ANNUAL REPORT
2018-19

Indian Institute of Technology | Bhubaneswar

Annual Report 2018-19

RANKING OF IIT BHUBANESWAR BY VARIOUS AGENCIES - 2018-19

NATIONAL AGENCIES

NIRF-2019

Engineering-17th
Overall- 46th

CAREER 360 -2019

Engineering-10th
Overall-22nd
(Rank among Public Institute)

Times Engineering Institute Rankings -2019

Overall-9th
Research Capability-2nd
Placement- 4th

INDIA TODAY-2019

Engineering-9th

(Rank among Government College)

THE WEEK-2019 (HANSA RESEARCH GROPU)

Engineering-15th
(Rank among Engineering College)

INTERNATIONAL AGENCIES

THE University Impact Ranking-2019

World – 301+

THE Times Higher Education Young University Rankings-2019

Overall-
151th - 200th

THE Emerging Economics University Ranking-2019

Overall-153rd

THE Asia University Ranking 2019

Asia-131st

QS World University Ranking- (INDIA) 2019

2018- 21st

QS World University Ranking- (BRICs) 2019

2018- 107th

CONTENTS

PROF. RATNAM V. RAJA KUMAR

Director, Indian Institute of Technology Bhubaneswar

FROM DIRECTOR'S DESK

This year is the eleventh year of existence of IIT Bhubaneswar. During the initial seven years, the institute functioning in transit facilities with the BTech intake of 180 students. The last four years have been very crucial, through which we have achieved a phenomenal growth and now the institute is fully operating from the permanent campus. With the present intake of 420 at, a phenomenal rise.

The institute took several pioneering initiatives in multiple fronts towards achieving global competence such as:

- Rising of standards of the institute in all fronts to international level,
- Creating near-global class infrastructure – the institute is one of the top few campuses, already,
- Global search for quality faculty and faculty of foreign origin,
- Internationalization of its academic programmes
- Enhancing of professional accountability in teaching and research,
- Encouraging quality than quantity in research,
- Establishing international collaborations on research of high industrial & societal relevance,
- Doubling of PhD scholars' intake in the next 3 years.

Some of the notable achievements of the institute, in the last four years, through intercalation of holistic education process, with the dedicated spirit of achieving excellence, in teaching and research are as follows:

- Improving of standards (teaching, research, faculty selections, transparency, governance, accountability, security, house-keeping, etc.).
- Doubling of B.Tech and PhD students' intake during the last two years,
- For the first time, the institute recorded improvement in closing ranks of B.Tech admissions, despite a rise in total number of seats in the country,
- During the last three years, the institute has tripled its placements with one and half times rise in average salary,
- As high as, 80% of placements of students has been in core industry which is a very desirable phenomenon markedly different from what has been happening in the country so far,
- The institute has achieved the first success in raising faculty of foreign origin and the endeavor is continuing with three colleagues on roll at the moment, with assignments for duration ranging from 8 to 24 months and several others in pipe line,
- Witnessed phenomenal rise in entrepreneurship during 2015-18 from almost zero to setting up of an incubator, start-up center and setting stage for the IITBBS Research & entrepreneurship Park by the end of 2017.

Now, I take the privilege of sharing with you a brief account of our journey emphasizing achievements and important milestones in the year 2018-19, in fulfilling our dream of building up an institute of global class in the near future.

Performance of the Institute in Institutional Rankings:

The strategic initiatives taken in the recent times have not only fostered the development of the institute, but also resulted in significant rise in institute's ranking performance in both National and International scenario. IIT Bhubaneswar's all India engineering institutional rank by NIRF in 2018-19 is at 17th position, and all India Overall rank by NIRF went up to 46th position from 51st position, in 2017-18. As per the India Today magazine's ranking, IIT Bhubaneswar's rank went up to 9th position from 10th position in government colleges category; in The Week Hansa Research Engineering, the rank went up to 15th position from 26th position; in the Times Engg. Survey, the rank went up to 9th position from 20th position; in Career360 Engineering, the rank went up to 10 from 16th position. This year, our Institute also participated in QS and Times Higher Education Rankings. The institute ranked 601-800 (among 1258 institutes) & in India, it is ranked 10th along with few other institutions (among 49 institutes), where it is 3rd in citation scores in India, in the Times Higher Education (THE) rankings. Institute also ranked 153rd in THE Emerging Economies University Rankings 2019, 131st in THE Asia University Rankings 2019, 151-200 in THE Young University Rankings 2019 and 301+ in THE University Impact Rankings 2019. This year institute ranked 21st in QS World University India Rankings and 107th in QS BRICS University ranking. The rising trend expected to continue.

Academic Programmes

Keeping pace with the changing scenario for providing adequate competent Technocrats and Scientists, the IIT Bhubaneswar has raised its student intake significantly with the current 2133 Students (B.Tech. - 1349, M.Tech. - 334, M.Sc – 155 and Ph.D - 295). The Institute has a spectrum of 135 full-time faculty members, 24 officers (19 on regular basis and 5 on contract) and other supporting staff.

This year we started three new M.Tech. Programmes i.e, in Power Electronics and Drives, Manufacturing Engineering and Geotechnical Engineering. Intake strength of undergraduate,MTech and PHD programmes is increased from 350 to 419; 172 to 246 and 360 to 400 respectively with the implementation of reservation for Economically Weaker Section (EWS) @5% for the year 2019-20.

Rejuvenation and Orientation (R&O) programme for Fresh Students:

In order to overcome the burn out syndrome of the JEE coaching, the Institute organized a semester long Rejuvenation and Orientation (R&O) programme. The R&O programme is very innovative and unique in nature aimed at helping the students to change over from the effects of the examination centric preparation and studies at Intermediate level for success in JEE to true education which empowers a student them with engineering problem solving, at IIT Bhubaneswar. This programme includes Orientation lectures by Director, Deans of Academic and Student Affairs, Heads of the Schools, members of the faculty, a detailed session on 'Introduction to Engineering' by Director and Faculty members of different Schools and a questionnaire, "Know yourself" personally created by the Director. As a part of this programme, the new entrants are sent for a visit to nearby heritage sites such as Konark Temple, Dhauli, Khandagiri, Udayagiri, Ekamra walks and Barunei Hill to make them familiar with the locality and make them be aware of history and culture. The programme also includes a three day Personality Development Programme by name 'Yes+' conducted by Sri Sri University, Cuttack, during the period 26 - 28th July 2019. Also, a series of lectures on what Indian Philosophy says about life, success, and failure, natural way of living and inspiring lectures on Science & Technology, Society are organized. The programme was in line with our objective of helping the students to develop team building capabilities, creativity, leadership, independent thinking, stress management and mind control. The Institute also adopts a cycling culture, yoga, lectures on life

skills to students, for a healthy and active lifestyle.

Research & Development Activities

The Research and Development activities have made rapid strides with time and there has been considerable progress in last one year. A total of 72 sponsored research and consultancy projects worth about Rs. 20.37 Crore have been sanctioned to the Institute during the year (2018-19) from different funding agencies. Besides these sanctioned projects, 90 project proposals worth about Rs. 70 Crore have been submitted during the last one year to different funding agencies by the faculty members. Our faculty members participated in major initiatives of MHRD like IMPRINT, Uchhatar Avishkar Yojana (UAY), Swachhta Action Plan, FIST and Unnat Bharat Abhiyan (UBA) etc.

Some of the recent Industry-Academia collaborations and R&D initiatives as well as projects connected to the National/State Missions are worth quoting and these are:

- A broad based Research Collaboration Agreement was signed with the Odisha Renewable Energy Development Agency (OREDA) on 17th February 2019 to provide technical support and advice to OREDA in their mission "State Policy for Roof Top Solar Systems".
- An international research initiative was taken up with the University of Auckland to foster academic exchange and cooperation between the two institutions in the potential domains namely Civil and Environment Engineering, Electrical and Computer Science & Engineering etc. to explore the possibility of joint-Ph.D. programme, internship & collaborative research projects.
- An MoU was signed with CSIR-Institute of Minerals & Materials Technology (IMMT), Bhubaneswar on 13th April 2019 to promote collaborative research, and exchange of knowledge and technical know how.

Research Publications & Patents

During the last year (2018), the institute contributed to creating new knowledge by publishing more than 578 research articles including, 436 research papers in National and International Journals of repute and high impact factor, 9 Book-chapters, and 133 papers were presented in various national and international conferences in India and abroad and 4 patents have been filed.

Collaborative Research

The Institute is very actively engaged in collaborative research with many reputed universities and research organizations across the world. Some of the collaborating universities include, University of Western Ontario, London; The University of Massachusetts Dartmouth; University of North Texas, USA; Warwick Manufacturing Group (WMG) of the University of Warwick, UK; The university of Buffalo the State University of New York, USA (SUNYAB); Dr. Dash foundation, USA; Engineering Center of Materials Manufacturing, Shanghai Jiao Tong University, China; University of Hohenheim, Germany; University of Auckland and many other reputed universities for joint research, student internship and faculty visits.

About 52 faculty members and 6 students visited foreign countries. The institute also had an innumerable number of distinguished visitors for academic, research and other collaborative programmes.

Faculty Matters

Appraisal about IIT Bhubaneswar at Acclaimed Universities: A team of Deans headed by Prof. R. V. Raja Kumar, Director visited some of the reputed and highly acclaimed Universities/ Institutes like Massachusetts Institute of Technology (MIT), Stanford University, University of Southern California, Harvard University, University of Princeton, University of Texas at Austin, Arlington, Texas A&M at College Station and Rutgers University and addressed

Doctoral students and Post-Doctoral candidates about the developments of IIT Bhubaneswar with a purpose of inviting applications for faculty positions and to explore the possibility of hiring quality faculty from the available sources and the team also interacted with some of the Provost/ Deans/ other senior Professors of these institutes to explore the possibility of having collaborative Research and Academic activities, from 26.07.2019 to 07.08.2019.

Student Activities

Awards and Prizes Won by Students in Socio-Cultural and Sports Competitions: Societies of Technical and Socio-cultural Councils participated and won in competitions in and around Bhubaneswar and brought glory to the institute. There has been tremendous improvement in the results of Inter IIT Sports Meet, Inter IIT Cultural Meet and Inter IIT Tech Meet.

The innovative teaching excellence created at the institute started yielding results. Students groups won several awards at conferences and inter institutional competitions including the following:

- Team Prajjawala won the prestigious NRDC National Budding Innovators Award – 2018. Also won Grand India IoT Innovation Challenge organised by Tata Communications. Won third place in Smart India Hackathon.
- Shibu Meher, Gurudev Singh and Himanshu Parida - of SMMME won the second prize in Grand Finale of MindRover Season 7 for T-Schools organized by Tata Motors.

Infrastructure Creation

Towards the end of financial year 2016-17, MHRD, Govt. of India sanctioned Rs 850 Crore to the institute for Phase-2 constructions to fully develop the institute in all respects for a student strength of 2500. The Institute selected NBCC as the PMC through the competitive bidding process and carried out a very careful planning process for speedy initiation and completion of Phase-II buildings. The Master plan has been redone with a lot of improvements including creation of academic and residential spines.

To cater to the immediate requirement of students accommodation, the contract for construction of a new Boys' Hostel (800 Seater) and a Girls' Hostel (400 Seater) were awarded ahead of other works in April 2017 and were supposed to be completed by Oct 2018. The buildings were nearly complete, the same were inaugurated on 15th July 2019 and students have been partially (half) accommodated from 17th July 2019. Though delayed, these two hostels are to be completed in all respect by 30th September 2019.

The construction of following buildings have started from November 2017 by the major contractor M/s. Simplex Infrastructures. The scheduled date of completion was February 2019 which got delayed due to inadequate man power deployment by the contractor and some ineffectiveness from NBCC. Majority of these buildings are expected to be completed by March-June 2020.

Though the scheduled date of completion was Feb 2019, due to slow progress of work by the contractor are expected to be completed by June 2020 as per NBCC.

The above work apart, the following works have also been taken up to develop a full-fledged campus:

- External development works which consists of Play fields, Play courts, roads, footpaths, drains, open air theatre, parking and landscaping,
- Sewerage Treatment Plant (STP) with SCADA system.

The external development works are awarded to M/s. Shtreejikrupa project Ltd. The date of commencement and scheduled date of complete are March 2019 and December 2019 respectively and are hoped to be completed in time.

The construction works have been delayed and it affected IIT in implementing its plans for an aggressive planned growth.

Green Campus Initiatives

IIT Bhubaneswar adopted the following green campus initiatives to make the campus eco-friendly:

Plantation Initiative: IIT Bhubaneswar strongly believes that nurturing nature is the best way to promote sustainability. Therefore, we created a positive, wellness and creative environment by maintaining outstanding landscapes and greenery in the campus. More than 30,000 trees have been planted during the last three years. The exotic and indigenous evergreen and deciduous flowering trees and plants were chosen to create the healthy echo-system for attracting the exotic and migratory birds. The massive teak plantation was completed along the boundary wall of our campus to help in maintaining the balance between the oxygen and carbon dioxide in the atmosphere.

Cycle Friendly Campus Initiative: IIT Bhubaneswar banned power vehicle use by students and incorporated the "Cycling Culture" for promoting the health benefits of students, faculty, staff and the community and for controlling environmental risk factors. The institute has initiated the Bicycle Infrastructure Development Plan for creating "Cycle Friendly Campus" by providing sustainable and convenient tree-lined cycle path for riding a bicycle between the schools and hostels, and for constructing cycle parking infrastructure in each of the buildings.

Energy-Harvesting Initiative: IIT Bhubaneswar installed and commissioned a solar power plant with the capacity of 0.49 MW of capacity on the existing building roof tops to reduce carbon footprint and dependency on conventional sources of energy. The facility got totally blew out during the extremely severe cyclone, Fani in May 2019. IIT is pursuing with the agency M/s. S.R. Corporates for reinstallation at their cost as damages were caused due to poor workmanship and did not sustain in wind speeds less than 185 KMPH while they were promised to withstand wind speeds of up to 200 KMPH, as required by IIT.

Water-Harvesting Initiative: IIT Bhubaneswar has initiated building up of rooftop rainwater harvesting and surface rainwater harvesting infrastructure, and setting up a waste management system and wastewater recycling plant, to make the campus zero-discharge.

Green Buildings: The buildings are GRIHA (Green Rating for Integrated Habitat Assessment) 4 and 5 compliant. The building construction is done by using the fly ash blocks which are not only environment friendly, but also keep the building cool and clean.

Eco-friendly Waste Disposal: IIT Bhubaneswar deployed dustbins with biodegradable and non-biodegradable categories.

Alumni Activities

The Alumni Affairs and International Relations office at the institute serves as an outward-facing window from the institute to the alumni by extending several facilities and services to the alumni.

The Alumni Association has organized the 2nd Alumni Meet in the permanent campus, from 12th to 14th April, 2019, during which many of the alumni had their first look at the new campus, besides the first hand interaction with the students and faculties. The Alumni Diaspora in US and UK got connected through video conference during the meet. Alumni Association has launched successfully the alumni website and the bi-annual newsletter, 'Spaghetti'. Alumni Association, along with the Alumni Cell, has started the 'Ask your Alumni' series which had already seen quite a few of our prominent alumnus, including Mr. Aravind Shanka, recently nominated for Forbes 30 under 30 Asia, directly interacting with the students.

Within a short span of the institute's existence, few alumni have been selected and joined the Indian Administrative

Services and Indian Engineering Services. More than 15 of our alumni have already founded their own start-ups. A large number of the alumni took up higher studies in reputed Universities abroad.

Entrepreneurship & Startup Activity

IIT Bhubaneswar is committed to its goal of nurturing the entrepreneurship culture among its students.

E cell activities: The E cell of IIT Bhubaneswar runs the Technology Incubator and also provides the much needed platform to the students to enrich and enhance their entrepreneurial capabilities through workshops, talks, panel discussions and competitions. The 3 Day flagship event of E Cell called E-Summit, held during January 18-20th, 2019 saw several noteworthy activities including motivational talks. Also, competitions were held various colleges across the country and 150 participants were shortlisted to take part in E-Summit'19.

Nodal Agency for MSME, Odisha: IIT Bhubaneswar has also been nominated as a nodal agency by MSME Department, Government of Odisha, to promote the Startup Odisha initiatives.

Technology Incubation Centre activities: E-Cell also looks after Technology Incubation Centre of the institute which helps final year students and faculty to incubate their technical ideas into workable products and processes. The activity was started in 2016. In the year 2018-19 too, students and faculty members applied for the funding under TIC and two projects were chosen to incubate the ideas into working product/technology in the areas of Metal foam and Biofuel. Other 03 already running IoT projects were granted extension for one year.

Startup Centre: A Startup Centre has been established at IIT Bhubaneswar with an overall objective of the Centre to inculcate a culture of innovation-driven entrepreneurship in and around IIT Bhubaneswar. At present 4 startups are associated with this centre now.

Research and Entrepreneurship Park: IIT Bhubaneswar received license and incorporation certificate from Registrar of companies (RoC) to run IIT Bhubaneswar Research and Entrepreneurship Park, a section-8 (not for profit) company in October 2017 for promoting entrepreneurship, research, and startup activities. A Center of Excellence in Augmented Reality and Virtual Reality (VARCoE) is functioning under the park and it is actively pursuing research on numerous projects in the area of Augmented Reality and Virtual Reality.

Continuing Education Programme (CEP)

Continuing Education is a part of IIT Bhubaneswar's outreach programs created to extend its arm for promotion and extension of science and technology benefits to the society, apart from its main focus of teaching and research.

As many as fifteen conferences and workshops have been organized by the institute to foster scholarly exchange of ideas and research collaboration during the last year. This is to mention that 13th annual Symposium of "National Frontiers of Engineering" was successfully organized by IIT Bhubaneswar and lectures were delivered by eminent academicians cum researchers of the country in the four thematic areas such as 1. Augmented Reality (AR) and Virtual Reality (VR); 2. Smart Grid; 3. Advances in Materials and Manufacturing Technology; and 4. Next Generation Transportation Systems. IIT Bhubaneswar has also extended its support to Department of School & Mass Education, Govt. of Odisha in organizing a series of workshops on "Capacity building for district and block level education officials".

Quality improvement Programme (QIP): All India Council for Technical Education (AICTE) approve Quality improvement Programme (QIP), ITT Bhubaneswar has been chosen as a QIP Centre w.e.f. the Academic year 2019-20. Under "Quality Improvement Programme" IIT Bhubaneswar has admitted five sponsored technical faculty members of degree level engineering institutes to Doctoral Degree Programs in different Branches like

Electrical Engineering, Electronics Engineering, Mechanical Engineering and Civil Engineering in July 2019.

Global Initiative of Academic Networks (GIAN): One of the Flagship programs of the Ministry of Human Resource Development, Government of India – GIAN (Global Initiative of Academic Networks) has been initiated to conduct short term courses inviting Guest Faculty from abroad and currently about 34 short term courses have been approved and 33 of them have already been conducted with the support eminent professors of foreign origin and renowned Indian professors working in foreign universities.

Scheme for Promotion of Academic and Research Collaboration (SPARC): One of the Flagship programs of the Ministry of Human Resource Development, Government of India – SPARC (Scheme for Promotion of Academic and Research Collaboration. For IIT Bhubaneswar, Eleven Major Research Projects have already been sanctioned and International Professors have already started teaching at IIT Bhubaneswar. This is the IIT the largest number amongst the 2nd and 3rd generation IIT's. IIT Bhubaneswar has extended the facilities to the research scholar to work under joint guidance of these eminent foreign professors and faculty of IIT Bhubaneswar.

PM-YUVA: Furthermore, in executing the vision of Hon'ble Prime Minister and contributing in implementing the PM-YUVA, IIT Bhubaneswar has been identified as the Nodal E- Hub for the eastern zone comprising of 60 projected institutes.

Outreach Programme: Going by the spirit of Government of India in instituting the Unnat Bharat Abhiyan in making the benefit of the presence of an IIT make a difference in the hinterland, IIT Bhuaneswar started a very spirited Outreach Programme. The institute takes up several activities in the following means during the last year under its Outreach programme:

Open House and S&T Exhibition: On the Foundation Day (12th February), the Institute conducts open house, every year, for public to showcase the knowledge and technology to High School to Post-Graduate students every Year through grand exhibition of as large as 250 research excellence projects undergoing at the Institute, being attracted by the society in large numbers ranging from 7000 – 8000 from over 100 schools/colleges.

Open House Day and Interactive Session with IIT Rankers and Aspirants: Institute conducts the event every year and in the current academic year, on 18th June 2019 about 150 aspirants and rank holders attended the enlightening session about them on the IIT education and process of admissions.

Unnat Bharat Abhiyan (UBA) activities: Sanskar barg: These are weekly sessions of yoga, creative games, songs and story- telling. In the process, the children are supposed to develop physical, emotional and spiritual culture.

Laboratory Exposition to the Students: Weekly visits are made by UBA team members to the science labs established by UBA in its adopted villages Arugul, Khudupur, Podapada and Padanpur and also the students are exposed to the modern laboratories of the Institute.

Health and hygiene camp: Doctors conducted free health check-up for the attendees in the adopted villages and based on the prescription, free medicines were provided to the patients. A first-aid kit box was gifted to the Head Mistress of Sundaria Upper Primary School.

Painting and Quiz Competition: A painting and quiz competition and drawing competitions are conducted at two levels: Junior (Class IV - VI), Senior (Class VII - VIII), on the theme "India".

Plantation Drive: Apart from Green Campus drive at the Institute, to make Green India, especially to make our surroundings greener after the cyclone, Fani that had uprooted several trees, UBA and Horticulture department of our institute conducted a plantation drive by planting various sapling varieties like Neem, Babul, Baula, Mango, Sishu, Debdaru, KrushnaChuda etc., in the Argul village.

Vigyan Jyoti Program: Institute plays a pivotal role to promote Girls students education in Engineering by holding Vigyan Jyoti Program, an initiative of Department of Science and Technology (DST), to emulate science and engineering enthusiasm amongst the Girls students of Intermediate education.

Swachh Bharat Program: Initiative of Prime Minister of India to make India under Clean India program, the Institute in true spirit and action follows up the event meticulously making it as a compulsory program under NSS activity of the Student Flagship program.

Ek Bharat Shreshtha Bharat (EBSB): Institute conducted all the sixteen events pairing the two states of the country for exhibiting the cultural aspects of the states with the participation of large number of students, staff and faculty, which is highly appreciated by the Ministry of Human Resource Development (MHRD), New Delhi.

Ishan Vikas Program: Promotion of North-East region students to the higher level of education excellence through workshop of a three week program were held at the Institute by which the talent and cultural aspects of the region is being showcased to others as well.

Career Development Cell (CDC)

Campus placements of 2018-19 have been eventful in terms of a very significant rise in new recruiters visiting IIT Campus placements of 2018-19 have been eventful in terms of a very significant rise in new recruiters visiting IIT Bhubaneswar, in addition to majority of the previous recruiters repeating this year too, indicating faith/trust in the quality of our students.

Highlights of placement season 2018-19 are as follows:

- Total 121 students from UG received offers.
- Undergraduate placement is about 90%.
- Highest domestic CTC offered was 39.02 Lakhs per annum.
- A total of close to 70% of M.Tech students have been placed.
- The Highest percentage of job offers have been received by the institute from core industries, amongst all IIt's..
- Around 70 companies have participated in the campus drive of 2018-19.
- Average salary is 11.44 Lakh per Annum for UG.
- PSU's like ISRO, IOCL, NCCBM participated in the campus placements.
- MNC companies like Goldman Sachs, GE India, Honeywell, Maruti Suzuki, Mahindra & Mahindra, Infosys, TCS R & D, Adobe, Tata BSL, have participated in this year of placements.
- 3rd year students have received internship offers from reputed industries like Amazon, Goldman Sachs, Go Jek, Microsoft, MAQ Software, MathWorks, Ittiam, Jindal Stainless, Tata Steel, Wipro. Many of them are engaged in Internships in R & D organisations like ATREE, BARC, TCS, and foreign universities like IOWA State University, Singapore University, Shanghai Jiao Tong University.

Distinguished Visitors

An innumerable number of distinguished personalities visited the Institute on different occasions and addressed the faculty, students and staff. As many as 75 no of distinguished personalities visited the campus..

Women's Welfare Committee (WWC)

WWC, IIT Bhubaneswar organized a workshop on "Sexual Harassment of Woman at Workplace Act 2013" and "Rights of Working Woman" on 9th and 22nd November 2018 respectively. The resource persons for the events were Adv. Namrata Chadha (Social Worker, Member of ICC, IIT Bhubaneswar), Adv. Ralalaxmi Das (Member of Child Welfare Committee, Odisha) and Adv. Snehanjali Mohanty (Member, Odisha State Commission for Women). A three day programme was conducted by WWC as a part of International women's day celebration-2019. The programme included theme based competitions along with a lecture on "Handling relationships". Ms. Amrita Dash

IPS, (Assistant Director, Sardar Vallabhbhai Patel National Police Academy Hyderabad) addressed the women's day evening function as chief guest.

Computer and IT services Cell (CITSC)

CITSC team implemented the Biometric Attendance System for taking attendance of students in the classrooms for all programmes/courses at IIT Bhubaneswar. Extended Unified Communication System (Telephone Exchange) facilities to residential areas (faculty quarters) in IIT Bhubaneswar permanent campus at Argul. CITSC also planned, and designed the 2nd phase of Campus Area Network in IIT Bhubaneswar permanent campus, which is to be implemented shortly. The CITSC in-house team developed and implemented additional Enterprise Resource Planning modules for IIT Bhubaneswar.

Graduates of the Year

I am very happy to announce that in this convocation, in a short while, 152 B.Tech., 105 M.Tech., 67 M.Sc., and 32 Ph.D. students will be receiving their degrees, totaling 356, a significantly raised number over the last year. More than doubling of PhD's produced per year over the earlier years is very satisfying and I would like to assure that it would further double within the coming two years.

Other Activities

The Institute observed and celebrated several events like 73rd Independence Day, 70th Republic Day, International Yoga Day, Engineer's Day, Vigilance Awareness Week 2018, Unity Run, Martyr's Day, Matribhasa Diwas, National Science Day, Anti-Terrorism Day, Blood Donation Camp, Medical Check-up Camp, Awareness Program on System Abuse, Media Visit to the Centers of Excellence, Workshop on the World Telecommunication and Information Society Day besides the regular national events and a large number of students, faculty and staff members participated in the events.

Acknowledgements

This Institute and its entire activities could not have been achieved without the full participation and support of all stakeholders – our faculty, students and staff; agencies and industries sponsoring R&D and consultancy projects; professionals from other organizations and our alumni. The Institute is grateful to the Ministry of Human resource Development, Govt. of India for its continued and sustained encouragement and support.

Before I conclude, I congratulate all the graduating students, awardees and medal winners and wish all happiness, professional success and fulfillment in their lives.

Jai Hind!

Prof. R. V. Raja Kumar

October 21st 2019

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Director, Indian Institute of Technology
Bhubaneswar, [From 11.02.2019]

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Director, Indian Institute of Technology
Bhubaneswar
[From 11.02.2019]

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SENATE

Prof. R.V. Raja Kumar	Chairman Ex-Officio)	Director, IIT Bhubaneswar
Prof. Sujit Roy	Member	Professor, School of Basic Sciences (Chemistry) / Head, School of Minerals, Metallurgical and Materials Engineering
Prof. Pravas Ranjan Sahu	Member	Dean (Academic Affairs) w.e.f. 27.03.2018
Prof. V. R. Pedireddi	Member	Dean, (Students' Affairs)
Prof. S.K. Mahapatra	Member	Dean, CE /Dean, AA&IR /Head, School of Humanities, Social Sciences and Management
Prof. R.K. Panda	Member	Dean (R&D)/Head, School of Infrastructure
Prof. S.K. Nayak	Member	Dean (F&P)As Dean (F&P) w.e.f. 01.11.2017
Dr. T.V.S. Sekhar	Member	Head, School of Basic Sciences
Dr. P.K. Sahu	Member	Head, School of Electrical Sciences
Dr. Satyanarayan Panigrahi	Member	Head, School of Mechanical Sciences
Dr. Sandeep Patnaik	Member	Head, School of Earth, Ocean & Climate Sciences,
Prof. Brahma Deo	Member	Professor, School of Minerals, Metallurgical and Materials Engineering Upto 04.01.2018
Prof. P. C. Pandey	Member	Adjunct Faculty, School of Earth, Ocean and Climate Sciences Left the Institute
Prof. Ganapati Panda	Member	Professor, School of Electrical Sciences Relieved w.e.f. 23.07.2018
Prof. U.C. Mohanty	Member	Visiting Professor, School of Earth, Ocean and Climate Sciences
Prof. V. R. Yerikalapudy	Member	Visiting Professor, School of Basic Sciences (Mathematics)
Prof. Jayanta Pal	Member	Visiting Professor, School of Electrical Sciences Relieved w.e.f. 18.05.2018
Prof. Ashok Kumar Kapoor	Member	Visiting Professor, School of Basic Sciences (Physics) Relieved w.e.f. 31.12.2017
Prof. Pratap Kumar Jagdev Mahapatra	Member	Visiting Professor, School of Mechanical Sciences & Academic Coordinator, School of Humanities, Social Sciences and Ma agement Relieved w.e.f. 19.04.2019
Prof. Brij Kumar Dhindaw	Member	Visiting Professor, School of Minerals, Metallurgical and Materials Sciences

Prof. H.K. Mishra	Member	Visiting Professor, School of Earth, Ocean & Climate Sciences
Prof. Tian Cheng Zhang	Member	Visiting Professor, School of Infrastructure Left the Institute
Prof. N.C. Sahoo	Member	Professor, School of Electrical Sciences w.e.f. 27.03.2018
Prof. Rambhatla G. Sastry	Member	Visiting Professor, School of Earth, Ocean & Climate Sciences w.e.f. 03.07.2018
Prof. Krishnamachar Prasad	Member	Visiting Professor, School of Electrical Sciences from 16.07.2018 to 17.12.2018
Prof. Godabarisha Mishra	Member	Visiting Professor, School of Humanities, Social Sciences and Management w.e.f. 16.08.2018
Prof. V. Chandrasekhar	External Meber	Director, NISER Bhubaneswar Upto 23.03.2019
Prof. Gopal Krishna Nayak	External Meber	Director, IIIT Bhubaneswarupto (23.03.2019)
Mrs. Kumkum Mohanty	External Meber	Geeta Govinda Charitable Trust, Bhubaneswar Upto 23.03.2019
Prof. Sudhakar Panda	External Meber	Director, NISER Bhubaneswar w.e.f. 24.03.2019
Prof. Gopal Krishna Nayak	External Meber	Director, IIIT Bhubaneswar w.e.f. 24.03.2019
Prof. Radhamadhab Dash	External Meber	Vice Chancellor, Shri Jagannath Sanskrit Vishvavidyalaya, Puri w.e.f. 24.03.2019
Dr. Manoranjan Satpathy	External Meber	Associate Professor, School of Electrical Sciences Renewed for another two years w. e. f. 24.03.2019
Dr. A.K. Ojha	External Meber	Associate Professor, School of Basic Sciences Upto 23.03.2019
Dr. Niharika Mohapatra	External Meber	Assistant Professor, School of Basic Sciences Upto 23.03.2019
Dr. Partha Pratim Dey	External Meber	Assistant Professor, School of Infrastructure Upto 23.03.2019
Dr. Soobhankar Pati	External Meber	Assistant Professor, School of Minerals, Metallurgical and Materials Engineering Upto 23.03.2019
Dr. Amrita Satapathy	External Meber	Assistant Professor, School of Humanities, Social Sciences and Management Upto 23.03.2019
Dr. Sabyasachi Pani	Member	Associate Professor, School of Basic Sciences Two years w. e. f. 24.03.2019
Dr. Puspendu Bhunia	Member	Associate Professor, School of Infrastructure Two years w. e. f. 24.03.2019
Dr. Animesh Mandal	Member	Associate Professor, School of Minerals, Metallurgical and Materials Engineering Two years w. e. f. 24.03.2019
Dr. Seema Bahinipati	Member	Assistant Professor, School of Basic Sciences Two years w. e. f. 24.03.2019

Dr. Rajkumar Guduru	Member	Assistant Professor, School of Humanities, Social Sciences and Management Two years w. e. f. 24.03.2019
Dr. Shantanu Pal	Member	Assistant Professor, School of Basic Sciences / Warden
Dr. S. Mohapatro	Member	President, Gymkhana
Dr. Rajesh Roshan Dash	Member	Chairman Library / Associate Professor, School of Infrastruture
Dr. C. Bhamidipati	Member (Ex-Officio)	Chairman, JEE Continuing Tenure as Chairman JEE w.e.f. 01.08.2018
Dr. S R Samantaray	Member (Ex-Officio)	Chairman, GATE Continuing tenure as Chairman GATE w.e.f. 01.08.2018
Dr. Rajan Jha	Member (Ex-Officio)	Chairman, JAM Continuing Tenure as Chairman JAM w.e.f. 01.08.2018
Dr. Bibhuti Bhusan Sahoo	Member	Deputy Librarian, Central Library
Mr. Samiran Mandal	Member	Research Scholar, School of Earth, Ocean and Climate Scienes Upto 28.02.2019
Mr. Siddharth Kumar	Student Invitee	Research Scholar, School of Humanities, Social Sciences and Management w.e.f. 01.03.2019
Mr. Punit R	Student Invitee	Vice President, Gymkhana
Shri Debraj Rath	Secretary	Registrar I/c, IIT Bhubaneswar

ADMINISTRATION

DIRECTOR

Prof. Ratnam V. Raja Kumar

DEANS

Dean (Academic Affairs)

Dr. Pravas Ranjan Sahu
Email: deanac@iitbbs.ac.in

Dean (Faculty and Planning)

Prof. Saroj Kumar Nayak
Email: deanf@iitbbs.ac.in

Dean (Research & Development)

Prof. R. K. Panda
Email: deanrd@iitbbs.ac.in

Dean (Student Affairs)

Prof. V. R. Pedireddi
Email: deansa@iitbbs.ac.in

Dean (Continuing Education) & Dean (Alumni Affairs and International Relations)

Prof. Swarup Kumar Mahapatra
Email: deance@iitbbs.ac.in
deanaa@iitbbs.ac.in

HEAD OF THE SCHOOLS

School of Basic Sciences

Dr. T. V. S. Sekhar
Email: hos.sbs@iitbbs.ac.in

School of Earth, Ocean and Climate Sciences

Dr. Sandeep Pattnaik
Email: hos.seoc@iitbbs.ac.in

School of Electrical Sciences

Dr. Prasant Kumar Sahu
Email: hos.ses@iitbbs.ac.in

School of Humanities, Social Sciences and Management

Prof. Swarup Kumar Mahapatra
Email: hos.hss@iitbbs.ac.in

School of Infrastructure

Prof. R. K. Panda
Email: hos.sif@iitbbs.ac.in

School of Mechanical Sciences

Dr. Satyanarayan Panigrahi
Email: hos.sms@iitbbs.ac.in

School of Minerals, Metallurgical and Materials Engineering

Prof. Sujit Roy
Email: hos.smmme@iitbbs.ac.in

OFFICERS

Shri Debaraj Rath
Registrar In-charge
Email: registrar@iitbbs.ac.in

Shri Debaraj Rath
Joint Registrar
Email: jtregistrar@iitbbs.ac.in

Shri Bimalendu Mohanty
Superintending Engineer (Civil)
Email: se.civil@iitbbs.ac.in

Dr. Bibhuti Bhusan Sahoo
Deputy Librarian
Email: dylibrarian@iitbbs.ac.in

Shri Manas Kumar Behera
Assistant Registrar
Email: ar.est@iitbbs.ac.in;ar.ce@iitbbs.

Dr. Sailendra Narayan Routray
Assistant Registrar
Email: ar.rd@iitbbs.ac.in

Shri Pradeep Kumar Sahoo
Assistant Registrar
Email: ar.sp@iitbbs.ac.in

Shri K. Saikiran
Assistant Registrar
Email: saikiran@iitbbs.ac.in

Shri Rabi Kumar Patnaik
CDPO
Email: tpo.cdc@iitbbs.ac.in

Dr. Gagandeep Kaur Makkar
Student Counsellor
Email: gagandeep@iitbbs.ac.in

Shri Sanku Das
System Engineer
Email: sanku@iitbbs.ac.in

Shri Chandra Vadde
Programmer
Email: chandra@iitbbs.ac.in

Shri K Rabin Kumar Dora
Executive Engineer (Civil)
Email: rabindora@iitbbs.ac.in

Shri Biswaranjan Pradhan
Assistant Executive Engineer
(Electrical)
Email: biswaranjan@iitbbs.ac.in

Lt Cdr Raj Kumar
Chief Security Officer
Email: cso@iitbbs.ac.in

Dr. Naba Kishore Patnaik
Medical Officer
Email: nkpatnaik@iitbbs.ac.in

Dr. Mansoor Ahmed Khan
Medical Officer
Email: mansoor@iitbbs.ac.in

Dr. Ashima Sarkhel
Medical Officer
Email: ashimasarkhel@iitbbs.ac.in

Dr. Subhasis Nag
Medical Officer
Email: subhasish@iitbbs.ac.in

Shri Prasanna Kumar Das
OSD (Finance &Accounts)
Email: prasanna@iitbbs.ac.in

Shri Sushanta Kumar Poddar
OSD (Academics)
Email: osd.academics@iitbbs,.ac.in

Shri Shalin Sasidharan Nair
Public Relation Officer
Email: pro@iitbbs.ac.in

Dr. Divya Undrakonda,
Medical Officer
Email: divyak@iitbbs.ac.in

Shri Kulamani Nayak, OSD
(Establishment)
Email: kulamani@iitbbs.ac.in

Dr. S. S. Yadav, OSD
(Sports)
Email: ssyadav@iitbbs.ac.in

PIC, CHAIRPERSON, CO-ORDINATORS WARDEN AND GYMKHANA

PROFESSOR-IN-CHARGE

Sl. No.	Name, Designation, School	Position
	Professor-In-Charge	
1	Dr. Gaurav Bartarya School of Mechanical Sciences	PIC - E -Cell
2	Dr. Arun Ku. Pradhan School of Mechanical Sciences	PIC - Training & Placement [Career Development Cell]
3	Dr. Mihir Kumar Pandit School of Mechanical Sciences	PIC - Guest House
4	Prof. V. R. Pedireddi School of Basic Sciences	PIC - Permanent Campus
5	Prof. V. R. Pedireddi School of Basic Sciences	PIC - Security
6	Dr. P. K. Sahu School of Electrical Sciences	PIC – [Network & Security]
7	Dr. R. R. Dash School of Infrastructure	PIC - Transport Services
8	Dr. M. Sabarimalai Manikandan School of Electrical Sciences	PIC - Horticulture
9	Dr. Srinivas Bhaskar Karanki School of Electrical Sciences	PIC - Counselling Service
10	Dr. Satyanarayan Panigrahi School of Mechanical Sciences	PIC - IPR
11	Dr. C. N. Bhende School of Electrical Sciences	PIC - Institute Seminar
12	Dr. Adway Mitra School of Electrical Sciences	PIC - Web Services
13	Dr. Balakrishna Pamulaparthy School of Electrical Sciences	PIC - Electrical works
14	Dr. Srinivas Pinisetty School of Electrical Sciences	PIC - ERP
15	Dr. Manoranjan Satpathy School of Electrical Sciences	PIC - Centre of Excellence of Augmented Reality and Virtual Reality
16	Dr. Raj Kumar Singh School of Earth, Ocean Climate Sciences	PIC - Raj Bhasha Ekak
17	Dr. Yogesh Bhumkar School of Mechanical Sciences	PIC - Start up Center

Sl. No.	Name, Designation, School	Position
18	Dr. Rajan Jha School of Basic Sciences	PIC - Examination
19	Dr. Manas M. Mahapatra School of Mechanical Sciences	PIC - Time Table
20	Dr. S. Ayyalasomayajula School of Mechanical Sciences	PIC - Email admin
Chairman / Chairperson		
21	Prof. Sujit Roy School of Basic Sciences	Chairman - Institute Purchase Committee
22	Dr. P. K. Sahu School of Electrical Sciences	Chairman - CITSC
23	Dr. Barathram Ramkumar School of Electrical Sciences	Associate Chairman - CITSC
24	Dr. P. R. Sahu School of Electrical Sciences	Chairman - CPMC
25	Dr. R. R. Dash School of Infrastructure	Chairman - Central Library
26	Dr. Manas M. Mahapatra School of Mechanical Sciences	Chairman - CIF [Central Instrumentation Facility]
27	Dr. Animesh Mondal School of Minerals Metallurgical and Materials Engineering	Co- Chairman - CIF [Central Instrumentation Facility]
28	Dr. C. Bhamidipati School of Basic Sciences	Chairman - JEE
29	Dr. Rajan Jha School of Basic Sciences	Chairman - JAM
30	Dr. S. R. Samantaray School of Electrical Sciences	Chairman - GATE
31	Dr. Remya Neelancherry School of Infrastructure	Chairman - WWC
Coordinator		
32	Dr. Soobhankar Pati School of Minerals Metallurgical and Materials Engineering	Coordinator - Alumni Affairs & International Relations
33	Dr. Snehasis Chowdhuri School of Basic Sciences	Coordinator - EAA, NSS Program Officer
34	Dr. Raj Kumar Guduru School of Humanities, Social Sciences and Management	Coordinator, Newsletter Committee

Sl. No.	Name, Designation, School	Position
35	Dr. Seema Bahinipati School of Basic Sciences	Co- Coordinator, UBA Programs
36	Dr. Tarakanta Nayak School of Basic Sciences	Co- Coordinator, UBA Programs
37	Dr. B. Hanumantha Rao School of Infrastructure	Co- coordinator, EAA
38	Prof. Godabarish Mishra School of HSSM	Academic Coordinator, School of HSSM
39	Prof. Brahma Deo School of MMME	Academic Coordinator, School of MMME
Warden		
40	Dr. Santanu Pal School of Basic Sciences	Warden
41	Dr. Srinivas B. Karanki School of Electrical Sciences	Assistant Warden [Boys]
42	Dr. Yogesh Ganpat Bhumkar School of Mechanical Sciences	Assistant Warden [Boys]
43	Dr. Sourav Sil School of Earth, Ocean Climate Sciences	Assistant Warden [Boys]
44	Dr. Barathram Ramkumar School of Electrical Sciences	Assistant Warden [Boys]
45	Dr. Meenu Ramadas School of Infrastructure	Assistant Warden [Girls]
Gymkhana		
46	Dr. Sankarsan Mohapatro School of Electrical Sciences	President, Gymkhana
47	Dr. Kaushik Das School of Minerals, Metallurgical, Material Engineering	Treasurer, Gymkhana
48	Dr. N. B. Puhan School of Electrical Sciences Dr. Tabrez Khan School of Basic Sciences	Advisor, Science & Technology Activities of Student Gymkhana
49	Dr. Venugopal Arumuru School of Mechanical Sciences	Advisor, Sports & Game Activities of Student Gymkhana

Sl. No.	Name, Designation, School	Position
50	Dr. Mihir Kumar Pandit School of Mechanical Sciences	Advisor, Purchase Committee of Student Gymkhana
51	Dr. V. Pandu Ranga School of Mechanical Sciences	Advisor, Finance Committee of Student Gymkhana
52	Prof. P. K. J. Mohapatra School of Mechanical Sciences	Advisor, Entrepreneurship Cell [E-Cell] of Student Gymkhana
53	Dr. Ankur Gupta School of Mechanical Sciences	Advisor, Socio-Cultural of Student Gymkhana

STAFF

DIRECTOR'S OFFICE

Shri Surendranath Patra
Secretary

Shri Ramesh Chandra Biswal
Driver

REGISTRAR'S OFFICE

Shri Pradeep Kumar Pattanaik
Private Secretary

DEAN FACULTY & PLANNING OFFICE

Shri Satyabrota Ghosh
Jr. Superintendent

DEAN CONTINUING EDUCATION OFFICE

Shri Marshal Tudu
Junior Assistant

ESTABLISHMENT

Ms. Jignyasha Behera
Jr. Superintendent

Ms. Smruti Smaranika Kumar
Junior Assistant

Shri Arup Kumar Pandab
Junior Assistant

FINANCE AND ACCOUNT SECTION

Shri Ajit kumar Sahoo
Jr. Superintendent

Shri Sambit Ranjan Mohanty
Jr. Superintendent

Smt. Suhana Parween
Jr. Accounts Officer

Shri Raghunath Behera
Jr. Accounts Officer

Shri Guru Parsad Sahoo
Jr. Accounts Officer

R&D SECTION

Shri Giresh Kumar Pitta
Jr. Superintendent

Shri Anirudha Bai
Jr. Superintendent

STORE & PURCHASE SECTION

Ms. Nibedita Patnaik
Jr. Superintendent

Shri Rajsekhar Bendi
Jr. Superintendent

ACADEMIC SECTION

Shri Satyajit Sarangi
Jr. Superintendent

Shri Abhimanyu Mahal
Jr. Superintendent

Shri Susanta Kumar Prusty
Junior Assistant

Shri Gouri Shankar Mishra
Junior Assistant

CENTRAL LIBRARY

Ms. Sangita Sahu
Sr. Library Information Assistant

HORTICULTURE

Shri K. V. Reddy
Horticulturist

CENTRAL DAK

Ms. Souravi Behera
Junior Assistant

MEDICAL UNIT

Ms. Prabhavathy M.
Staff Nurse

Ms. Soniya John
Staff Nurse

Ms. Swarnalata Swain
Staff Nurse

Shri. Srinibash Panigrahy
Pharmacist

HEALTH AND SANITARY UNIT

Shri Pradip Kumar Poddar
Sanitary Inspector

SECURITY UNIT

Shri Tapan Kumar Mohapatra
Assistant Security Officer

CITSC

Shri Rabinson Behera
Associate Network Administrator

ENGINEERING CELL

Shri Dipti Ranjan Pattanaik
Junior Engineer Civil)

Shri Abhisek Das
Junior Engineer (Electrical)

Shri Gajendra Behera
Junior Engineer (Electrical)

Shri Rupesh Kumar Pradhan
Junior Engineer (Civil)

STUDENT GYMKHANA

Ms. Sunita Verma
Physical Training Instructor

Shri Biswajit Pegu
Physical Training Instructor

Shri Ravinder Kumar Sagar
Physical Training Instructor

SCHOOL OF BASIC SCIENCES

Shri Nihar Ranjan Panda
Jr. Technical Superintendent

Shri Tarapada De
Junior Technician

Shri Samir Kumar Jena
Jr. Laboratory Assistant

Shri Naresh Koppula
Jr. Laboratory Assistant

SCHOOL OF ELECTRICAL SCIENCES

Madhusmita Divyadarsini Mohapatra
Jr. Technical Superintendent

Shri Santosh Kumar Sahoo
Jr. Technical Superintendent

Shri Bikram Ranjan Behera
Junior Technician

Shri Dillip Kumar Biswal
Junior Technician

Shri Birata Keshari Nanda
Junior Technician

Shri Raimohan Behera
Junior Technician

Shri Brajamohan Mohapatra
Junior Technician

Shri Mrinal Datta
Junior Technician

Sk Tajuddin Ahmed
Junior Technician

Shri Krushana Chandra Nayak
Junior Technician

SCHOOL OF INFRASTRUCTURE

Ms. Supriyarani Mohanty
Jr. Technical Superintendent

Shri Samir Kumar Sethi
Jr. Technical Superintendent

Ms. Akasmika Sarangi
Junior Technician

Shri Soubhagya Kumar Behera
Junior Technician

SCHOOL OF MECHANICAL SCIENCES

Shri Aloka Kumar Nayak
Jr. Technical Superintendent

Shri Malaya Kumar Routray
Jr. Technical Superintendent

Shri Sidhartha Biswal
Jr. Assistant

Shri Dillip Kumar Sahoo
Junior Technician

Shri Sunil Kumar Pradhan
Junior Technician

Shri Bibhudata Mohanty
Junior Technician

Shri Purnendu Kumar Bisoi
Junior Technician

SCHOOL OF MINERAL METALLURGICAL MATERIALS ENGINEERING

Shri Ramakrishna Pantangi
Jr. Technical Superintendent

Shri Sonu Kumar Goyal
Jr. Laboratory Assistant

ABOUT IIT BHUBANESWAR

Indian Institute of Technology Bhubaneswar is established by the government of India in 2008 under The Institutes of Technology Act 1961 with Amendments upto 2012. The Act was passed in the Lok Sabha on 24th March 2011 and by the Rajya Sabha on 30th April 2012. IIT Bhubaneswar became an Institute of National Importance from 29 June 2012 with notification of Amendment in the Institutes' of Technology Act, 1961 by the Ministry of Human Resource Development, (Department of Higher Education) Government of India published in the Gazette of India dated 2 July 2012.

The Institute started functioning from the campus of IIT Kharagpur on 22nd July 2008 and shifted its operation to the city of Bhubaneswar on 22nd July 2009. The Institute has adopted the concept of Schools rather than Departments for promoting inter-disciplinary research. At present there are 7 schools offering academic programme.

Presently the academic programmes of Institute include B. Tech. (Hons.) in Computer Science, Civil, Electrical, ECE, Mechanical Engineering, Metallurgical and Materials Engineering. The institute is also starting Dual degree courses in Mechanical and civil with intake of 10 from academic year 2016-17. The institute offers 2 years M.Sc. and M. Tech courses. The Institute started the Doctoral programme from the academic session 2009-2010 and offer admission to the joint M. Tech-Ph.D. Programme from July 2012. The Indian Institute of Technology, Bhubaneswar (IITBBS) is also planning to start a new school of planning, architecture and design. This school will offer undergraduate, postgraduate and PhD courses in all three disciplines. This will be the eighth school to function in the Institute. At present such schools function at two other IIT's-in IIT Kharagpur and Roorkee.

The Institute has broadly adopted the course curricula, syllabi and other academic regulations of IIT Kharagpur, the mentor institute. The pedagogy emphasizes participatory, student centric and participatory learning. The academic programmes are equipped with very relevant courses for a budding entrepreneur, the entire institute may be used as a technology incubator and the institute has a 40,000 sq. ft. Start-up space for students to avail.

The institute is committed to provide holistic education aimed at producing tomorrow's leaders, nurturing personality, creativity, innovative mindset and capability be it in Science or Technology or Management or in other domains of human excellence. It provides ample opportunity for a young mind to take any path and excel apart from providing opportunity to research in a chosen area. Institute is also committed to create a wellness environment, including in green, clean and healthy environment, quality education, efficient and effective governance, effective health services, security, equality and enlightenment.

The Institute has started all academic operations from permanent campus at Argul from academic session 2015-16. The final shifting of the Institution was done on 14th July, 2018 where the entire administrative became operational post that. The Institute provides well qualified faculty,state-of-the art infrastructure facilities creating a conducive environment for rapid growth of the students' skill sets in all aspects of the personality – academic, research, cultural, sports, ethical and social responsibility. Our Institute's numerous collaborations with foreign universities, industries and institutions across the world provides a scope to the students to be exposed to the global trends in education, research and industry. Ample opportunities in both national and international stints for internships, research projects and exchange programs has been a prominent trend among our students. In the past 10 years the Institute Co-offered degrees to 1810 students (B.Tech., M.Tech., Ph.D., MSc. etc.).

During last 10 years, the Institute's faculty members and students have contributed to creating knowledge by publishing more than 1850 original research papers in reputed national and international Journals and Conferences. Students also won several awards in conferences and competitions.

It has been ranked well amongst the Top Engineering institutions in the country. IIT Bhubaneswar was ranked 18th in engineering category by the National Institutional Ranking Framework (NIRF) in 2018. IIT Bhubaneswar is also ranked 10th in India by India Today in 2018, 20th within India by i3RC Times Engineering Institute Rankings 2018 (among 150 Engineering Colleges), 10th in India by Times Higher Education, 601-800 rank across the world (among 1258 Institutes), 21st Rank within India, 107th rank within BRICS Countries, 20th rank within India, 153rd rank within emerging countries by Times Higher Education Emerging Economies University Rankings 2019 and 10th rank in India best Public Engineering Institutes and overall 22nd rank in among public Institutes in India as per Careers360 Magazine Ranking of India's Best Universities 2019 and 9th Best Engineering College in Govt. category in India by India Today MDRA survey.

VISION AND MISSION

Indian Institute of Technology Bhubaneswar inherits the brand name IIT. This fact itself charges the Institute not only to be worthy of its inheritance but also to be distinctive and distinguished on its own by scripting a path towards novelties. Presented below are the statements for Vision, Mission, Goals & Strategies (to achieve the Goals) and the Core Values of IIT Bhubaneswar.

VISION

- "We will be a highly respected Institute in the world for our distinctive knowledge"

MISSION

- To shape ourselves into a learning community, where we work, listen and respect each other.
- To encourage and facilitate faculty, researchers and students to work synergistically across discipline boundaries.
- To infuse a sense of excitement in students in innovation & invention, design & creation and entrepreneurship.
- To develop and pursue curricula those are dynamic, flexible and holistically designed to facilitate creativity and cognitive thinking.
- To strive for productive partnership between the industry and the Institute.

GOALS AND STRATEGIES

Promoting globally competitive academic programs and ambience that support intellectual growth and skill acquisition

- Promote skills to critically analyze and the competency to effectively synthesize and apply new knowledge in curriculum development and delivery
- Address the changing needs of the region, state, nation and world in the learning process.
- Create a diverse, fully-engaged, learner-centric campus environment
- Strengthen the national and international competitiveness of the students by facilitating international internships, industrial project opportunities, student exchange and study abroad participation
- Put equal emphasis on discovery science and solution science
- Bring research into class rooms

Namrata Chadha (Social Worker, Member of ICC, IIT Bhubaneswar), Adv. Ralalaxmi Das (Member of Child Welfare Committee, Odisha) and Adv. Snehanjali Mohanty (Member, Odisha State Commission for Women).

A three day programme was conducted by WWC as a part of International women's day celebration-2019. The programme included theme based competitions along with a lecture on "Handling relationships". Ms. Amrita Dash IPS, (Assistant Director, Sardar Vallabhbhai Patel National Police Academy Hyderabad) addressed the women's day evening function as chief guest.

Expanding world-class interdisciplinary research and scholarly endeavours.

- Promote distinctive research programs that address the real life as well as futuristic issues.
- Strengthen integrated and synergistic interdisciplinary research within and across the various Schools.
- Broaden and strengthen the Institute's research base and support infrastructure by engaging with partners from all sectors of the economy.
- Create a talent pool of world-class faculty members, postdoctoral fellows, doctoral and post-graduate students.
- Create an excellent support staff structure and regularly upgrade their competencies.
- Evolve itself into a repository of intellectual properties and prototypes on a globally competitive basis.

Strengthening and providing support in sustaining a healthy society by improving the quality of life through application of technology.

- Establish an institutional structure to facilitate and promote community engagement and societal enterprise
- Include community engagements into the Institute's promotional guidelines
- Encourage and reward faculty and students' efforts in community development. Acknowledge efforts and gains in official statements and transcripts Evolve itself into a repository of intellectual properties and prototypes on a globally competitive basis.

Establishing a strong and sustainable economic base for the Institute

- Encourage and facilitate sponsored projects, consultancy and technology transfer for creating a sound corpus
- Utilize brand value for attracting endowment for sponsored chairs and scholarships
- Support entrepreneurial endeavours especially in commercializing emerging technologies evolved out of the Institute labs through public private partnership

Building up a healthy and robust IIT Bhubaneswar family

- Promote and sustain a positive working environment and maintain a significantly improved service quality
- Improve staff support through expanding professional development opportunities
- Perform Institute's corporate social responsibilities with utmost sincerity
- Nourish and sustain vibrant co- and extra-curricular activities
- Create an ambience for bonding through equity, trust and mutual respect

CORE VALUES

Core Values

- Respecting students as budding engineers and scientists embarking on a journey towards innovation and invention
- Nurturing freedom of thought and expression and encouraging sense of inquiry
- Empowering each person to rise to his/her full potential
- Respecting the opinions and rights of others

IIT Bhubaneswar is Ragging Free

The Institute strongly adheres to anti-ragging policy and implements it through true spirit of actions. The institute takes several timely actions including close monitoring to ensure the system is in place. Also the administration, concerned faculty and staff conducts several meetings with the newly joined fresher's as well as senior students appraising them about the policy of the institute and counselling them about the good practices of interaction with new students and development of brotherhood towards personality building.

Anti-ragging activities

The Dean (SA) closely monitors the activities in the campus being supported by Warden and faculty members to make it ragging free. In order to build up the confidence in the minds of freshers, faculty do regularly visit the hostels to ensure truest interaction between freshers and senior students and spend nights in the hostel during initial few months

ABOUT CAMPUS

The permanent campus of IIT Bhubaneswar spreads over 936 Acres of land. It is situated at the foot of Barunei Hill, which is famous for its rich history. The campus provides a unique serene and pollution free academic environment. The campus includes Academic area, Residential area and area for Training centres and Research Park. The students are also staying in NISER hostel.

Mahanadi Hall of Residence

Boys Hostel with capacity of 800 studentsMess Facilities; Modern and well equipped kitchens; Gym and Physical Fitness; Basketball and Volleyball Courts; Badminton and Table Tennis Court; Media Entertainment Room; Solar Lighting Systems; 24 Hours high alert security system; Gigabit Ethernet to individual hostel rooms; ATM facilities

Subarnarekha Hall of Residence

Girls Hostel with capacity of 200 studentsIndependent mess facilities; Modern and well equipped kitchens; Basketball and Volleyball Courts; Solar lighting systems; 24 hours high alert security system; Gigabit Ethernet to individual hostel rooms

Health Center

- Dispensary-Male
- Dispensary-Female
- Round the clock availability of experienced doctors
- Well-equipped ambulances
- Paramedical staff nurses
- Life-saving drugs

Sports Facility

- Cricket field
- Volleyball courts
- Basketball courts
- Table tennis rooms

Residential facility for Faculty and Staff

- Faculty quarters block having 80 quarters
- 40 room guest house
- Staff quarter block having 40 quarters
- Mini-Market
- 200 seated community centre

Staff Quarters

Community Hall

Guest House

The guest house is comprised of a total of 42 single and double bedded air conditioned rooms with attached bathrooms and all modern amenities. Online booking and e-payment facilities are available.

Guest House

Shopping Mall

ACADEMIC AREA

Administrative Building

School of Infrastructure

First Year Laboratory Complex

School of Electrical Sciences

School of Basic Sciences

School of Mechanical Sciences

Workshop Complex

Phase-II Constructions

MHRD has sanctioned Rs. 1260 Crores for Phase –I & II constructions of IITBBS. Out of Rs. 1260 crores, IIT Bhubaneswar had approved the Preliminary Estimated cost of 410 Crores for Phase-I and CPWD was given A/A and E/S and planned for the expenditure of Rs. 850 Crores for Phase – II constructions by appointing NBCC (India) Ltd. as the Project Management Consultant for phase – II constructions of IIT Bhubaneswar. Rs. 850 Crores is to be spent for infrastructure development of the Institute by March 2019.

The following buildings/facilities are under construction by NBCC as PMC.

Sl. No.	Name of the Work	Area (Sq.m.)	Date of Start	Likely date of Completion
A) Works in Progress				
M/s. Krishna Builders (Awarded value 87.88 Cr.)				
1.	Boys' Hostel (800 Seater)- 1 No.	24504	20.04.2017	30.06.2019
2.	Girls' Hostel (400 Seater)- 1 No.	15043		
M/s. Simplex Infrastructures Ltd. (Awarded value 524.12 Cr.)				
1.	Boys' Hostel (800 Seater)- 1 No.	24504	27.11.2017	30.11.2019
2.	Type – A Faculty Qtrs. (44 Nos)-2 unit	11342		
3.	Type –B Faculty Qtrs) -4 units (88 Nos	20658		
4.	Type –C Faculty Qtrs-3 units (66 Nos)	13710		
5.	Type –D Staff Qtrs - 2 units (44 Nos)	6733		
6.	Director's Bungalow	506		
7.	Students activity centre (including swimming Pool 50 x 25M)	4509		
8.	Dispensary	1224	27.11.2017	30.11.2019
9.	Auditorium (1500 Capacity)	5281		
10.	School of Minerals, Metallurgical and Materials, Engineering	3648		
11.	School of Earth Ocean & Climate Sciences	3648		
12.	School of Humanities, Social Sciences & Management	1582		
13.	Central Workshop	2554		
14.	Central Research and Instrumentation facilities	2508		
15.	Lecture Theater (60 Seater Class room-48 Nos., 120 Seater Class room-22 Nos., 240 Seater Class room - 4 Nos.	26354		

M/s. SNS Infracon Pvt. Ltd (Awarded value 29.29 Cr.)				
1.	Commercial Complex (Academic)	1443	01.06.2018	30.11.2019
2.	Commercial Complex (Residential)	1143		
3.	Extension of SES Building	8468		
M/s. Lalitendu Satpathy (Awarded value 13.63 Cr.)				
1.	Construction of Sewerage Network with STP at Argul Campus		14.11.2018	13.07.2019
M/s. Shreejikrupa Projects Ltd. (Awarded value 49.32 Cr.)				
1.	Efficiency Hostel	7555	14.12.2018	13.11.2019
2.	Extension of School of Basic Sciences	2564		
3.	Extension of School of Mechanical Sciences	3128		
4.	Extension of School of Infrastructure	3105		
M/s. Shreejikrupa Projects Ltd. (Awarded value 55.26 Cr.)				
1.	External Development Covered Car parking works, Open air Theatre works (with green room), Basketball, Volley ball, Lawn Tennis, Open Car, Cycle Parking, Sports stand works, Equipment room, Football Ground & athletic Track works, LTC Circle works, Road work, footpath and Drain work, School ring hard and soft landscaping including waterbody works, Lecture hall ring hard and soft landscape including three nos. lily pool and water body works, Cricket, Javelin/Discuss throw field, Hockey Ground & Seating area, External Plumbing, External Electrical and Swimming pool Equipments& Balancing tank)		03.03.2019	02.12.2019
M/s. J.M .Enviro Technologies Pvt. Ltd (STP with SCADA system)				
1.	STP with SCADA system			30.11.2019
B]	Tender to be call shortly			
1.	Construction of Boys' Hostel-4 (One wing) with front common block including kitchen and multipurpose hall			

Photographs of Phase-II Construction Dt. 31.03.2019

ACADEMIC BLOCK

Auditorium: Structural work up to ground floor Completed and column works is in progress

Central workshop: Structural work completed. Block work and finishing work is in progress

SEOCS: 1st floor roof slab is in progress and block, Work is in progress in Ground floor & 1st floor

SHSSM: 1st floor roof slab is completed and finishing Work is in progress

SMMME: 1st floor roof slab is in progress and block Work is progress in Ground floor an 1st floor

LTC-1: 2nd floor roof slab is in progress and block work in ground floor and 1st floor is in progress

LTC-2: 1st floor roof slab completed and block work Is in progress in Ground and 1st floor.

CRIF: Ground floor roof slab completed and block Work for ground floor is in progress.

LTC-3: 2nd floor roof slab is in progress and block Work of ground and 1st floor is in progress

SES (Extension): B-wing SBS(Extension): Foundation work completed And column SIF(Extension)

CRIF: Ground floor roof slab completed and block Work for ground floor is in progress.

Commercial Complex (Academic): Plinth beam work Completed and column work is in progress.

SES (Extension): A-wing

SES (Extension): B-wing

RESIDENTIAL BLOCK

Boys' Hostel -3 (A Wing)

Girls' Hostel -2

Boys' Hostel -3 (B Wing)

Boys' Hostel -3

Type-B3 & B4 Quarters:
Ground floor roof slab
Completed in B3 & 3rd floor
roof slab completed In

Director Bungalow: Plastering work in progress

Dispensary: Ground floor roof slab completed And column work is in progress in 1st floor

Type-B1 & B2 Quarters: 6th floor roof slab Completed

Type-A1 & A2 Quarters: 6th floor roof slab Completed
in A1 & 2nd floor roof slab completed In A2 Quarters

Type-C1, C2 & C3 Quarters: 2nd floor roof slab completed,
Ground floor roof slab completed in C2 and 3rd floor Roof slab
completed in C3.

Type C3 Quarters :3rd floor Roof slab completed

Type-D1 & D2 Quarters: First floor roof slab Completed in D1 and
Terrace slab completed in D2 quarter

Earth work in Basketball court for External Development work

Student Activity Centre: Structural work completed
Except basketball and Badminton court

Commercial Complex (Residential): Shuttering

Efficiency Hostel: Work is in process column work
above foundation is in progress

Swimming pool

Earth work in football ground for External Development work

Earth work in Hockey ground for External Development work

Sewerage network in front side of BH-3. (Residential)

Earth work in cricket ground for External Development work.

Sewerage network in front of Dispensary (Residential)

ECO FRIENDLY CAMPUS INITIATIVES

The horticulture activity was started in 2015 to create the IIT Bhubaneswar campus with full of greenery and more vibrant, including exotic and indigenous deciduous and coniferous trees and plants (long-life tall trees, flower and medicinal trees, fruit trees, palm and pine trees). For the next-five year plan, the main focus of the centre for horticulture is to create native landscaping in newly constructed areas and near buildings with lush green gardens adorned with ornamental and medicinal plants that maintain the clean and healthy environment for the students and residents of the campus. Autonomous water irrigation system will be set up in the campus to saving both water and expenditures. The horticulture section is strict about using only organic fertilizers.




PLANTATION INITIATIVE

IIT Bhubaneswar believes that nurturing nature is the best way to promote creativity and increasing the amount of landscaping and greenery in the campus can provide positive effect on mental and physical health of the community. More than 33000 trees have been planted in last two years. The exotic and indigenous deciduous and coniferous trees and plants were chosen to create the healthy echo-system for attracting the exotic and migratory birds. The avenue trees can sooth and relax us by providing the pleasant smells. The massive teak plantation was completed along the boundary wall of our campus to help in maintaining the balance between the oxygen and carbon dioxide in the atmosphere.


CYCLE FRIENDLY CAMPUS INITIATIVE

IIT Bhubaneswar banned power vehicle use by students and incorporated the "Cycling Culture" by considering the health benefits of students, faculty, staff and the community and for controlling environmental risk factors. The institute has initiated the Bicycle Infrastructure Development Plan for creating "Cycle Friendly Campus" by providing sustainable and convenient tree-lined cycle path to a ride a bicycle between the schools and hostels, and to create cycle parking in each of the buildings.

Energy-Harvesting Initiative

IIT Bhubaneswar has installed solar panels on the building rooftops to reduce carbon footprint and dependency on conventional sources of energy.

Water-Harvesting Initiative

IIT Bhubaneswar has initiated building up rooftop rainwater harvesting and surface rainwater harvesting infrastructure and setting up a waste management system and wastewater recycling plant.

Green Buildings

The buildings are GRIHA (Green Rating for Integrated Habitat Assessment) 4 and 5 compliant. The building construction is done by using the fly ash bricks recognized as an environmentally friendly product because it helps in keeping building cool and clean environment, and also saves agricultural land which is used for manufacturing clay bricks.

Eco-friendly Waste Disposal

IIT Bhubaneswar deployed dustbins with biodegradable and non-biodegradable categories.

IIT BHUBANESWAR IS RAGGING FREE

The Institute strongly adheres to anti-ragging policy and implements it through true spirit of actions. The institute takes several timely actions including close monitoring to ensure the system is in place. Also the administration, concerned faculty and staff conducts several meetings with the newly joined fresher's as well as senior students appraising them about the policy of the institute and counselling them about the good practices of interaction with new students and development of brotherhood towards personality building.

The Dean (SA) closely monitors the activities in the campus being supported by Warden and faculty members to make it ragging free. In order to build up the confidence in the minds of freshers, faculty do regularly visit the hostels to ensure truest interaction between freshers and senior students and spend nights in the hostel during initial few months

ACADEMICS

Indian Institute of Technology Bhubaneswar is one of the elite technology institutes of India spurred by sustained creation of knowledge and innovation, through high quality R&D activities and commitment to holistic education. The Institute aims to develop and pursue dynamic and flexible curricula designed to facilitate creativity and cognitive thinking among students through productive partnership with industry. The Institute offers 6 Nos. of B.Tech., 9 Nos. of Dual Degree Programmes, 5 Nos. of M.Sc., 11 Nos. of M.Tech Programmes and Ph.D Programme in its 7 Schools. The admission for the academic year 2018-19 to the above courses took place on 20th and 25th July, 2018 respectively. Intake of the B. Tech. students increased from 350 to 369 with the increase in supernumerary seats for female students in a significant step which made IIT Bhubaneswar have the highest intake amongst 2nd and 3rd generation IITs. Out of 369 seats offered through JEE, 354 students (Including 2 preparatory course completed students of last year, joined this year) joined B.Tech, and Dual Degree programmes and 5 students joined preparatory course at other institutes, Out of 100 seats offered, 75 students joined M.Sc and out of 160 offered, 156 (including 3 sponsored students from DRDO) students have joined various M.Tech programmes. 90 students took admission in the Ph.D programme. This year almost all seats have been filled up. M.Tech. admission through COAP was very successful. General trend to opt for Computer Science, Electronic & Communication, Electrical Engineering disciplines were exercised by the students for undergraduate programmes. From the

academic year 2018-19, one new M.Tech course in Computer Science & Engineering with two sub-specializations viz: Cyber Security & Forensics and Data Analytics were introduced. The Institute has 1767 Students (B.Tech. - 1101, M. Tech. - 262, M.Sc. – 142, and Ph. D. - 262).

The 7th Annual Convocation was held on Sunday, 22nd September 2018 in the Community Centre, Argul Campus, IIT Bhubaneswar. Prof. Ashutosh Sharma, Secretary, Department of Science and Technology graced the occasion as Chief Guest. The Chairman, Board of Governors, Shri Pankaj Ramanbhai Patel, the Director IIT Bhubaneswar Prof. Ratnam V. Raja Kumar and other dignitaries were present on the occasion. Out of total 332 graduates, 211 (108 B.Tech., 51 M.Tech., 46 M.Sc., and 6 Ph.D.) students were awarded degrees during the occasion. Shri Nanduri Divakar from B.Tech. (Mechanical Engineering) was awarded the President of India Gold Medal for topping among all B. Tech. branches, Ms. Debaleena Mukherjee of M.Tech. (Transportation Engineering) was awarded the Director's Gold Medal in absentia for topping among all M.Tech. Programmes and Shri Sayan Roy of M.Sc. (Chemistry) was awarded the Director's Gold Medal for topping among all M.Sc. disciplines. Several other medals and endowment awards were also distributed.

Academic Information for 2018 – 19

4-year B.Tech. Programme	Civil Engineering, Electrical Engineering, Mechanical Engineering, Computer Science and Engineering, Metallurgical and Materials Engineering, Electronics and Communication Engineering
5-year Dual Degree (B.Tech. + M.Tech)	B. Tech in Mechanical Engineering + M. Tech. in Mechanical System Design, B. Tech in Mechanical Engineering + M. Tech. in Thermal Science and Engineering, B. Tech. in Mechanical Engineering + M. Tech. in Manufacturing Engineering, B. Tech in Civil Engineering + M. Tech. in Structural Engineering, B. Tech in Civil Engineering + M. Tech. in Transportation Engineering, B.Tech. in Civil Engineering + M. Tech. in Transportation Engineering, B. Tech in Civil Engineering + Environmental Engineering, B.Tech. in Computer Science and Engineering + M.Tech. in Computer Science and Engineering, B.Tech. in Electrical Engineering + M.Tech. in Power Electronics and Drives, B.Tech. in Metallurgical and Materials Engineering + M.Tech. in Materials Science and Engineering
M. Tech. Programme	Climate Science and Technology, Electronics and Communication Engineering, Transportation Engineering, Structural Engineering, Metallurgical & Materials Engineering, Mechanical Systems Design, Thermal Science and Engineering, Power System Engineering, Environmental Engineering, Water Resources Engineering, Computer Science and Engineering
Joint M.Sc.-Ph.D. Programme	Physics, Chemistry, Mathematics, Geology, Atmosphere and Ocean Sciences
Ph.D. Programme	School of Basic Sciences, School of Earth, Ocean & Climate Sciences, School of Electrical Sciences, School of Humanities, Social Sciences and Management, School of Infrastructure, School of Mechanical Sciences, School of Minerals, Metallurgical & Materials Engineering

Year-Wise Sanctioned (Approved) Intake

Academic Programme	2018-19	2017-18	2016-17	2015-16
B.Tech & Dual Degree	350	350	260	180
M. Tech	173	154	130	130
Joint M.Sc. - Ph.D.	100	100	100	100
Ph.D	360			

Year wise admitted strength of students in various academic Programmes

Year	B.Tech & Dual Degree	M.Tech	M.Sc	Ph.D.	Total
2010-11	126			25	151
2011-12	112			21	133
2012-13	113	42		50	205
2013-14	148	50	57	44	299
2014-15	164	71	71	48	354
2015-16	162	74	76	58	370
2016-17	249	106	73	61	489
2017-18	338	125	70	51	584
2018-19	354 *	156	75	90	675

*including Supernumerary Female student and preparatory course completed students

Total Actual Student Strength (2018-19)

Programme	No. of Male Students	No. of Female Students	Total Students	Within State	Outside State	Economically Backward	Socially Backward (SC, ST, OBC-NCL)
B.Tech	984	117	1101	45	1056	356	543
M.Tech	207	55	262	88	174	65	116
M.Sc.	112	30	142	28	114	52	73
Ph.D	217	45	262	101	161	----	62

Course Wise Student Strength B.Tech & Dual Degree:

Sl. No.	Name of Programme	Approved Intake	No. of students admitted in 2018-19*		Total number of students in 2018-19*		No. of Students passed in 2017-18		No. of Students passed in 2018-19 (upto Spring End Sem. Exam. 2018-19)	
			Male	Female	Male	Female	Male	Female	Male	Female
1	B.Tech. (Civil Engineering)	50	42	7	149	15	30	4	28	2
2	B.Tech (Electrical Engineering)	50	46	7	162	18	35	3	24	4
3	B.Tech. (Computer Science and Engineering)	50	43	8	168	23	36	7	34	7
4	B.Tech (Electronics and Communication Engineering)	40	34	6	104	19				
5	B.Tech. (Mechanical Engineering)	50	44	7	157	11	38	0	30	1
6	B.Tech. (Metallurgical and Materials Engineering)	20	17	4	61	6	9	0	10	0
7	Dual Degree (B. Tech in Mechanical Engineering + M. Tech. in Mechanical System Design)	10	10	2	31	3				
8	Dual Degree (B. Tech in Mechanical Engineering + M. Tech. in Thermal Science & Engineering)	10	10	1	30	1				
9	B. Tech. in Mechanical Engineering + M. Tech. in Manufacturing Engineering	10	8	2	18	2				
10	Dual Degree (B. Tech in Civil Engineering + M. Tech. in Structural Engineering)	10	8	2	21	5				
11	Dual Degree (B. Tech in Civil Engineering + M. Tech. in Transportation Engineering)	10	8	2	23	4				
12	B. Tech in Civil Engineering + M. Tech. in Environmental Engineering	10	7	2	14	2				
13	B.Tech. in Computer Science and Engineering + M.Tech. in Computer Science and Engineering,	10	8	2	18	4				
14	B.Tech. in Electrical Engineering + M.Tech. in Power Electronics and Drives	10	8	2	17	3				
15	B.Tech. in Metallurgical & Materials Engineering + M.Tech. in Materials Science and Engineering	10	6	1	11	1				
	Total :	350	299	55	984	117	148	14	126	14

M. Tech

Sl. No	Name of Programme	Approved Intake	No. of students admitted in 2018-19		Total number of students in 2018-19		No. of Students passed in 2017-18		No. of Students passed in 2018 -19 (upto Spring End Sem. Exam. 2018-19)	
			Male	Female	Male	Female	Male	Female	Male	Female
1	Electronics and Communication Engineering	18	14	1	21	7	10	4	8	5
2	Power System Engineering	18	12	3	18	8	10	4	8	3
3	Computer Science and Engineering	18	9	7	9	7				
4	Mechanical Systems Design	18	17	1	31	1	13	1	13	0
5	Thermal Science and Engineering	18	17	1	32	1	16	0	16	0
6	Civil Engineering						1	0		
7	Structural Engineering	12	8	2	14	5	4	4	6	2
8	Transportation Engineering	10	8	1	16	2	3	4	8	1
9	Environmental Engineering	12	7	3	12	4			4	1
10	Water Resources Engineering	12	4	6	9	8			5	2
11	Climate Science and Technology	18	14	2	25	6	3	3	10	5
12	Metallurgical & Materials Engineering	19	15	4	20	6	9	2	5	2
	Total :	173	125	31	207	55	69	22	83	21

M. Sc.

Sl. No.	Name of Programme	Sanctioned (Approved) Intake	No. of students admitted in 2018-19		Total number of students in 2018-19		No. of Students passed in 2017-18		No. of Students passed in 2018-19 (upto Spring End Sem Exam. 2018-19)	
			Male	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
1	Chemistry	20	9	7	24	9	10	6	15	2
2	Physics	20	12	4	25	8	10	6	0	0
3	Mathematics	20	12	4	31	6	13	5	17	2
4	Geology	20	13	5	23	7	9	6	10	2
5	Atmosphere and Ocean Sciences	20	9	0	9	0	2	2	13	4
Total :		**100**	**55**	**20**	**112**	**30**	**44**	**25**	**55**	**10**

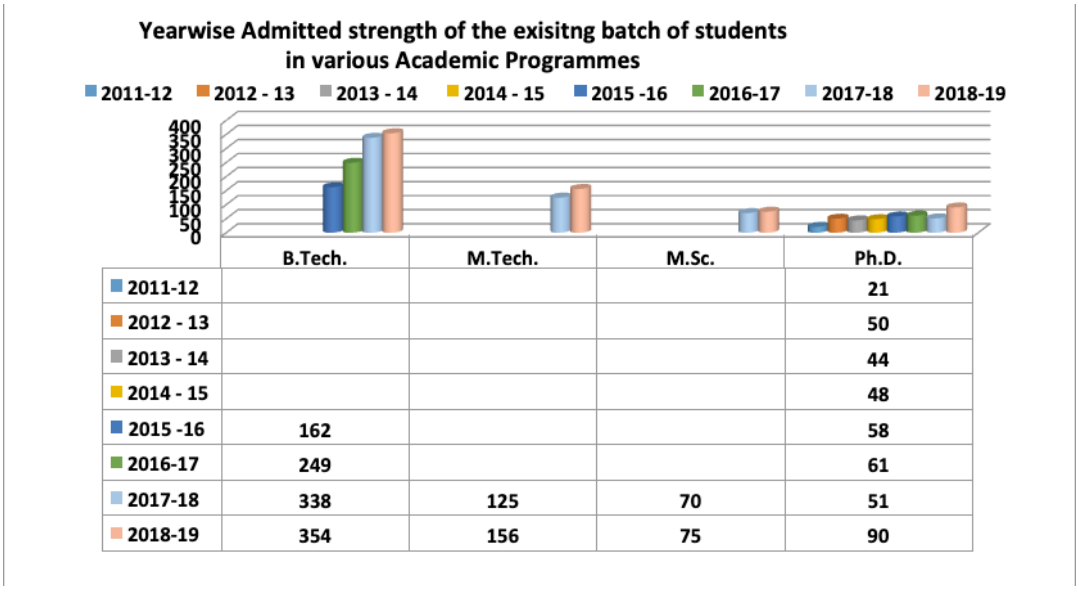
Ph. D

Sl. No	Name of course /School	Approved Intake	No. of students admitted in 2018-19		Total number of students 2018-19		No. of Students passed in 2017-18		No. of Students passed in 2018-19 (upto Spring End Sem Exam. 2018-19)	
			Male	Female	Male	Female	Male	Female	Male	Female
1	School of Basic Sciences	360	22	8	61	14	3		4	5
2	School of Earth, Ocean & Climate Sciences		3	0	21	7				
3	School of Electrical Sciences		17	2	44	9	1	1	4	1
4	School of Humanities & Social Sciences		1	5	5	6	1	1		
5	School of Infrastructure		12	0	37	5	1		1	1
6	School of Mechanical Sciences		10	0	37	1	2		2	0
7	School of Minerals, Metallurgical & Materials Engineering		10	0	22	4				
Total :		360	75	15	227	46	8	2	11	7

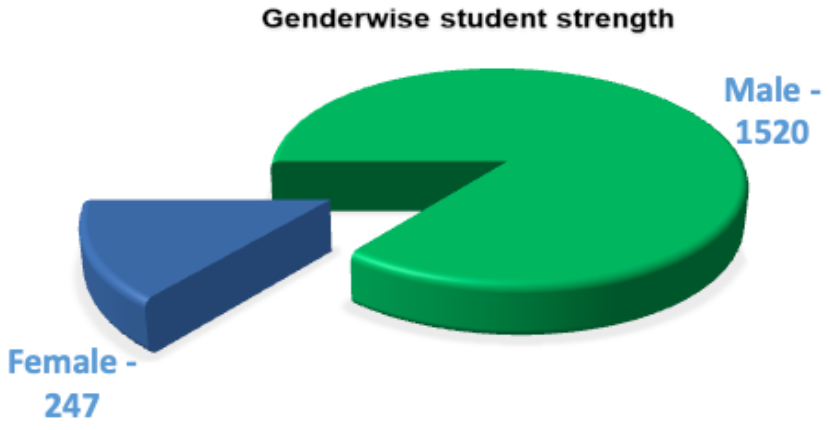
Total fee per student for academic year 2018-19 (per semester)

	General	OBC-NCL	SC/ST	Sponsored
B.Tech	1,47,568.00	1,47,568.00	47,568.00 *	Not applicable
M.Tech	52,568.00	52,568.00	47,568.00	72,068.00
M.Sc	47,568.00	47,568.00	47,568.00	Not applicable
Ph.D	50,068.00	50,068.00	47,568.00	49,568.00

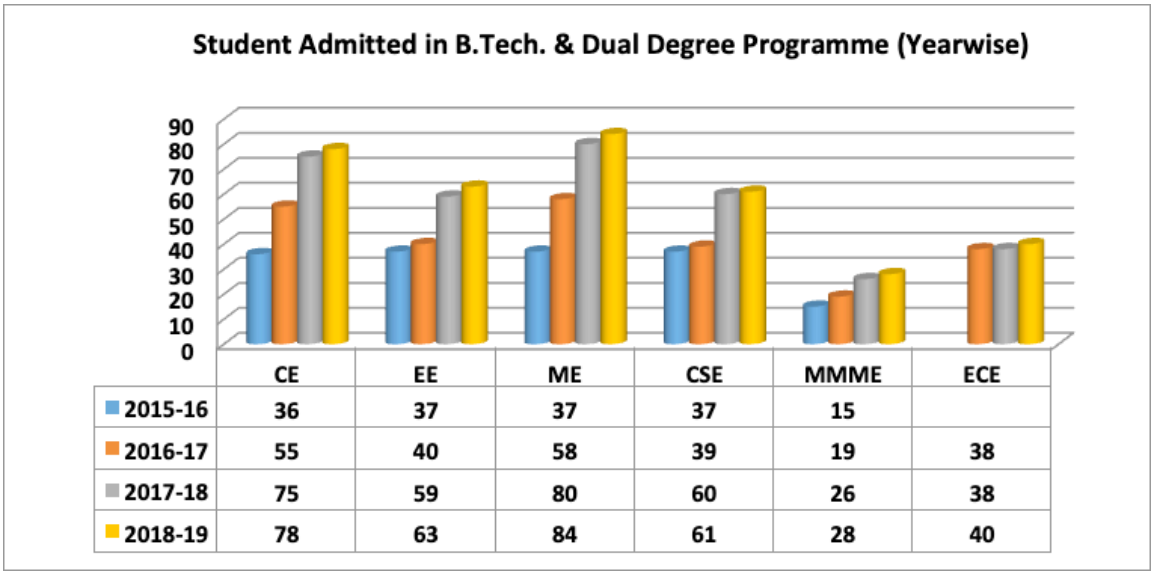
Graphical Representation of Different Academic Programmes Up To 2018-19



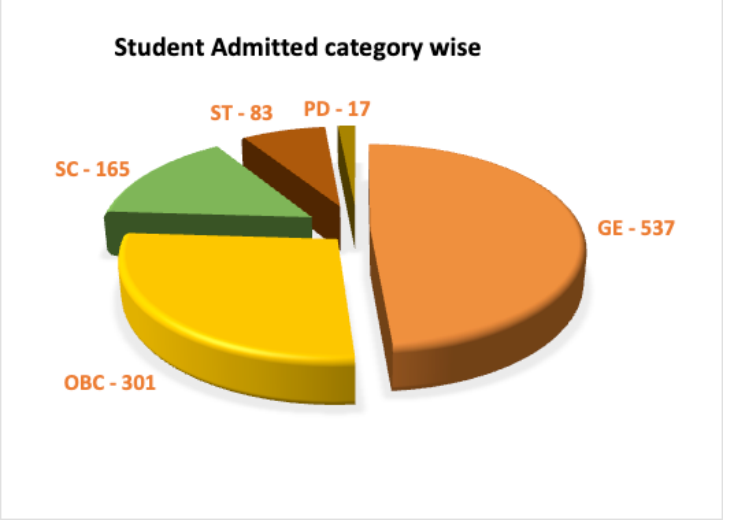
	B.Tech.	M.Tech.	M.Sc.	Ph.D.
2011-12				21
2012 - 13				50
2013 - 14				44
2014 - 15				48
2015 -16	162			58
2016-17	249			61
2017-18	338	125	70	51
2018-19	354	156	75	90



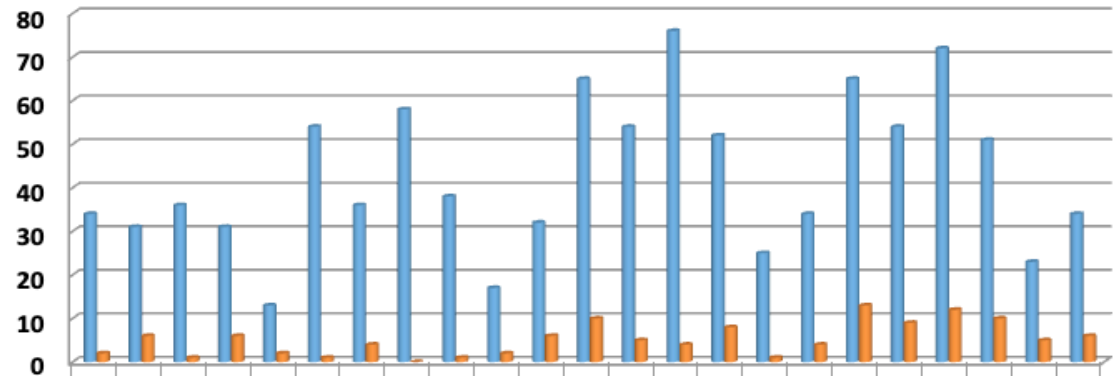
B.Tech & Dual Degree Programme



	CE	EE	ME	CSE	MMME	ECE
2015-16	36	37	37	37	15	
2016-17	55	40	58	39	19	38
2017-18	75	59	80	60	26	38
2018-19	78	63	84	61	28	40

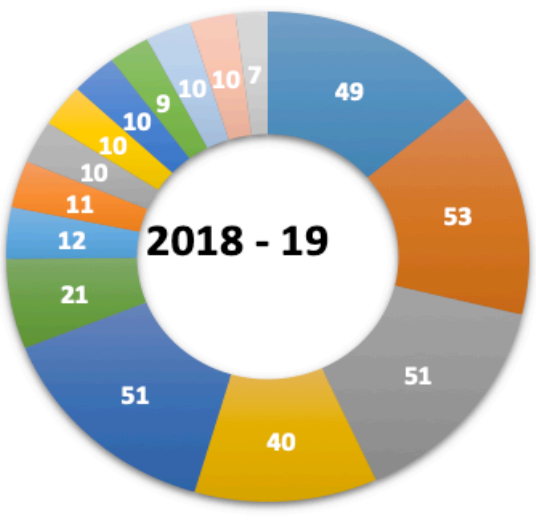


Gender Statistics of Students in B.Tech Programe



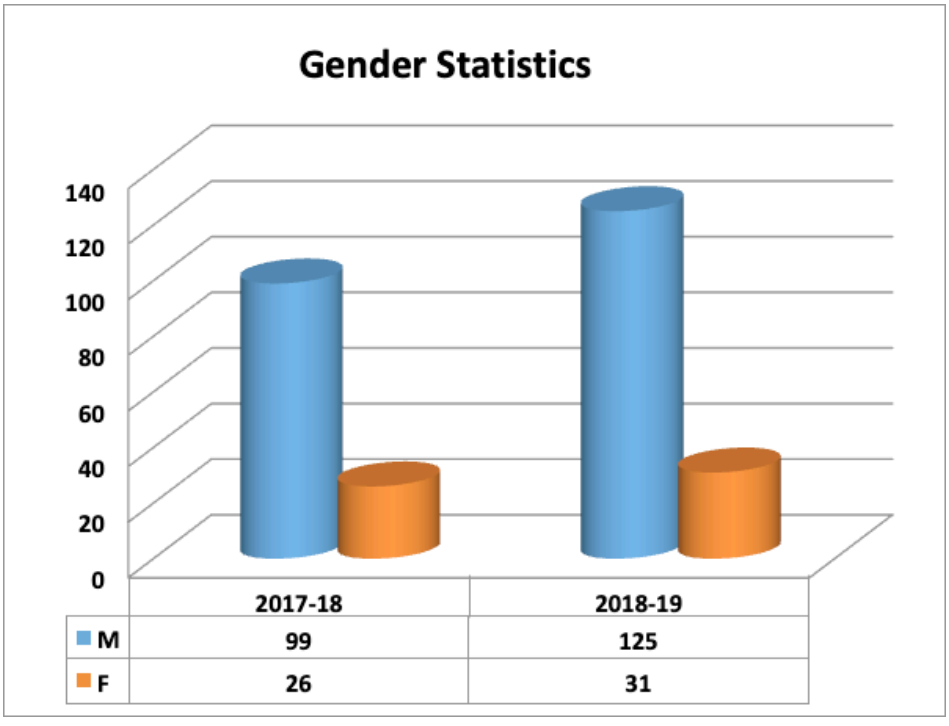
	2015-16					2016-17						2017-18						2018-19					
	CE	EE	ME	CSE	MME	CE	EE	ME	CSE	MME	ECE	CE	EE	ME	CSE	MME	ECE	CE	EE	ME	CSE	MME	ECE
M	34	31	36	31	13	54	36	58	38	17	32	65	54	76	52	25	34	65	54	72	51	23	34
F	2	6	1	6	2	1	4	0	1	2	6	10	5	4	8	1	4	13	9	12	10	5	6

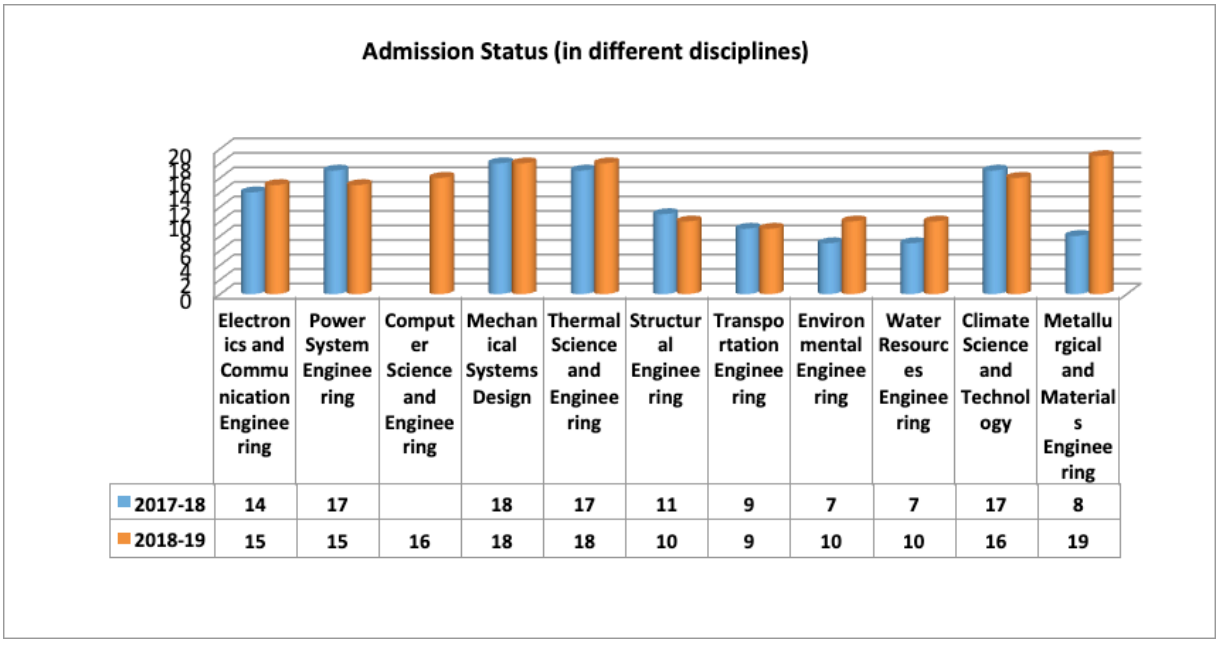
Student admitted in different Programmes : 2018-19

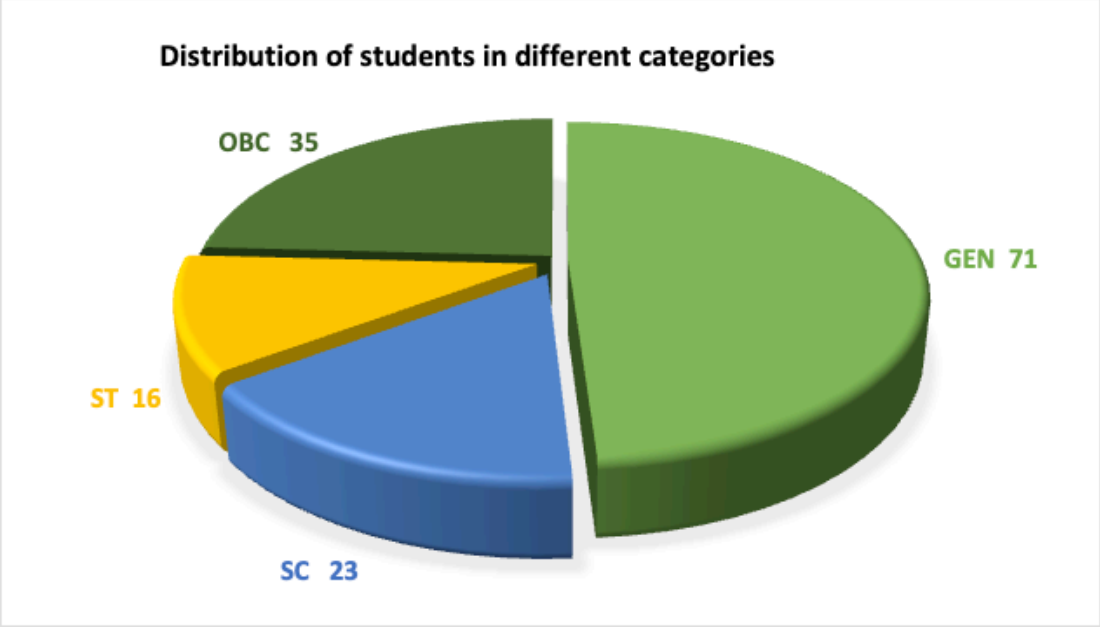


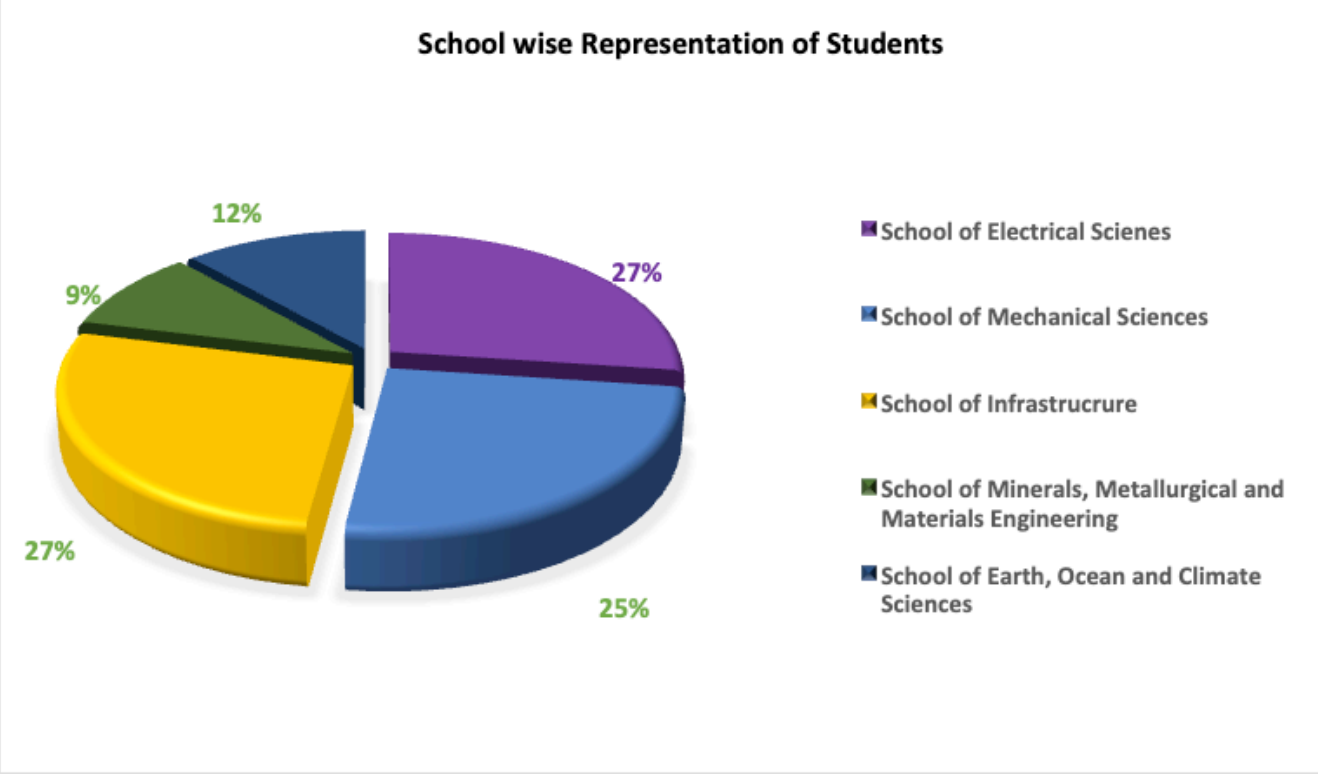
- B.Tech. (Civil Engineering)
- B.Tech (Electrical Engineering)
- B.Tech. (Computer Science and Engineering)
- B.Tech (Electronics and Communication Engineering)
- B.Tech. (Mechanical Engineering)
- B.Tech. (Metallurgical and Materials Engineering)
- Dual Degree (B. Tech in Mechanical Engineering + M. Tech. in Mechanical System Design)
- Dual Degree (B. Tech in Mechanical Engineering + M. Tech. in Thermal Science & Engineering)
- B. Tech. in Mechanical Engineering + M. Tech. in Manufacturing Engineering
- Dual Degree (B. Tech in Civil Engineering + M. Tech. in Structural Engineering)
- Dual Degree (B. Tech in Civil Engineering + M. Tech. in Transportation Engineering)
- B. Tech in Civil Engineering + M. Tech. in Environmental Engineering,
- B.Tech. in Computer Science and Engineering + M.Tech. in Computer Science and Engineering,
- B.Tech. in Electrical Engineering + M.Tech. in Power Electronics and Drives

M.Tech Programme

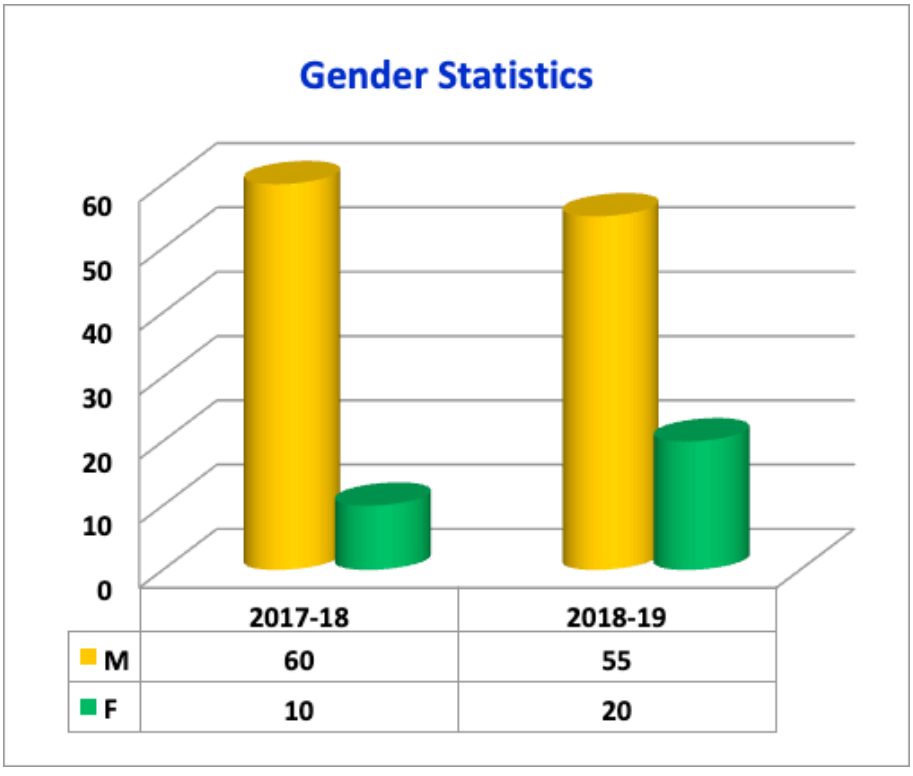


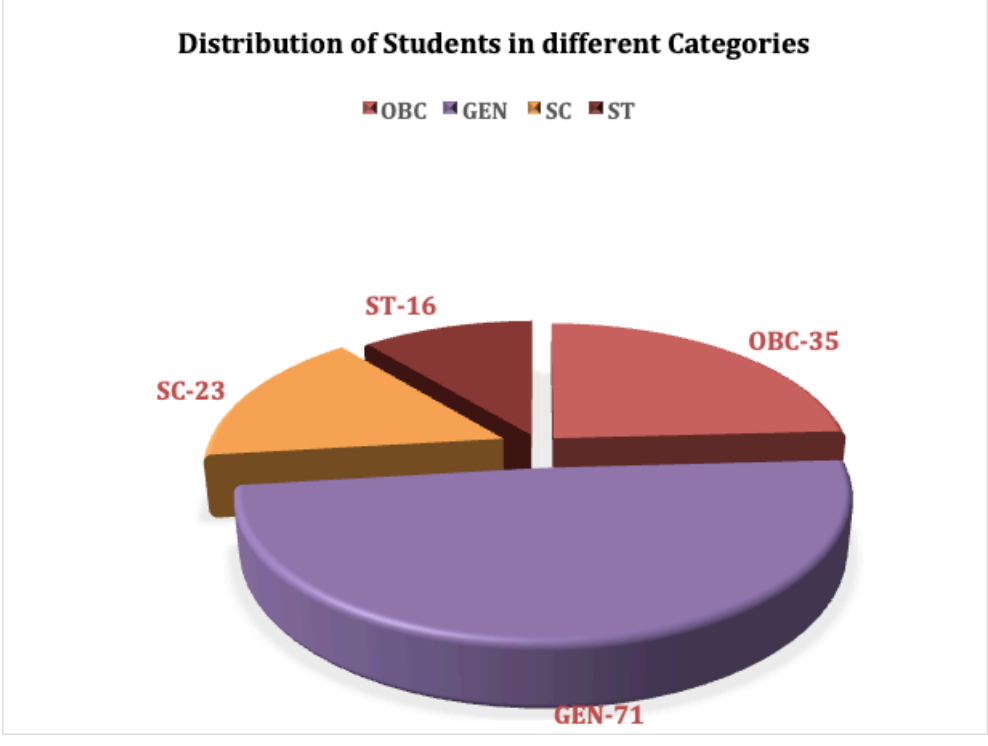


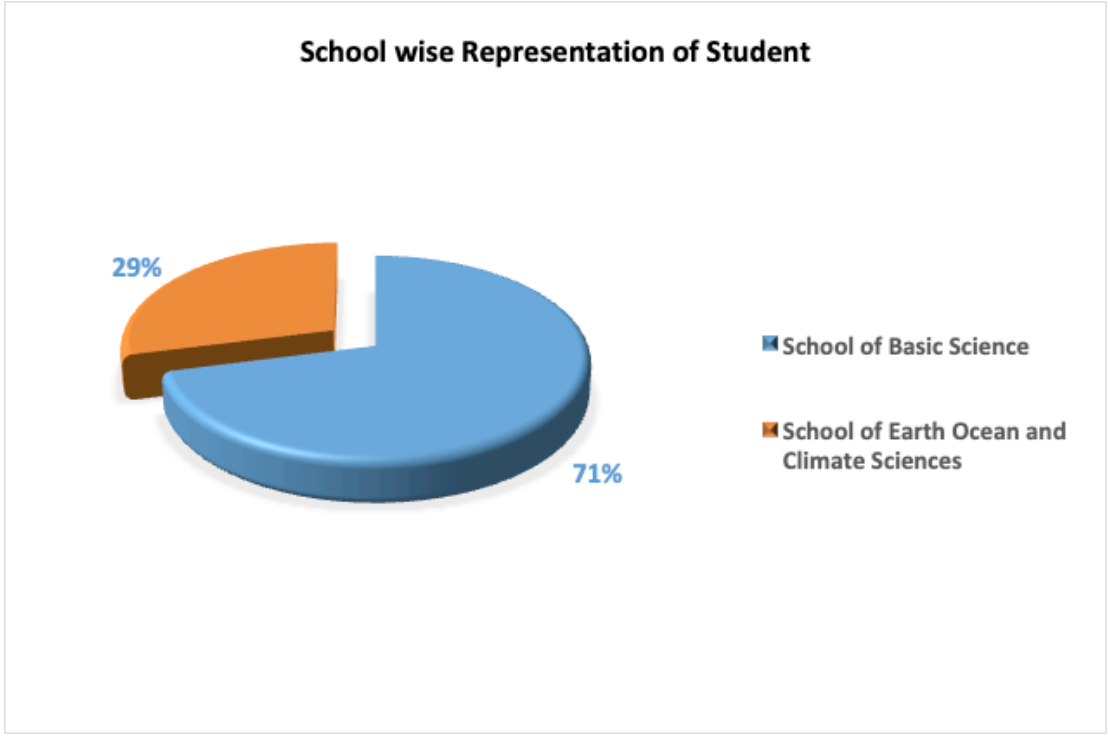

Distribution of students in different categories
OBC 35
GEN 71
ST 16
SC 23

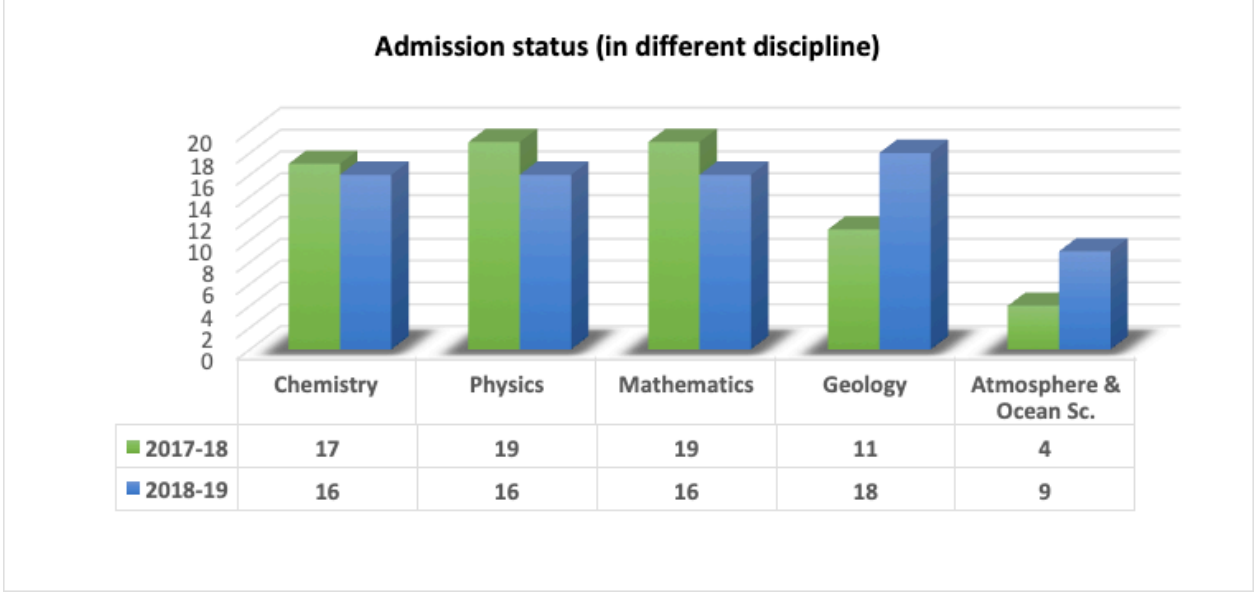

School wise Representation of Students
12%
27%
9%
27%
25%
School of Electrical Scienes
School of Mechanical Sciences
School of Infrastrucrure
School of Minerals, Metallurgical and Materials Engineering
School of Earth, Ocean and Climate Sciences

Joint Msc-Phd Programme



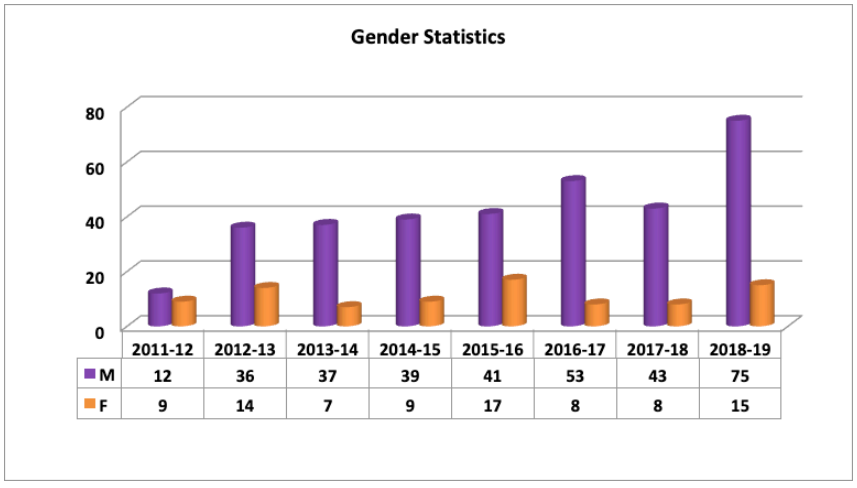


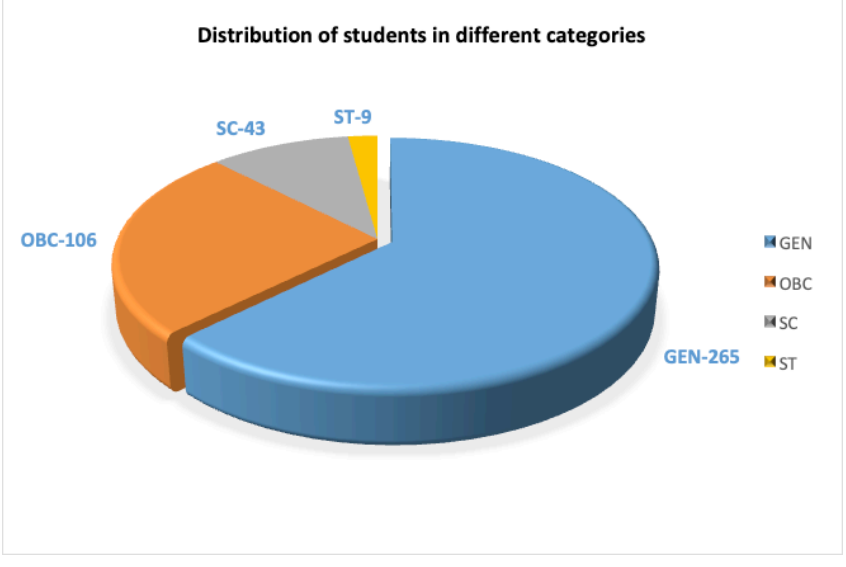


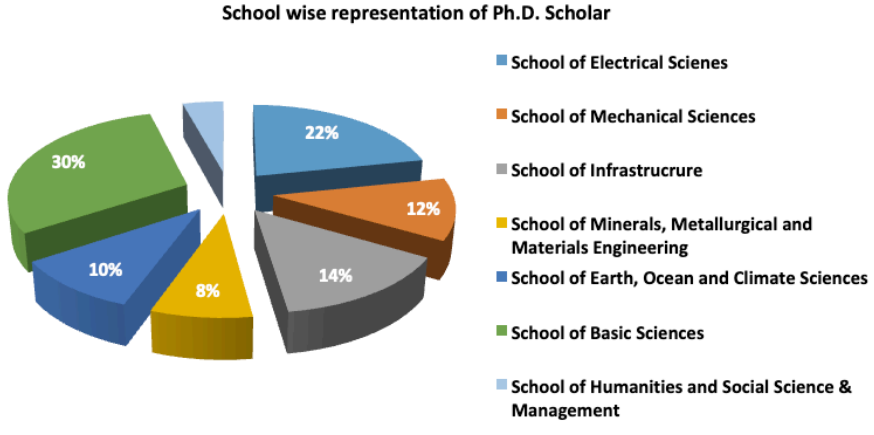


	Chemistry	Physics	Mathematics	Geology	Atmosphere & Ocean Sc.
2017-18	17	19	19	11	4
2018-19	16	16	16	18	9

Phd Programme







Graduation Data (Last Three Years)

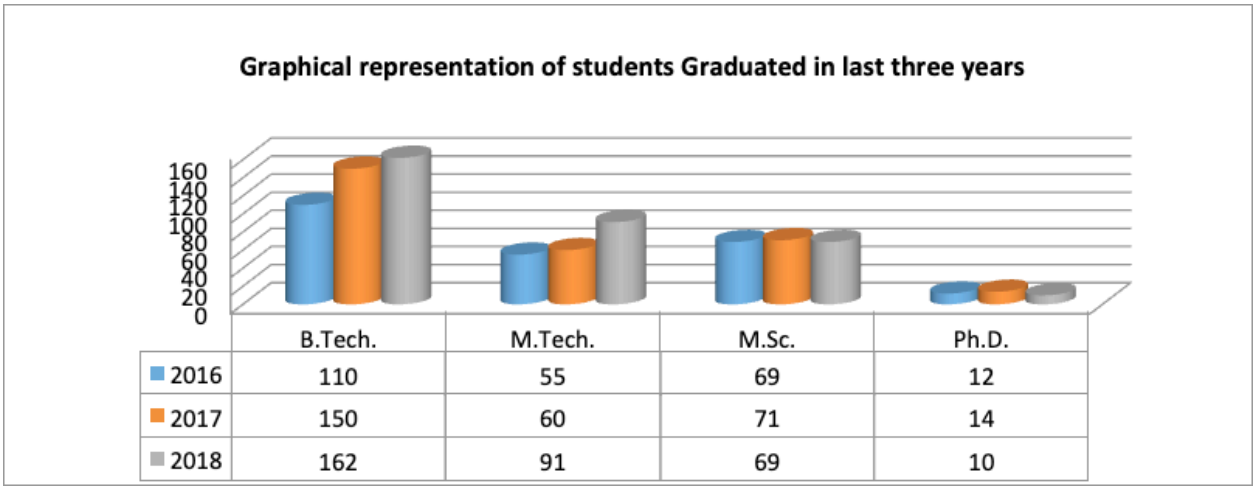
Graduation Data 2016				
Disciplines	**Ph.D.**	**M. Tech.**	**M.Sc.**	**B. Tech.**
Civil Engineering	1	5	-	30
Electrical Engineering	2		-	43
Electronics & Communication Engineering	-	14	-	-
Mechanical Engineering	-	-	-	37
Materials Science & Engineering	-	9	-	-
Climate Science & Technology	-	5	-	-
Mechanical Systems Design	-	1	-	-
Power System Engineering	-	14	-	-
Thermal Science and Engineering	-	7	-	-
School of Basic Sciences	3	-	-	-
School of Electrical Sciences		-	-	-
School of Humanities & Social Sciences & Management	1	-	-	-
School of Infrastructure	-	-	-	-
Atmosphere and Ocean Sciences	-	-	11	-
Chemistry	-	-	13	-
Geology	-	-	15	-
Mathematics	-	-	15	-
Physics	-	-	15	-
Total :	**7**	**55**	**69**	**110**

Graduation Data 2017				
Disciplines	**Ph.D.**	**M. Tech.**	**M.Sc.**	**B. Tech.**
Civil Engineering	-	2	-	33
Computer Science and Engineering	-	-	-	41
Electrical Engineering	-	-	-	38
Mechanical Engineering	-	-	-	38
Electronics & Communication Engineering	-	7	-	-
Materials Science & Engineering	-	13	-	-
Climate Science & Technology	-	8	-	-
Mechanical System Design	-	10	-	-
Thermal Science and Engineering	-	11	-	-
Power Systems Engineering	-	4	-	-
Structural Engineering	-	3	-	-

Transportation Engineering	-	2	-	-
School of Basic Sciences	9	-	-	-
School of Electrical Sciences	3	-	-	-
School of Infrastructure	1	-	-	-
School of Mechanical Sciences	1	-	-	-
Atmosphere and Ocean Sciences	-	-	4	-
Chemistry	-	-	17	-
Geology	-	-	16	-
Mathematics	-	-	17	-
Physics	-	-	17	-
Total :	**14**	**60**	**71**	**150**

Graduation Data 2018				
Disciplines	**Ph.D.**	**M. Tech.**	**M.Sc.**	**B. Tech.**
Civil Engineering	-	1	-	34
Computer Science and Engineering	-	-	-	43
Electrical Engineering	-	-	-	38
Mechanical Engineering	-	-	-	38
Electronics & Communication Engineering	-	14	-	-
Materials Science & Engineering	-	11	-	9
Climate Science & Technology	-	6	-	-
Mechanical Systems Design	-	14	-	-
Thermal Science and Engineering	-	16	-	-
Power System Engineering	-	14	-	-
Structural Engineering	-	8	-	-
Transportation Engineering	-	7	-	-
School of Basic Sciences	3	-	-	-
School of Electrical Sciences	2	-	-	-
School of Infrastructure	1	-	-	-
School of Mechanical Sciences	2	-	-	-
School of Humanities, Social Sciences & Management	2	-	-	-
Atmosphere and Ocean Sciences	-	-	4	-
Chemistry	-	-	16	-
Geology	-	-	15	-
Mathematics	-	-	18	-
Physics	-	-	16	-
Total :	10	91	69	162

Graphical representation of students Graduated in last three years



Scholarship

Programme	Name of Scholarship	2018 (Batch)	2017 (Batch)	2016 (Batch)	2015 (Batch)
B. Tech.	MCM Scholarship 2018-19	48	61	49	39
	Free Studentship 2018-19	0	0	2	16
	Financial Assistance 2018-19	2	3	6	0
Joint M. Sc. – Ph.D.	INSPIRE & Other Scholarship	9	18	16	-

Awards & Medals and Participation in Conference

Programmes	Awards & Medals	National Conference	International Conference
B. Tech.	6	3	1
M. Tech.	7	-	2
Joint M. Sc. – Ph.D.	5	1	--
Ph.D.	10	45	15

Special Events in 2018-19

Programme	Date
Senate Meetings	15.05. 2018
	11.10. 2018
	17.12. 2018
	20.03. 2019
Convocation	22.09. 2019
National Science Day	28.02. 2019

SCHOOL OF BASIC SCIENCES (SBS)

About the School

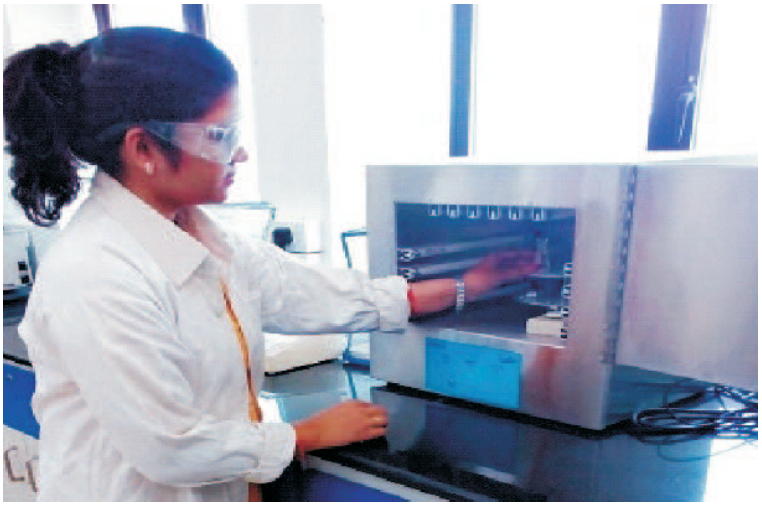
The School of Basic Sciences is an unique school with emphasis on interdisciplinary research in areas of Physics, Chemistry, Mathematics and Biosciences.
Presently SBS offers programs as follows:

- Joint M.Sc.- Ph.D. in Physics, Chemistry and Mathematics
- Ph.D. in Physics, Chemistry, Mathematics and Biosciences
- Post-doctoral program

The School is proud to have two Centres of Excellence, namely MHRD Centre of Excellence for Novel Energy Materials (CENEMA) and S. K. Dash Centre of Excellence of Bio-sciences and Engineering & Technology (SKBET)

Statistics

- No. of faculty: 32
- No. of Ph.D. Students enrolled: 30
- Number of Ph.D. Students Graduated: 13
- Number of M.Sc. Students: 61
- Number of Publications in 2018-19: 250
- No. of on-going sponsored research projects: 26



Major Research Areas

The broad areas of research in Physics includes Theoretical and Experimental High Energy Physics, Theoretical and Experimental Condensed Matter Physics, Optics and Photonics, Atomic Molecular and Surface Physics, Nonequilibrium Statistical Mechanics, Nanoscience and Nanotechnology, and Novel Material search.

The research in Chemistry discipline spans over the areas of Physical, Organic, Inorganic and Green Chemistry: the design and development of metal complexes towards catalysis and anti-cancer drugs, functionalization of nanoparticles and nanoparticles based biosensors, coordination chemistry, magnetic materials and magnetostructural correlation and bio-inspired coordination chemistry, catalysis for fine chemicals, molecular recognition for the synthesis of exotic organic and organic-inorganic hybrid materials

The main areas of research in Mathematics are Analysis, Applied Functional Analysis, Complex dynamics and Fractals, Matrix Theory, Graph theory, Optimization Theory, Queueing Theory, Applied Probability Models, Computational Fluid Dynamics, Numerical Methods, and Soft Computing. The research work in biosciences is focused on G-protein coupled receptor biology, peptide/protein design and engineering, molecular modelling, computational biology, the structure-function studies of various proteins of eye lenses, leprosy, tuberculosis and mechanism and regulation of a class of enzyme ATPases involved in various biological pathways and human diseases.

State of the art Facilities

The School has procured state-of-art equipment to pursue advanced research. Following advanced instrumentation facilities have been established through central instrumentation facility:

- X-ray Diffractometers (XRDs)
- Scanning Electron Microscope (SEM)
- No. of Faculty Rooms-
- No. of Major Equipment
- Raman Spectrophotometer
- Rheometer Nuclear Magnetic
- Resonance (NMR)
- Physical Properties Measurement System (PPMS)
- Gas Chromatography–Mass Spectrometry (GC-MS)

IIT Bhubaneswar is a member of both Belle and Belle II collaborations at KEK, Japan and a member of CMS collaboration, at Large Hadron Collider (LHC), CERN, Geneva.

The School is fully equipped with a central computing server system and integrated and functional for all sorts of high computing research and analysis.

Laboratories

The School of Basic Sciences presently has the following laboratories equipped with relevant modern equipment and instruments:

- Atomic Molecular and Surface Physics Lab
- Biochemistry Lab
- Bioinstrumentation Lab
- Chemical Biology Lab
- Coordination Chemistry and Materials Chemistry Lab
- Coordination Chemistry Lab
- Experimental High Energy Physics Lab
- M.Sc. Chemistry Lab
- M.Sc. Mathematics Lab
- M.Sc. Physics Lab
- Magnetic Materials Lab
- Nano Photonics & Plasmonics Lab
- Nanostructure & Soft Matter Physics Lab
- Organic Chemistry Lab
- Organic Synthesis Lab
- Protein Chemistry Lab
- Quantum Chemistry Lab
- Renewable Energy Lab
- Supramolecular Chemistry Lab
- Undergraduate Chemistry Lab
- Undergraduate Physics Lab

SCHOOL OF EARTH, OCEAN AND CLIMATE SCIENCES (SEOCS)

About the School

Established in 2012 with a vision of generating highly skilled manpower in different specialized areas of Earth System Sciences.

Presently SEOCS offers programs as follows:

- Joint M.Sc. – Ph.D. in Geology, Joint M.Sc. – Ph.D. in Atmosphere and Ocean Sciences,
- M. Tech. in Climate Science & Technology
- Ph.D. Programmes

Experienced and motivated faculty members with varied specializations has been one of the strengths of the School. Currently, the specializations of these faculty members include geochemistry, hydrogeology and watershed management, geophysics, coal geology, paleoceanography& paleoclimatology, remote sensing & GIS applications, atmospheric aerosols & climate, data assimilation & analysis, ocean circulations & modelling, mesoscale modelling and prediction of extreme weather events, tropical cyclones, storm surges

State of the art Facilities

Laboratories are equipped with state-of-the-art computational and scientific instruments viz. ICP-OES, Ion Chromatograph, Automatic high resolution streozoom microscope with 3D imaging capability, Number of broadband Seismometers, Engineering Seismograph, Digital Gravimeter, Resistivity meter (Terrameter), Continuously Operating GPS Reference Stations, High precision Multi-parameter ocean profiler, Binocular and Trinocular polarizing microscopes, High resolution stereo zoom microscopes, range of hydrological and hydro-meteorological instruments, High Performance Liquid Chromatography, Total Organic Carbon Analyzer, Deionized Water Purification System, Microbalances, Microwave Digestion System, LD-Particle Size Analyzer. In addition, Lightning Detection Sensor System, Flux tower for atmospheric observations, a number of high-end workstations, computers and software are available for data analysis, simulation, modelling and visualization purposes. To study the coastal processes, the school have current profiler, number of CTDs, Grab samplers, Niskin Water bottles, gravity corer (1.5m) etc.

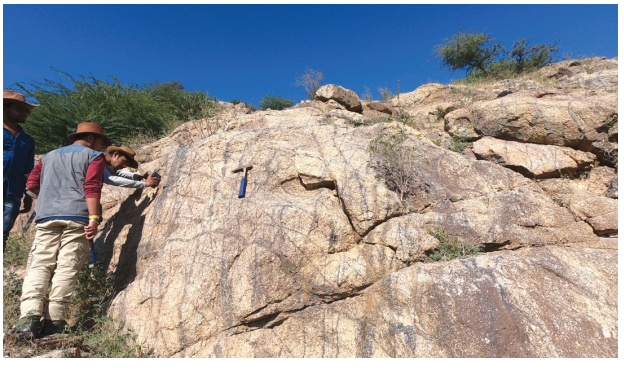
Laboratories

Within the last four years, the following laboratories have been established with state-of-the-art facilities for Geophysical and Geochemical analyses, Petrological and Paleontological studies, Paleoceanography and Paleoclimatology, Remote Sensing & GIS, Modelling and Visualization Weather Analysis and Forecasting, and & air-sea interactions, tropical waves, modelling inter-tropical convergence zone, intrapersonal variability, monsoon dynamics and climate change etc.

Statistics

- No. of faculty: 13
- No. of Ph.D. students enrolled (2017-2018): 02
- No. of M.Sc. students: 39
- No. of M.Tech. Students in Climate Science and Technology: 34
- No of Publications in 2018-19: 41






Simulations of Atmospheric and Oceanic Processes. List of laboratories are as follows

- Advance Geochemistry Laboratory
- Advanced Mineralogy & Crystallography Laboratory
- Applied Paleontology Laboratory
- Climate Observatory
- Cloud physics
- Computational Geosciences & Geophysical Laboratory
- Geophysical Lab
- Hydro geological and Hydro-metrological Laboratory
- Instrumentation and Observation Laboratory
- Modelling and Visualization Laboratory
- Ocean Analysis and Modeling Laboratory
- Ore Geology Laboratory
- Petrology & Geochemistry Laboratory
- Remote Sensing and GIS Laboratory
- Structure Geology Laboratory
- Sedimentology Laboratory
- Paleoclimatology and Paleoceanography Laboratory
- Weather Analysis and Forecasting Laboratory

In addition, Bay of Bengal Coastal Observatory is being established on the coast line near Loudigaon adjacent to IISER Berhampur. It is flagship project of the institute sponsored by Ministry of Earth Sciences, Govt. of Odisha and IIT Bhubaneswar. Prime objectives of the observatory are to collect real time observations and monitoring of the coastal Bay of Bengal in collaboration of different renowned national and international institutions.

SCHOOL OF ELECTRICAL SCIENCES (SES)

About the School

The School of Electrical Sciences was established in the year 2008.Presently SES offers the following academic programs:

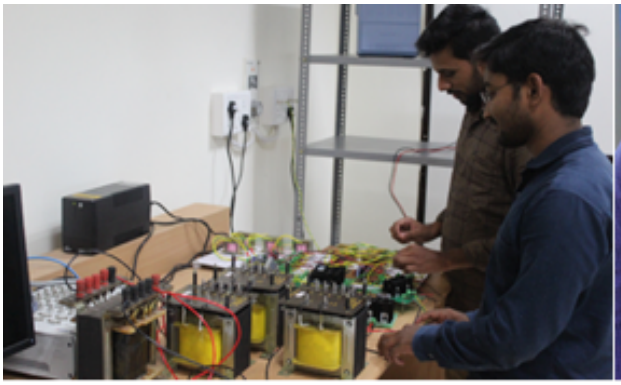
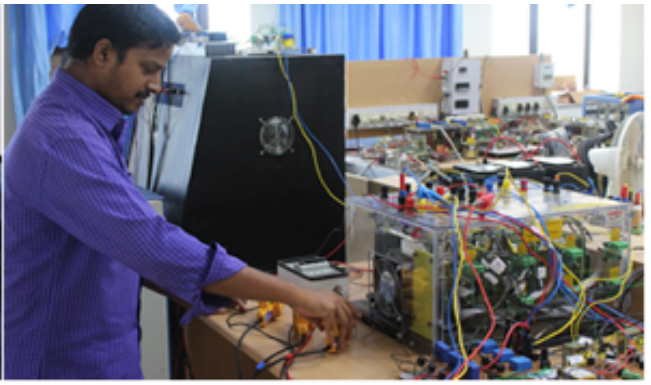
- 4-year B. Tech. in Electrical Engineering, Computer Science & Engineering, Electronics and Communication Engineering
- 5-year dual degree (B. Tech. and M.Tech.) in Electrical Engineering, Computer Science & Engineering
- M. Tech. in Electronics & Communication Engineering, Power System Engineering, Computer Science and Engineering and Power Electronics and Drive (July 2019)
- Ph.D. Programmes: In all major areas of Electrical Sciences

The school has a distinguished record in both teaching and research. Faculty members are active in research and development, and are publishing their research findings in highly reputed national and international leading journals and in

State of the art Facilities

The School has numerous state of the art laboratories and facilities including VLSI system design and fabrication lab, RTDS lab, Renewable Energy system lab, Radiating system design lab and computational facilities for application development and research. Full-fledged FPGA implementation and development facilities linked with embedded system tools and MATLAB provides a smooth platform for ambitious developers.



Laboratories

The School has full-fledged laboratories to train the undergraduate, postgraduate students, and research scholars from the very basics to modern trends in the field of Electrical Engineering, Electronics and Communication and Computer Science Engineering. Students utilize the modern lab facilities and equipment to carry out design and testing of various circuits, projects, programs, and proof of concepts of various research aspects in electrical, electronics, communications, and computer engineering. At present there are 34 laboratories that include:

- Advanced Communication Lab
- Algorithm Lab
- Analog & Digital Electronics Lab
- Basic Electronics Lab
- Biomedical Signal Processing Lab

national and international conferences. In addition, the faculty members are engaged in number of consultancy and in project activities sponsored by government and leading industries.

Statistics

- No. of Faculty: 29
- No of Publications in 2018-19: 74
- The number of patents filed till date: 10
- The number of patents granted till date: 8
- Cloud Lab
- Communication Engineering Lab
- Computer Architecture and Embedded Systems Lab
- Computer Networking Lab
- Control & Instrumentation Lab
- Database Systems Laboratory
- Digital Signal Processing Lab
- Electric Machines Lab
- Electrical Technology Lab
- FACTS and Power Quality Laboratory
- High Performance Computing laboratory
- Image & Video Processing Lab
- Measurement and Instrumentation Lab
- Micro-fabrication and Characterization Lab
- Multimedia Lab
- Operating System & DBMS Lab
- Optical Communication Lab
- Power Electronics & Electric Drives Lab
- Power Quality & FACT Lab
- Power System Analysis & Protection Lab
- Real Time Digital Simulation (RTDS) Lab
- Real time Embedded Systems Lab
- Real-time Signal Processing Lab
- Renewable Energy Systems
- RF, Microwave & Characterization Lab
- Security Lab
- Signal Processing Lab
- Smart Grid & Hybrid Energy System Lab
- Telemedicine Lab
- Wireless Communication & Sensor Networks Lab
- VLSI Simulation Lab

SCHOOL OF HUMANITIES, SOCIAL SCIENCES AND MANAGEMENT (SHSS&M)

About the School

The School aims at imparting inter-disciplinary education in Humanities and other Social Sciences to its students. It has developed into a full-fledged department having expertise in three different disciplines – Economics, English and Psychology. Having a team of six young and dynamic faculties, well-versed in inter-disciplinary areas like environment, finance, management, personality development, communication skills and neural science, this school seeks to generate erudite citizens who would be perfect amalgamation of technical knowledge, creativity, empathy and social responsibility.

Statistics :

- Number of Faculty: 08
- Number of Ph.D. students graduated: 07
- Number of Ph.D. students enrolled at present: 09
- Number of Ph.D. students submitted the thesis: 02
- Number of Publications in 2018: 08
- Completed Research Projects: 13
- No. of Computer Labs: 01
- No. of Computers: 39
- No. of Faculty Rooms: 08
- No. of Equipment's (No. of Major Equipment's): 03

Integrated Computational Lab with Data Bank (ICLDB)

The ICLDB is meant to be used by the research scholars and faculty members for computation and forecasting of various socioeconomics variables.

Research Areas:

- English language training programme
- Forest Resource Management
- Impact of climate change on Agricultural sector
- Mining Sector and Productivity; Valuation of natural resource
- Solid Waste Management
- Insurance
- Indian Writing in English;
- Migrant/Diaspora Literature;
- Travel Literature; Autobiographies; Creative Writing;
- Film Studies and Popular Culture
- Postcolonial World Literature ; American Literature ; Canadian Literature
- Cross-cultural Communication; Business Communication
- Clinical Psychology : Cognitive Neuroscience, Cognitive Psychology, Hemispheric Lateralisation, Personality, Neurolinguistics
- Developing Critical Vocabulary of ESL Learners; Cognitive Reading Skills; Second Language Acquisition; Teacher Education and Development; Communication Skills; Technology and Language Learning
- Non-Western Philosophical Schools: Advaita Vedanta, Buddhism and other schools of Indian Philosophy.

SCHOOL OF INFRASTRUCTURE (SIF)

About the School

School of Infrastructure at IIT Bhubaneswar has come up to dedicate its excellence in engineering education, creation of knowledge, innovation in research and leadership in professional services. The mission of the School is to offer an unbounded academic and research environment in undergraduate, postgraduate and doctoral program. The academic activities of the School emphasize on comprehensive understanding of fundamental principles, development of creative ability to handle the challenges of real-world Civil Engineering problems, and the analytical ability to solve problems having interdisciplinary in nature. Our goal is to do research in challenging engineering problems and provide efficient engineering solution in the various sub-disciplines of Civil Engineering. The school has a strong focus in the research areas of Environmental Engineering, Geotechnical Engineering, Structural Engineering, Transportation Engineering and Water Resources Engineering. Engineering + M. Tech. in Transportation Engineering Presently the School offers programs as follows:

B.Tech. in Civil Engineering, Dual-degree B. Tech in Civil Engineering + M. Tech. in Environmental Engineering, Dual-degree B. Tech in Civil Engineering + M. Tech. in Structural Engineering, Dual-degree B. Tech in Civil

- M.Tech in Environmental Engineering, M.Tech. in Structural Engineering, M. Tech. in Transportation Engineering, M.Tech. in Water Resources Engineering and M.Tech. in Geotechnical Engineering
- Ph.D. Programme The Department is actively involved in basic and applied research and consultancy and provides high quality technical advisory support through various R & D projects and consultancy to various organizations. The School also encourages its students to engage in extracurricular activities, promotion of team spirit, and refining their budding managerial skills.

State of the art Facilities

The School is having Advanced Computational Laboratory facility with modelling and simulation packages like PLAXIS 3D, ABAQUS, HYDRUS 3D, VMODFLOW for practical training in handling real-world civil engineering problems. The Environmental Engineering Laboratory of the School is equipped with state-of-the-art equipment like AAS, GC, Freeze Dryer, Radiometer, UV-Vis. Spectrophotometer, Zeta Potential cum Particle Size Analyzer, etc. for carrying out various sophisticated analysis of water and wastewater. The Geotechnical Engineering Laboratory houses advanced instruments such as GPR, Cyclic Triaxial Setup, Laser Profilometer, Flexible Wall Permeameter, etc. The Structural Engineering and Concrete Technology Laboratories house state-of-the-art facilities such as Dynamic Actuators, Shake Table, Servo Controlled Compression Testing Machines, NDT Equipment, Corrosion Analyser, etc. for analysis and evaluation of various types of civil engineering structures. The Transportation Engineering Laboratory is equipped with state-of-the-art instruments to carry out advanced experiments and simulations works such as bituminous mix design, pavement evaluation, rutting measurement, evaluation of multi-modal urban transportation network, traffic flow etc. The Laboratory facility houses sophisticated instruments such as Dynamic Shear Rheometer, Repeated Load Triaxial Test, Wheel Tracking Machine with Roller Compactor, Superpave Gyratory

Compactor etc. Besides the lab has a computational facility for those working in Transportation System Planning and Traffic Engineering field. The Water Resources Engineering Laboratory is capable of carrying out various experiments and simulations relating to fluvial hydraulics, flow through submerged and emergent vegetation. The laboratory is equipped with state-of-the-art equipment like Down looking and Side looking Acoustic Doppler Velocimeters, Acoustic Doppler Profilers, Recirculating Tilting Flumes with Wave Generator and sensors like Flow Visualisation Apparatus, MIKE_SHE software, Water Depth Recorder, Digital Flowmeter, etc.

Statistics

- Number of Faculty: 18
- Number of Ph.D. students enrolled at present: 12
- Number of Publications in 2018: 67
- Number of M.Tech student: 31

Laboratories

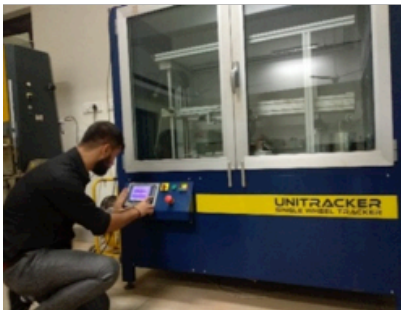
The School of Infrastructure currently runs with eight well-equipped under graduate and postgraduate laboratories as follows:

- Advanced Computational Laboratory
- Concrete Technology Laboratory
- Engineering Mechanics Laboratory
- Environmental Engineering Laboratory
- Geotechnical Engineering Laboratory
- Groundwater Hydrology Laboratory
- Hydro-meteorology Laboratory
- Soil Dynamics Laboratory
- Structural Engineering Laboratory
- Surveying Laboratory
- Transportation Engineering Laboratory
- Water Resources Engineering Laboratory

All of the above laboratories are equipped with modern facilities to carry out high-end research works in any of the micro specializations of Civil Engineering field.

In addition to the state-of-the-art laboratories, the classrooms are equipped with multimedia projectors. Besides, the school is having 20 faculty office chambers, 01 seminar room, and 01 conference room.

The school is collaborating with various agencies/industries like Airport Authority of India Ltd, NBCC, Vedanta Limited, IDCO and Tata Steel Ltd in research and consultancy work. Currently, the school is working on 12 research projects. The school has 3 on-going SPARC proposals.



SCHOOL OF MECHANICAL SCIENCES (SMS)

About the School

The School of Mechanical Sciences at IIT Bhubaneswar endeavours to be both globally competent and locally relevant. Presently the School offers programs as follows:

- B. Tech. in Mechanical Engineering, B. Tech. in Mechanical Engineering + M. Tech. in Mechanical System Design, B. Tech. in Mechanical Engineering + M. Tech. in Thermal Science & Engineering, B. Tech. in Mechanical Engineering + M. Tech. in Manufacturing Engineering
- M. Tech. in Mechanical System Design,
- M. Tech. in Thermal Science and Engineering and
- Ph.D. Programmes

Thrust areas of the School include Energy & Environment, Advanced Manufacturing, Autonomous Robotics, Agricultural automation and Product Design. The faculty members of the school are also involved in basic research in their own areas of specialization while also coming together to blend their shared expertise in creating technologies, products and processes that will enrich both the national and local economy. The school sees its role in nation building via three important avenues of contribution – building of human capital, building of knowledge capital and building of wealth capital through creation of comprehensive idea to-industry cycle.

State of the Art Facilities

The Advanced Product Development Laboratory houses a high end FORTUS 400 FDM based rapid prototyping machine and a high accuracy 3-D Optical Profilometer. The advanced manufacturing laboratory has various in-house developed equipment such as 400W Fiber laser micro workstation, Laser-Milling Hybrid processing and a Pulsed Micro Micro-Electroforming. Besides, the lab also houses CNC Router with Digitizer for Reverse Engineering, CNC Milling and Gear Hobbing Machine. The thermo-fluid laboratory has NEXA PEM Fuel Cell Training System, Flame propagation & stability unit and Mach-Zehnder Interferometer for visualization of various heat transfer phenomena.

Laboratories

School has well equipped laboratories along with a high-end computational laboratory with 30 workstations served byan 18 blade server. This laboratory also provides various software packages like ANSYS, SolidWorks, NASTRAN, Hyper Works, Pro-E, CATIA, ADAMS, COMSOL, MATLAB, LabVIEW, ASAP-PRO, Tecplot360etc. School has following laboratories with major equipment:

Advanced Manufacturing Laboratory

Optical Profilometer, Profile projector, Grinders, Laser based Micro-machining Workstation.

Advanced Product Development Laboratory

Fused Deposition Method based Rapid Prototyping Production system, Optical Three Dimensional (3D) Profiler System

Artificial Intelligence and Mechatronics Lab

Stewart Platform, Humanoid robot platforms (Bioloid and Lamark), Manipulator arm, Hexapod robot, four wheeled robots, Table top CNC Milling and Turning machines

CAD/CAM/CAE Laboratory

Work Station for CADLAB, UPS for CADLAB, Electrification of CADLAB, Work Station for CADLAB, Blade Server, ANSYS Software (25users), ANSYS Software (75users), PRO Engg. Software, Hyper Works Software, Scanner & Plotter for CADLAB, UPS for CADLAB, MSC Software bundle, PBS Pro, Tech Plot 360, CATIA, DELMIA, and Smart Team.

CWF Laboratory

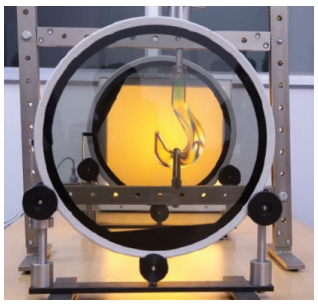
TIG & MIG welding, general purpose belt grinder & surface polisher, Hydraulic specimen mounting press, Induction furnace, Resistance furnace, Foundry equipment & Machinery, Muffle furnace, 80 Ton Hydraulic Press.

Fluid Dynamics Laboratory

4 Channel Hot Wire Anemometer, 70 cfm 13 bar Screw Type Compressor Fluid Mechanics Laboratory Experimental set ups for measurement of fluid viscosity, flow measurement, major and minor losses, forces on immersed bodies, flow visualization (All experimental set ups are developed by U.G. students of IIT Bhubaneswar)

Heat Transfer Laboratory

Concentric Tube heat exchanger Unit, Shell and Tube Heat Exchanger Unit, Combined Free and Forced Convection and Radiation Heat Transfer Unit, Radiation Errors in Temperature Measurement, Unsteady State Heat Transfer Unit, Refrigeration Cycle Demonstration Unit, Linear and Radial Heat Conduction Unit, Radiation Heat Transfer Unit, Combined Cycle Refrigeration Unit with Cycle Inversion Valve, Extended Surface Heat Transfer Unit, Single Tube Boiling Heat Transfer Unit, Critical Heat Flux Boiling Heat Transfer Unit, Plate Heat Exchanger Unit, Boiling Heat Exchanger Unit, 5×3 Tube Bundle Boiling Heat Transfer Testing Setup, PCM Based Electronic Chip Cooling Setup



IC Engine Laboratory

Variable Compression Ratio Engine, Axial Flow Gas Turbine Unit, Flame Propagation & Stability Unit, Nexa Fuel Cell Training System, 4 Stroke 4 Cylinder CRDi Diesel Engine with Open ESU, Exhaust Gas Analyzer.

Machine and Mechanism Laboratory

Static and Dynamic Balancing, Whirling of Shaft, Gyroscope, Governor, Anti-Friction Bearing, Hydrodynamic Lubrication, Basic Kinematics Demonstrations – Gears, Linkages, Mechanism, Inversion, Differential, Universal Vibration Apparatus.

Machine Tools & Machining Laboratory

Wire cut EDM, Ultrasonic drilling cum milling machine, CNC vertical milling center, Master gear hobbling, radial drilling machine, Industrial grinder, Lathe machine, Milling machine, Hydraulic surface grinder, Die Sinking EDM, Dynamometer, Lapping Machine, Telerond.

Materials Testing Laboratory

Hardness Testing Machines: Rockwell, Brinell, Vickers, Spring Testing Machine, Torsion Testing Machine, Rotary Bend Fatigue Testing Machine, Erichsen Cupping Test Machine, Photo-elastic Bench

Opto-Thermal Lab (Thermo-Fluid Lab)

Mach– Zehnder Interferometer setup

Sense & Process Laboratory

Sound Impedance Tube, Handheld Sound Analyzer, DAQ Boards & PXI Chassis, Compact CRIO DAQ system

SCHOOL OF MINERALS, METALLURGICAL AND MATERIALS ENGINEERING (SMMME)

About the School

- The School of Minerals, Metallurgical and Materials Engineering at IIT Bhubaneswar, established in 2012, is a unique initiative where minerals, metals and materials have come into a collaborative existence with a mission to be locally relevant and globally competitive.
- Presently the School offers programs as follows:
- B.Tech. in Metallurgical and Materials Engineering,
- B.Tech.-M.Tech. Dual degree in Metallurgical and Materials Engineering,
- M. Tech. in Metallurgical and Materials Engineering and
- Ph.D. Programme
- Located in the state of Odisha, one of the most mineral rich states of India, the school is aware that the maximum economic benefit from a mineral could be achieved when economically transformed to its final product leading to ultimate benefit.

Statistics

- No of faculty: 11
- HPC computer clusters: 2
- No. of major equipment: 60
- Number of Publications: 19
- Number of Sponsored projects (on going): 10
- Number of consultancy
- projects: 05
- Number of patents granted (till date): 04
- Number of patents pending: 01
- No. of symposiums organized: 01
- Distinguished Visitors:01

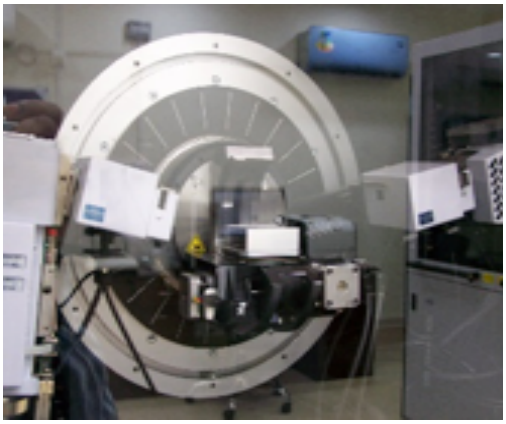
State of the art Facilities

The School continuously strives to create and upgrade its advanced experimental and computational facilities. The School has procured a Field Emission Scanning Electron Microscope with EDX and EBSD facility which is under Central Instrumentation Facility. Others include the microscopy facilities like Inverted and upright Optical microscopes with image analysis facility, Melting and heat treatment facilities, Metallography facility for sample preparation, Universal Hardness, Testing Machine, Electrochemical workstation and High Performance Computing Clusters together with multiscale and multiphysics simulation softwares.

Laboratories

The School has been developing a number of laboratories to cater to undergraduate and postgraduate teaching and well as various research activities of the School and the Institute. Currently it houses the following laboratories:

- Electrometallurgy and Thermodynamics Laboratory
- High Temperature Processing Laboratory
- Mechanical Testing Laboratory
- Metallography Laboratory
- Minerals Processing Laboratory
- Modeling and Simulation Laboratory
- Optical Microscopy Laboratory
- Physical Metallurgy Laboratory
- Powder Processing Laboratory
- Materials Characterization Laboratory
- Process Control and Instrumentation Laboratory



The faculty members are engaged in sponsored projects from Department of Science and Technology, UGC-DAE Consortium of Scientific Research - Kalpakkam, Planning Coordination Department - Government of Odisha and Uchchatar AviskarYojana - MHRD. The school is actively providing technical consultancy services to industries such as Tata Sponge Iron Limited, Jindal Stainless Steels Ltd. and Paradip Phosphates Ltd.








CENTRES OF EXCELLENCE

VIRTUAL AND AUGMENTED REALITY CENTRE OF EXCELLENCE (VARCOE)

A centre of excellence in the field of Virtual and Augmented Reality (VARCoE) was established in IIT Bhubaneswar in January 2018 with generous funding from Department of MSME, Govt. of Odisha, Software Technology Park of India (STPI) and philanthropist Mrs. Susmita Bagchi. A MoU was signed to this effect between IIT Bhubaneswar and the three above parties in the presence of Shri Naveen Pattanaik, Chief Minister of Odisha in January 2018. The main aims of this centre are (a) development of cutting-edge projects in the field of AR/VR, (b) development of training systems to train people from IIT and outside of IIT, and (c) incubation of high-impact AR/VR projects. Mr. Subroto Bagchi (formerly the Chairman, Skill Development Authority of Odisha) is the primary mentor for this centre. Prof R.V. Raja Kumar, Director of IIT Bhubaneswar, has taken a keen interest for the success of this centre.

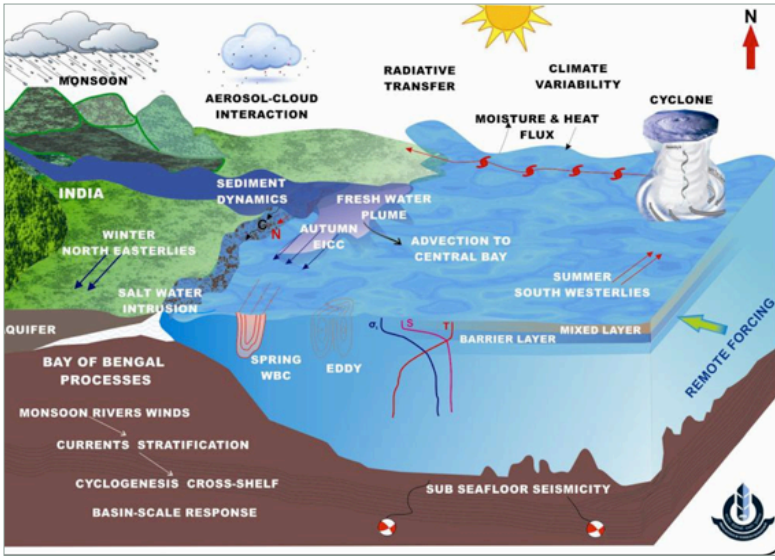
Shri A. Padhi, Chief Secretary of Odisha, and Chief Mentor Mr. Subroto Bagchi visiting one of the labs of VARCoE)

Chief mentor Mr Subroto Bagchi and IIT Director Prof Raja Kumar in a VARCoE Lab)

Currently, 10 faculty members of IIT Bhubaneswar, several undergraduate and post graduate students, and a number of hired Research Assistants are deeply involved in various projects of this centre. The current projects in this centre are in the areas of (i) AR/VR in elective Education of School Children, (ii) Simulator for a driverless car, (iii) robotic control using AR/VR, (iv) Non-destructive testing in steel industry using virtual reality, (v) AR in Healthcare, (vi) fault analysis in Smart Grids, (vii) training simulators for costly instruments, and (viii) AR in Natural Language Processing. Faculty members and students are encouraged to submit AR/VR projects which are approved after being reviewed by experts from inside and outside of IIT Bhubaneswar. The VARCoE centre is also available to other academic and research institutes in the country.

BAY OF BENGAL COSTAL OBSERVATORY (BOBCO)

The Innovation Centre for Climate Change (IC3)-Bay of Bengal Coastal observatory is an integrated multidisciplinary long term and sustainable observation facility to understand complex interactions among Earth-Ocean-Land-Atmosphere at different spatio-temporal scales. This observation facility will monitor extreme events, tropical cyclone, sea level rise, climate change, regional climate and monsoon variability, aerosol, marine seismology, salt water intrusion, coastal processes, ocean circulation and biogeochemical cycle, ocean acidification and paleoclimate to name a few. It is anticipated that these observations over Bay of Bengal will facilitate the operational and research institutes to better understand intriguing interactions among various components of earth system leading to improvement in weather and climate prediction.

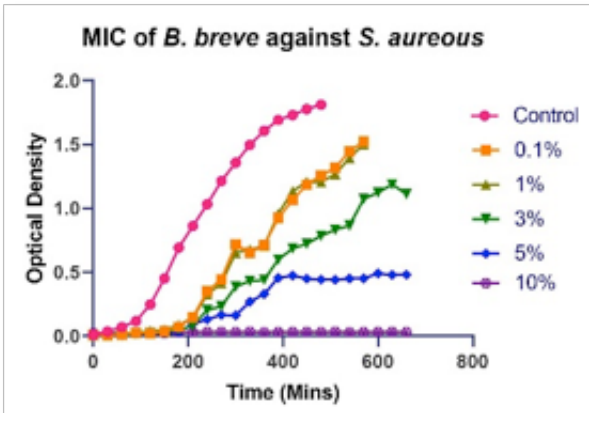


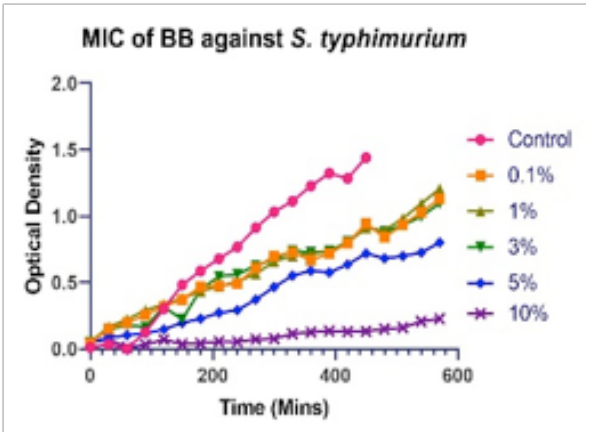
SK DASH CENTRE OF EXCELLENCE OF BIOSCIENCES AND ENGINEERING AND TECHNOLOGY (SKBET)

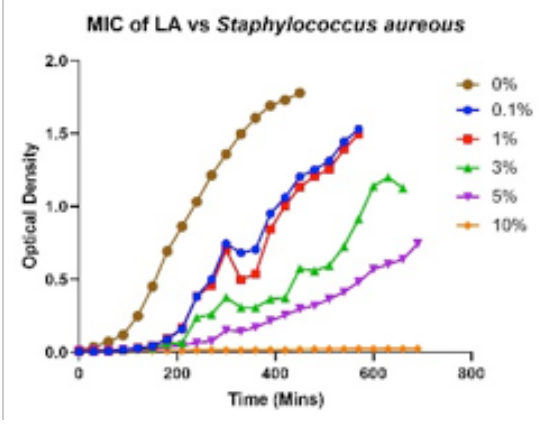
S K Dash Centre of Excellence of Biosciences and Engineering and Technology (SKBET) was established in IIT Bhubaneswar in 2014 with a generous grant from Dr. S. K. Dash Foundation, USA to carry out research on probiotics and broader areas of biology. The centre has a world class laboratory with state-of-the-art instrumentation facility to carry our research on microbiology, cell biology, molecular biology and bioinformatics. The new research laboratories were inaugurated on 18th December 2018 by the director of AIIMS Bhubaneswar, Dr. Gitanjali Batmanamane; the chairman and founder, UAS laboratories, LLC. Dr. Sita kanta Dash; the director, IIT Bhubaneswar, Prof. Ratnam V Raja Kumar; and the Co-ordinator, SKBET, Prof. Saroj Kumar Nayak (Figure 1).

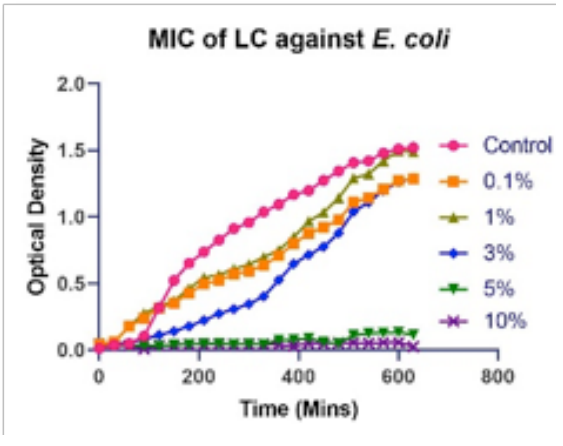
The honourable guests in the Laboratory inauguration ceremony of SKBET

The goal of the centre for the year 2018 was to screen various potential probiotic strains for their probiotic properties. We have successfully identified six probiotic strains that are at par with an established probiotic strain, LA DDS1. The identified strains can suppress the growth of various pathogenic strains at 10% concentration or lower (Figure 2). Our goal for the next year is to find a few more probiotic strains and their ability to modulate the gut microbiota and immunity and formulate a few products out of it and take the products to the clinical trial studies.









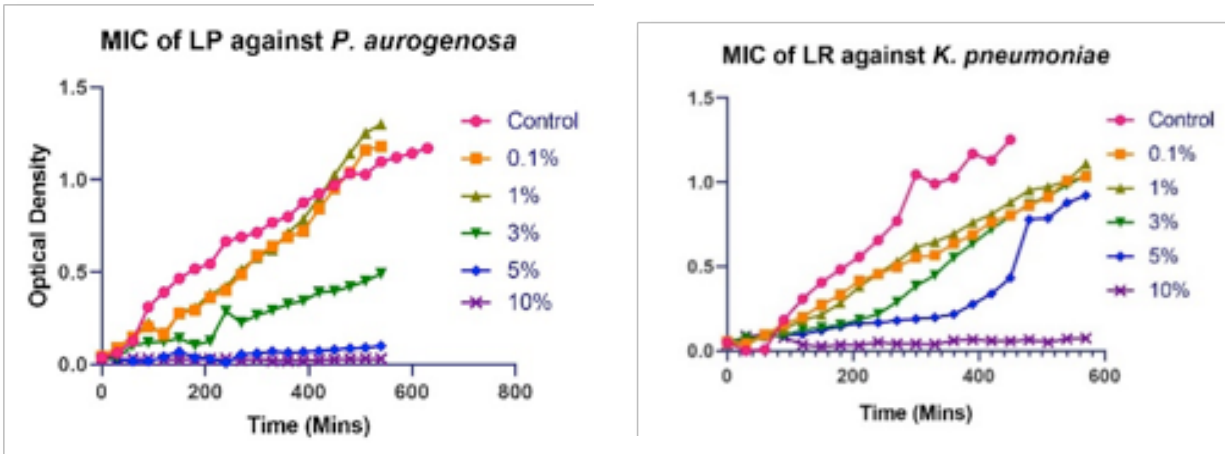


Figure 2. Minimal Inhibitory Concentration (MIC) of the identified probiotic strains estimated from the growth kinetics of the various pathogenic type strains.

CENTRE OF EXCELLENCE FOR NOVEL ENERGY MATERIALS (CENEMA)

The goal of the Center of Excellence for Novel Energy Materials (CENEMA) at IIT Bhubaneswar (IITBBS) is to advance, explore and exploit the forefront of the science and engineering of energy materials. The primary aim of this center is to become hub for developing and designing new materials for energy conversion and storage, with a bottom up approach starting from atomistic/molecular design to a final usable product. Other complementary functions of center include: industrial outreach and knowledge transfer, operation of shared facilities to support materials research on- and off-campus, educational outreach to graduate and undergraduate researchers.

The center houses state-of-the art equipment for academic as well as industrial research and development. Although energy conversion and storage has been recognized worldwide as a challenge, it is more so in developing countries where the demand exceeds the production significantly. Particularly, our research focuses in producing and providing sustainable energy solutions. The current team members come from three different centrally funded institutes in Bhubaneswar (IITBBS, IMMT and IOP) with expertise ranging from supramolecular chemistry to battery technology.

We have established a strong collaboration with industries. For example, funding of about Rs 1 Crore initially and as we progressed we recently bagged 4 projects of total amount Rs 1.4 crore. The main industry sponsored is NALCO for looking into advanced research on aluminium including possible use of aluminium in battery technology, energy efficient electronic devices,

Solar collectors etc. Similarly, funding of about 40 lakhs is in principle approved from TATA steel in the area of graphene. We continue to collaborate with the first start up from IIT Bhubaneswar, KARMA on renewable energy research to validate some of our developments. Through CENEMA, till now we have filed 1 Patent and several papers are communicated for publication. The impact of Al-graphene composites in conductor applications have been studied to examine its effect on current carrying capacity and sagging of conductors. Similarly, effect of graphene on hardness and thermal properties at different temperatures have been studied in depth. A sizable work has been achieved by now and we are able to achieve certain innovative result like enhancement of conductivity over

70% with increase in strength of the material. While working on these projects the 3 major achievements derived for aluminium based materials are- Enhanced thermal properties, higher strength and high ampacity and storage-based materials. Validation of the properties of new materials through Raman, TEM, SEM, XRD and Conductivity measuring instruments have been taken up extensively.

DESIGN INNOVATION CENTRE (DIC)

Design Innovation Centre (DIC) an initiative under the National Design Innovation Network since its days of establishment in February 2015 has been pioneer flag bearer creating an usher among the youth towards creative thinking, innovation and entrepreneurship adding to new age thinking and product development. The financial year 2018-19 been a year of different exciting events, innovations with wonderful array of achievements of established startups from DIC.

DESIGN INNOVATION CENTRE
IIT BHUBANESWAR

EVENTS AND WORKSHOPS (2018-19)

- An orientation programme was channelized by DIC on dtd.10th & 31st August 2018 For B.tech First year students. Here, they came through various projects of DIC. A basic knowledge was given on the gaming structure. They were provided with cognitive ideas on utilization of certain equipments of DIC like AR VR (3D glasses), Drone camera etc. The orientation was conducted in 2 phases with around 100 participants.
- An orientation on PYTHON was conducted by DIC on dtd.10th November 2018 with around 100 participants from B.Tech, M.tech, M.Sc & Phd groups. They were provided with the elementary knowledge on Python, its utilization, advantages etc.
- An orientation cum idea evaluation and mentoring session was conducted at SPOKE institute BOSE, Cuttack on dt. 29th November 2018 with total around 35 students comprising of groups from different branches of engineering (Diploma) shared their respective ideas for validation and implementation of idea in reality.
- Vasitars one of the start up of DIC IITBBS has organized a workshop on "Introduction to Composites and Manufacturing Processes ". The aim of the workshop is to aware the participants about the definition of composites, its advantages over conventenional materials, scope and applications, method of manufacture etc. In the practical session, Making a GFRP/CFRP laminates using Hand-layup manufacturing technique was demonstrated and the participants had a hands on experience too.

Indian Institute of Technology observed its 11th Foundation Day on 12th February, 2019 at its Arugul Campus, Jatni, Bhubaneswar. DIC, its sub centers and spokes executed a science and Technology exhibition with 40 exhibits which were showcased to the invitees. Around 5000 school students from class- VI to class- XII along with junior engineering students from across the city and state have participated in the observation within the scheduled time from 9:30 AM to 6:00 PM. The students came in contact with the live projects and garnered knowledge about the versed techniques. It was clearly reflected from their side that they have deepened the mechanism of the innovations demonstrated by DIC.

These are some of the workshops organized by DIC IITBBS. Till date from the day of inception of DIC-IITBBS a total of 6350 participants are a part of different events and workshops as a whole.

DIC STATUS TILL DATE

DETAILS OF START-UPS:

Vasitars Pvt. Ltd

Vasitars Pvt. Ltd. Co-founded by Mr. Vishwas Chandra Khan and Mr. Tushar Gautam is a technology-based startup founded by students & faculty members of School of Mechanical Sciences, IIT Bhubaneswar to provide In-Situ composite repair solutions to damaged transmission pipelines (Patent No. allotted is 201731007916). It is the first Indian company to provide "Complete in-situ Composite Repair Solutions" to all kind of damage scenarios in transmission pipelines. The technique is well tested at laboratory scale and presently it is in pilot scale. It has been supported by Design Innovation Centre (DIC) IITBBS.

PRODUCTS:

Nano fillers reinforced polymer composites wrap to repair corroded steel pipelines A polymer composite material was designed for nano fillers reinforcement of corroded pipe was made by Mr. Tushar Gautam, Mr. Vishwas Chandra Khan, Mr. Aditya Gupta, Dr. Mihir Kumar Pandit, Dr. Arun Kumar Pradhan from the School of Mechanical Sciences at DIC.

Development of Rapid Curing Epoxy for Repair of Leaking Defects in Pipelines It's the design and development of rapid curing epoxy for repair of leaking defects in pipelines which is meant to repair of leaking defects of oil and gas pipelines by a semi solid rapid curing epoxy resign. This will help in temporary filling and strengthening of the leakages of pipes thereby avoiding loss and damage to the company. Mr. Vikas Sharma BS and Mr. Nitheesh P. students' representative from DIC, IITBBS worked under the development of the same.

Development of Pre Pregs based repair methodology using automatic wrapping mechanism Development of pre pregs based repair methodology using automatic wrapping mechanism is being undertaken by students' group of DIC-IITBBS as a part of development of polymer based composites to repair leaking defects in pipelines for Vasitars Pvt. Ltd. Mr. Nitheesh P., Mr. Deepak Khethavath and Mr. Katam Rishwanth are the students' representative from DIC-IITBBS working on the project.

Development of resin system for elevated temperature applications Mr. Katam Rishwanth, Mr. Deepak Khethavath, Mr. Sai Challa & Mr. Vivek Vardhan are the students' representative from DIC-IITBBS working towards development of resin system for elevated temperature applications. This will enhance and strengthen more the developmental work of the startup towards the polymer based composites repair solutions for defects in leaking pipelines.

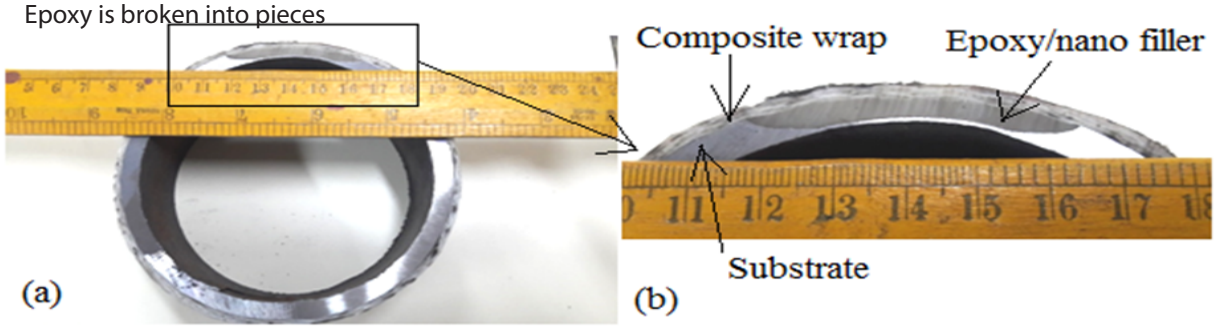
ACHIEVEMENTS:

- The said company has been supported by Indian Oil Corporation with a fund of Rs. 80 Lakhs for Testing & Commercialization.
- Startup Odisha funded Vasitars with an amount of Rs. 5.0 Lakhs.
- The company was selected among Top 50 innovators in IIGP-2.0 (Indian Innovation Growth Programme).
- They received 1st Prize in Techkriti Innovation Challenge at TECHKRITI-2017, IIT Kanpur.
- They received 1st Prize in Techkriti Upstart Pioneer (B-Plan) at TECHKRITI-2017, IIT Kanpur.
- They received 3rd Prize in Techkriti Elevators Pitch at TECHKRITI-2017, IIT Kanpur.
- The company got incubated at STARTUP CENTRE, IIT Bhubaneswar and IIT Madras Research Park with extended lab facilities.
- Mr. Vikas Sharma BS and Mr. Nitheesh P. students' representative from DIC-IITBBS received NRDC National Budding Innovators Awards 2017 for their work on composite materials.
- A total of 3 no.s patent filled (1 from DIC and 2 from Company).
- Vasitars Pvt. Ltd has signed MoU with Gas Authority of India Limited (GAIL) with an amount of Rs. 350 Lakhs towards product commercialization & marketing. It has also valuated the company around a worth of 20 Crore.
- Vasitars has been successful in implementing the pipeline mechanism at sites of IOCL (Paradeep), IOCL (Mathura), IOCL (Varodara), IOCL (Panipat), Cairn India (Barmer, Rajasthan), ONGC (Karaikal, Puducherry), BPCL (Kakinada), Apollo Tyres (Chennai) etc.
- Vasitars Pvt Ltd a DIC supported start-up and incubated under Start-up Centre, IIT Bhubaneswar has been selected as one of the six successful start-ups of Odisha and was invited to Make in Odisha Conclave 2018 to share its success story. They also were featured in the latest booklet containing Information related to startups of Odisha.



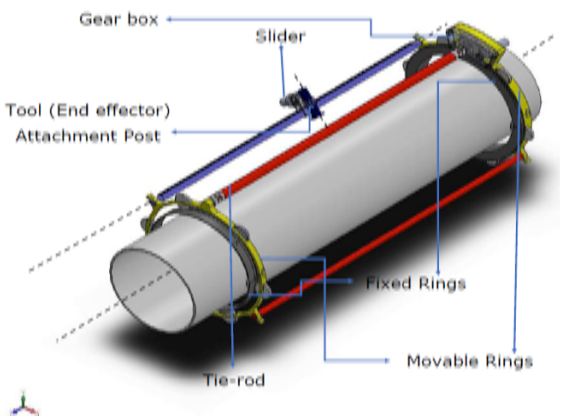
Neat Epoxy resin

- Failure Pressure: 230 bar
- Complete notch portion opened
- Fiber failure & debonding
- Epoxy is broken into pieces



Nano clay reinforced epoxy resin

- Failure Pressure: 231.3 bar
- Significant difference in the failure modes
- Predominantly debonding
- No fiber failure



Automated Helical Filament Winding Manipulator

Vasitars Pvt. Ltd. Co-founded by Mr. Vishwas Chandra Khan and Mr. Tushar Gautam is a technology-based startup founded by students & faculty members of School of Mechanical Sciences, IIT Bhubaneswar to provide In-Situ composite repair solutions to damaged transmission pipelines (Patent No. allotted is 201731007916). It is the first Indian company to provide "Complete in-situ Composite Repair Solutions" to all kind of damage scenarios in transmission pipelines. The technique is well tested at laboratory scale and presently it is in pilot scale. It has been supported by Design Innovation Centre (DIC) IITBBS.

Salient Features:

- Enhanced bonding strength of Nano clay dispersed epoxy increases the failure pressure of Fibre Reinforced Composite Overwrap Repair System.
- The repair methodology does not involve any hot works, thus promising a safe working environment.
- The process is quick and less laborious compared to conventional repair techniques.
- The process is In-Situ and hence can be improvised and tailor fit to various kinds of damage scenarios.
- The lifetime of the pipeline is extended to a decade.
- Repair of leaking defects under shutdown conditions can be achieved by the use of Rapid Curing Epoxy Resin developed.
- In non-leaking defects scenario, downtime is reduced to zero and in leaking defect scenario the downtime is lower than the conventional repair methodology.

Prajjawala Systems and Solutions Pvt. Ltd

An IOT based Data Management solution named as Project Prajjawala: Method and Apparatus for Automation & Optimization of LPG Cylinder Distribution System was initiated and formed with primary contributions includes the alumni of IITBBS (Mr. Vishwas Chandra Khan & Mr. Mohinish Chatterjee) along with some other partners and with contributions of present students of IITBBS including Mr. Nitheesh Kumar, Mr. Rahul Mahanot, Mr. Rahul Kumar & Mr. Katam Rishwanth. It has been supported by Design Innovation Centre (DIC) IITBBS. The project is further being developed for commercialization under the flagship of a company called Prajjawala Systems and Solutions Private Limited which has been incubated at Start-up Centre, IIT Bhubaneswar. Project Prajjawala has come up with An IOT based Data Management solution: Method of and Apparatus for Automated LPGPay-As-You-Use (PAYU) Solution (Filed patent under patent application number 201811018360 by the company) to supplement and catalyze the 100 % clean energy drive under Pradhan Mantri Ujjwala Yojana (PMUY) by introducing the concepts of:

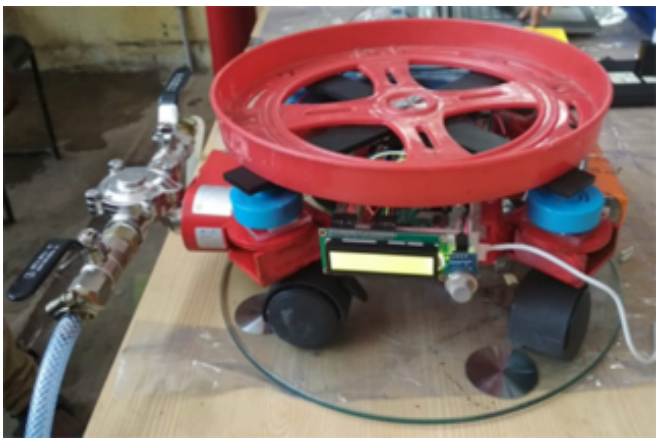
1. Price Fragmentation of LPG.
2. pay-As-You-Use (PAYU) functionality.
3. Automation of Supply Chain Management.
4. Real-time LPG usage and inventory data.
5. Automated Asset Management & Demand Supply Co-ordination

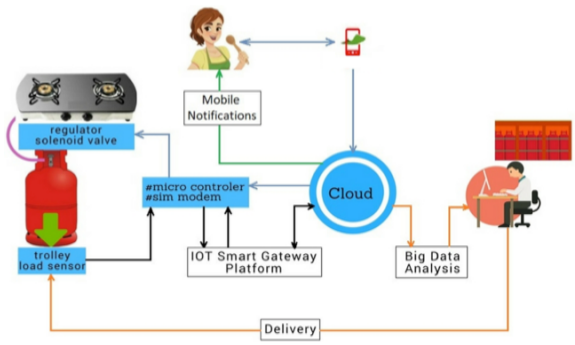
Consumer Base Unit (CBU):

It is an in-house prototype apparatus developed to monitor, track and control LPG usage from your LPG cylinder by communicating the real-time LPG usage data to the central cloud server through an IoT Smart Gateway Platform which can further be used to control the LPG flow from cylinder to the stove by means of a LPG safe valve controlled remotely using electromagnetic signals.

ACHIEVEMENTS:

- Received 2nd Prize in Techkriti Social Track B-Plan, Techkriti 2018, IIT Kanpur
- Received 3rd Prize in GES Pitchers Elevators Pitch Competition, Ges 2018, IIT Kharagpur
- Received 1st Prize In SRIJAN, B-Plan Competition Purvodaya 2018, Vgsom-IIT Kharagpur
- Received 1st Prize In E-Summit 2018, Iit Bhubaneswar, Product Design Competition
- Mr. Rahul Kumar & Mr. Rahul Mahanot student representative from DIC-IITBBS for project Prajjawalla has been selected for NRDC National Budding Innovators Awards 2018 which is to be received in May 2019.
- Received 1st Prize In Grand India IoT Innovation Challenge 2018, Tata Communications & CII
- Received 1st Prize In Techkriti Pitch Premier, Techkriti 2019, IIT Kanpur
- Received 3rd Prize In Smart India Hackathon-2019.
- The company has filed one patent from its side for the Prajjawalla product.
- The company has been incubated at Startup Centre-IITBBS.





Achievement Photos of Prajjawalla

Jury Member of GIIOTIC (From Left: Arvind Tiwary, Rajendre Shende, Anita Rajan, VS Shridhar, Rohit Srivastwa)

SMART STUDENTS

Soumika M Das

For a smart kitchen

A year back, six students from IIT Bhubaneswar had visited various slums in and around Bhubaneswar and other cities, including New Delhi, Chandigarh, Patna and Bangaluru. The visits had a purpose. They were talking to members of Below-Poverty Level (BPL) households to ascertain whether the ambitious Pradhan Mantri Ujjwala Yojana was a hit or a miss! And, they learnt that most of the beneficiaries were not going for the subsequent refills after exhaustion of the free LPG cylinders. They weren't able to pay ₹800 at one time to get the cylinder refilled.

Besides, they had also gathered the CRISIL report which apparently presented a similar picture. These students, thus, decided to solve the affordability and accessibility issues related to the free LPG cylinder scheme with the help of Big Data and Internet of Things (IOT). They designed a LPG tracker that would measure and track its consumption, helping the beneficiary to follow a pay-as-you-use system. They named this tracker Prajjawala.

Recently, Prajjawala was adjudged as the winner of India's first Grand IoT Innovation Challenge, hosted by Tata Communications and Confederation of Indian Industry (CII). The four month-long contest had 757 entries. Out of which, nine projects made it to the final contest at Pune.

The students who have made the prototype of the LPG tracker are Niteesh Kumar, Rahul Kumar, Rahul Mahanot, Rishwant, Deepak, Mohinesh, Abhishek and Biswas. The prototype of the tracker is actually a trolley, fitted with sensors. "Only 60 per cent beneficiaries come back for refill at the rate of 3.6 cylinder refills per year. The BPL families spend ₹10 to ₹20 per day for fuel. Due to unavailability of LPG at smaller prices, these families opt for alternative cooking fuel like solid biomass," said Niteesh.

The students claimed that the problem unavailability of the LPG cylinders could also be solved using the tracker. "In most of the privileged households, the members keep an extra cylinder in the stock. If a tracker is made available to them, the users will receive notifications on their mobile phones for refills on time. There is no need to keep two cylinders at home," explained Rahul.

Their biggest challenge in the project is to keep the price of the trolley low. The project was approved by Union Ministry of Petroleum and Natural Gas. A team of experts from the three major oil companies, IOCL, HPCL and BPCL had also reviewed the project. It will now undergo safety and compliance test.

Only 60 per cent beneficiaries come back for refill at the rate of 3.6 cylinder refills per year. The BPL families spend ₹10 to ₹20 per day for fuel

— Niteesh, Student

The Article in Indian Express and other News Papers

IITBBS wins innovation award at Kanpur festival

Sandeep Mishra | TNN

Bhubaneswar: Team Prajjawala — comprising students of the Indian Institute Technology (IIT) Bhubaneswar — grabbed the first prize for innovation at Asia's largest technical and entrepreneurial festival — Techkriti 2019 — organized by IIT Kanpur.

The team got the award for their invention 'Internet of Things and Data Analytics based Price Fragmentation, Pay-As-You-Use and Supply Chain Automation and Optimization in LPG Distribution System'.

This is the fourth time the team has won an award for the project. Earlier, it had won the RDC National Budding Innovators Award-2018, and got the third prize at Smart Hackathon-2019, among others.

As part of the project, students have developed an Internet of Things sensory attachment for gas cylinder that can intimate users about the level of gas in the cylinder online so that refilling can be done on time. "The impact of the project on the energy and utilities sector will be significant. This is a new realm of data that gives flexibility and transparency to users to measure gas consumption," said a member of the team.

IIT-BBS director R V Raja Kumar said the students had done well. The institute would continue to foster innovative thinking and creativity, he added.

Officials said there were 47 teams at the Pitch Premier Competition of Techkriti 2019, which concluded on Sunday. It was organized to provide participants with the opportunity to transform their innovation into real-world entrepreneurial ideas.

"The IIT team comprised Deepak Khethavath, Rishwanth Katam, Kurteek Sirisetti, Mrudhul Guda, Dipti-man Pati and Rahul Saikya. "The project was registered as Project Prajjawala under the Design Innovation Centre of our institute. We continued to support the team with facilities to develop the Proof of Concept along with mentoring and guidance whenever required," an IIT administrator said.

This is the fourth time that the team has won an award for the project

IIT-Bhubaneswar Wins NRDC National Budding Innovators Award

By OB Bureau - February 27, 2019

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Bhubaneswar: Team Prajjawala students of IIT, Bhubaneswar, have won the NRDC National Budding Innovators Award-2018 for their invention 'Internet of Things and Data Analytics based Price Fragmentation, Pay-As-You-Use and Supply Chain Automation and Optimization in LPG Distribution System'.

ଆଇଆଇଟି 'ଟିମ୍ ପ୍ରଜ୍ୱଳ' ଜିତିଲା ପ୍ରଥମ ପୁରସ୍କାର

ଏସିଆର ସର୍ବ ବୃହତ ବୈଷୟିକ ଉଦ୍ଭାବନୀ ମେଳା 'ଟେକ୍‌ଫେଷ୍ଟି'ରେ ବାଜିମାତ୍

IITians shine at hackathon

TOBEL.IN

TROBEL Co-founded by Mr. Manoranjan Kumar in 2016, is an entrepreneurial endeavor which aspires to provide the service of a centralized library throughout the country, with the initial stages focusing more on the metropolitans and other major cities of the country, starting with Bhubaneswar, Odisha. They aim to provide the joy of book reading to people in the most convenient, affordable, and accessible in secure manner possible.

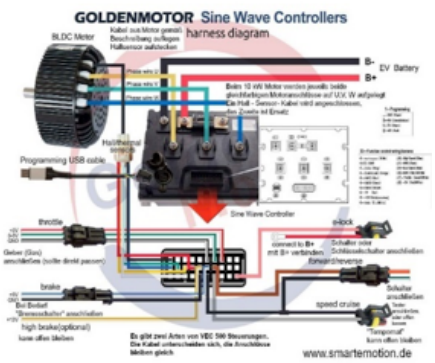
GLANCE OF SOME ONGOING PRODUCTS BY STUDENTS, FACULTIES, DIC OFFICIALS

Prajjwalla Project
(Version-1 & 2)
Photonx Dobsonian

Photonx

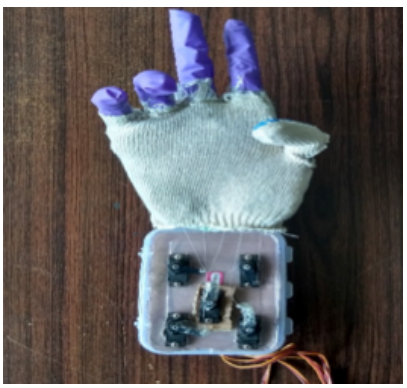
Dobsonian Telescope

Autonomous Self Driving Car

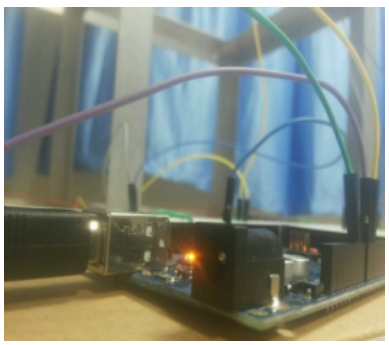


Design & Modelling of
an Electric Motor Car

Advancement in the field of
Lithium-ion batteries for Robotic
Hand Ballistic Chronograph

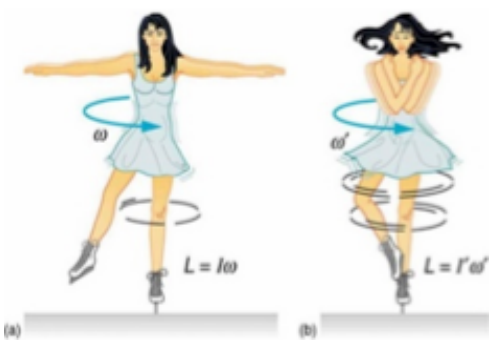


Robotic Hand

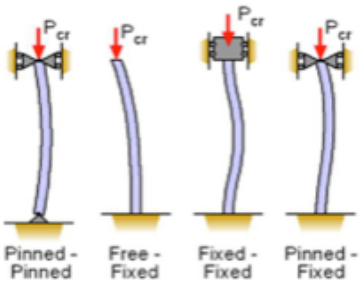


Ballistic Chronograph

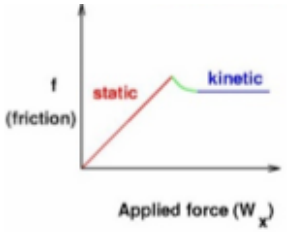
Experimental Verification
of Torsional Equation



Demonstration of Conservation of Angular
Momentum

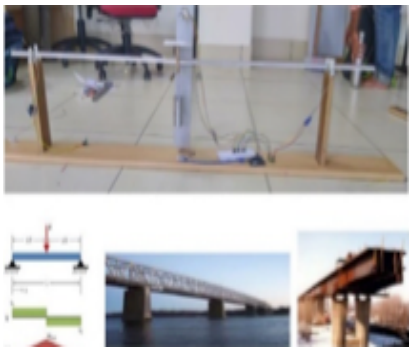


Buckling of Column

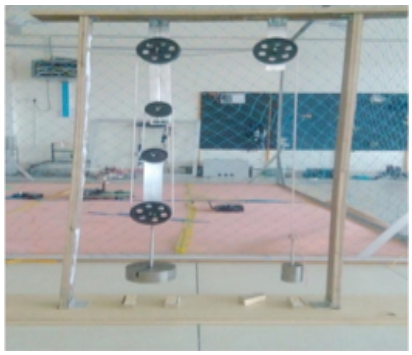


Determination and Comparison of Static and Dynamic Friction

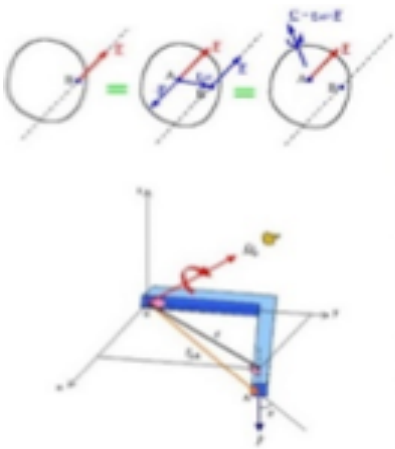
Calculation of Reaction Force in Truss Carrying Load using Load Sensor



Measurement of Deflection and Reaction Forces of a Loaded Beam

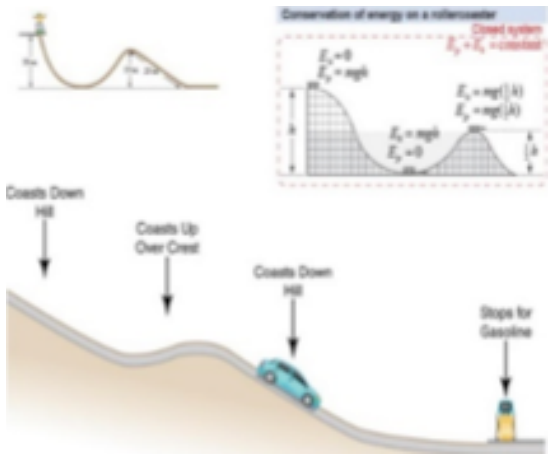


Mechanical Advantages of Pulleys

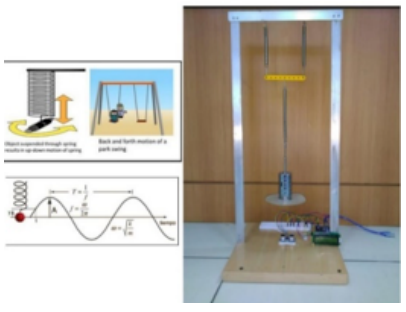


Demonstration of Conservation of Energy

Line of Action of Force and Moment due to its Transmission

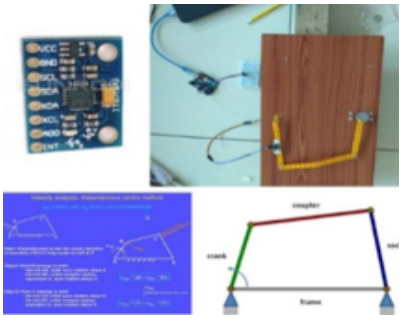


Demonstration of Conservation of Energy



Demonstration of simple Harmonic motion And natural frequency of spring mass system

Coefficient of Restitution

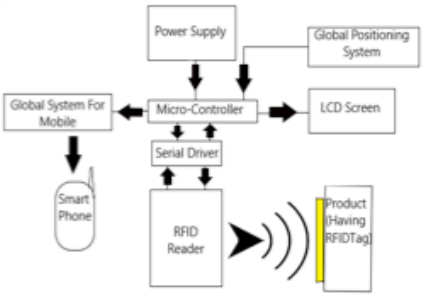


Four Bar Mechanism

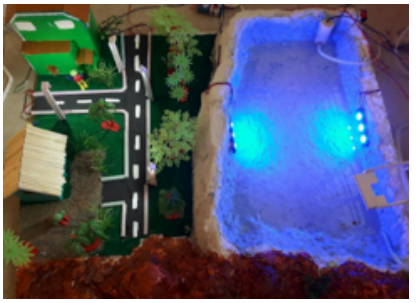
Glance of Some Ongoing Projects of Spoke Partner Bose, Cuttack

It is an in-house prototype apparatus developed to monitor, track and control LPG usage from your LPG cylinder by communicating the real-time LPG usage data to the central cloud server through an IoT Smart Gateway Platform which can further be used to control the LPG flow from cylinder to the stove by means of a LPG safe valve controlled remotely using electromagnetic signals.

Polar Graph (Wall Drawing Machine)

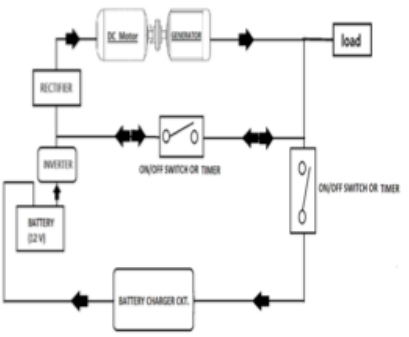


Smart Basket

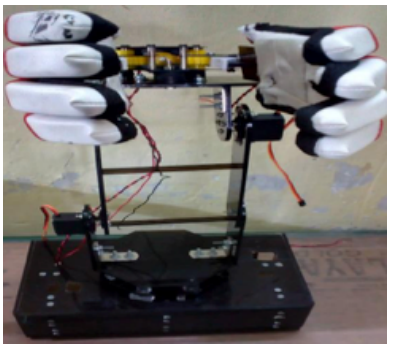


IoT based flood monitoring and warning system

Automatic stair climbing Chair

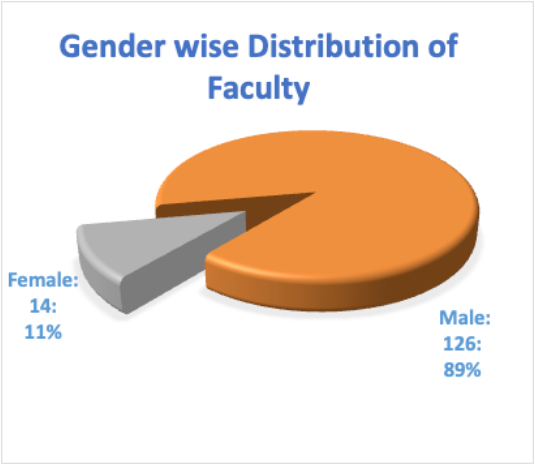


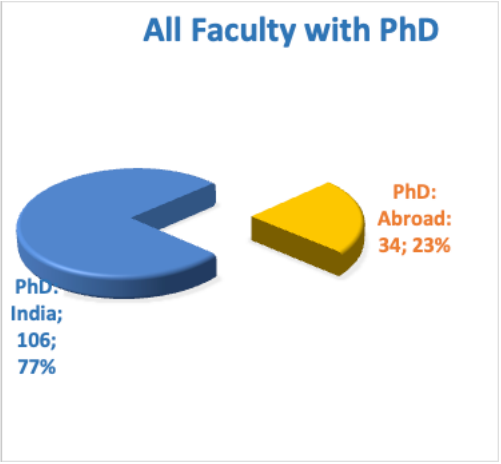
Production of free energy

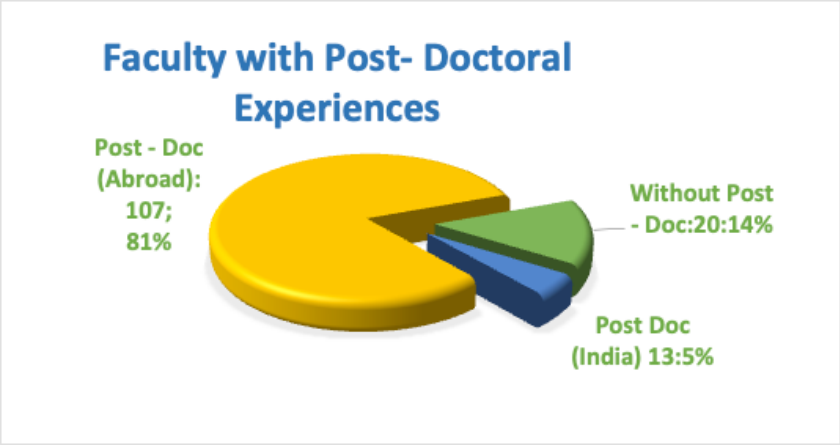


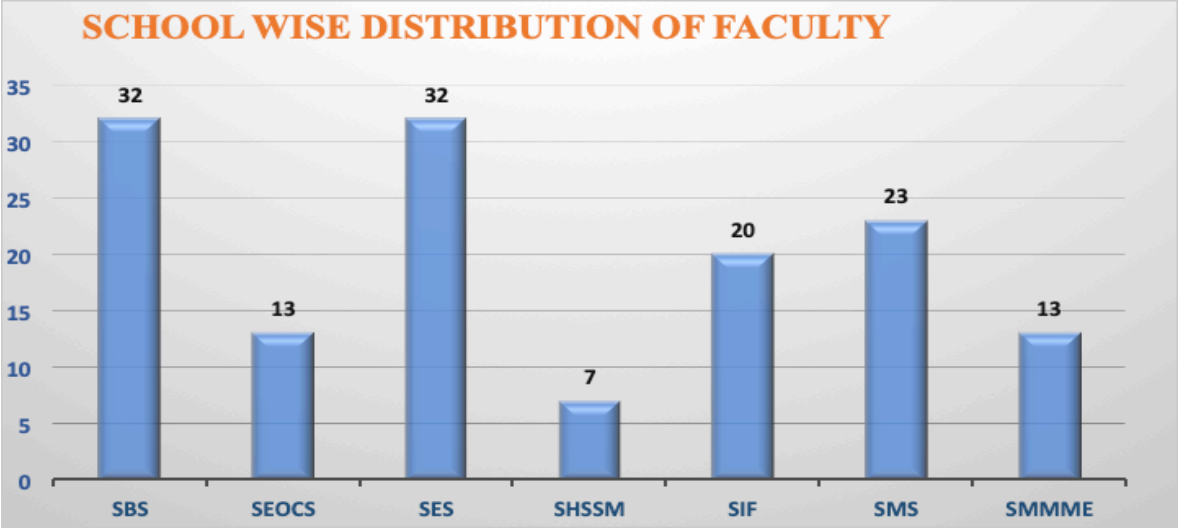
Robotic arm for massaging purpose

OUR FACULTY


Gender wise Distribution of Faculty
Female: 14: 11%
Male: 126: 89%


All Faculty with PhD
PhD: India; 106; 77%
PhD: Abroad: 34; 23%


Faculty with Post- Doctoral Experiences
Post - Doc (Abroad): 107; 81%
Without Post - Doc:20:14%
Post Doc (India) 13:5%


SCHOOL WISE DISTRIBUTION OF FACULTY
35
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SBS
SEOCS
SES
SHSSM
SIF
SMS
SMMME

School Of Basic Sciences (SBS)

Sl. No	Name/Designation/ Email	Ph.D./Year	Specialization/Research Area
1	Prof. Saroj Kumar Nayak Professor nayaks@iitbbs.ac.in	Jawaharlal Nehru University, 1995	First Principles Molecular dynamics Simulations, Nanostructures, Quantum transport, Quantum Biology
2	Prof. Sujit Roy Professor sroy@iitbbs.ac.in	IIT Kanpur, 1987	Organometallic Chemistry, Homogeneous Catalysis
3	Prof. V. R. Pedireddi Professor vr.pedireddi@iitbbs.ac.in	University of Hyderabad, 1993	Solid State Chemistry; Supramolecular Chemistry; Self-Assembly of Biological, Organic and Organic-inorganic Ensembles
4	Prof. V. R. Yerikalapudy Visiting Professor ryvasudeva@iitbbs.ac.in	Andhra University, 1980	Mathematical Modelling for Ultrasonic Nondestructive Testing ;Numerical Methods in elastic wave motion and vibration; Techniques of Applied Mathematics
5	Prof. Matjaz Kovse Visiting Faculty of Foreign Origin kovse@iitbbs.ac.in	University of Maribor, 2008	Graph Theory
6	Dr. Akshay Kumar Ojha Associate Professor akojha@iitbbs.ac.in	Utkal University, 1997	Soft computing; Optimization Theory(Geometric programming and Fractional Programming; Data Mining and Portfolio Optimization
7	Dr. T. V. S. Sekhar Associate Professor sekhartvs@iitbbs.ac.in	IIT Madras, 1995	Numerical Methods; Computational Fluid Dynamics;
8	Dr. Kari Vijayakrishna Associate Professor kvijayakrishna@iitbbs.ac.in	IIT Madras, 2006	Synthesis of task specific ILs and polymerizable IL monomers; Synthesis of Chiral Polymers and their applications in chiral induction; Synthesis of Achiral and Chiral Resins and their applications in synthesis; PIL stabilized metal nanoparticles and their applications; Polyelectrolyte-DNA interaction studies; PILs for gas separation membranes; Synthesis of MIPs and resins for nuclear waste treatment; Synthesis of (RAFT derived) ionic, pH, temperature and solvent responsive homo- and block copolymers towards their self-assembling for drug delivery
9	Dr. Vasudeva Rao Allu Associate Professor avrao@iitbbs.ac.in	IIT Madras, 2010	Complex Analysis; Geometric Function Theory; Harmonic Mappings in the Plane.
10	Dr. Abhijit Datta Banik Assistant Professor adattabanik@iitbbs.ac.in	IIT Kharagpur, 2007	Queueing Theory, Applied Probability Models, Stochastic Modelling and Simulation, Stochastic Models in Operations Research and their application in Communication systems, Transportation, Manufacturing, Production and Inventory Systems.

Sl. No	Name/Designation/ Email	Ph.D./Year	Specialization/Research Area
11	Dr. Akhilesh Kumar Singh Assistant Professor aksingh@iitbbs.ac.in	IIT Kanpur, 2007	Fluorogenic and Chromogenic Chemosensors; Magnetic Materials and MRI Contrast Agents; Synthesis and Characterization of Task Specific Ionic Liquids and Their Application
12	Dr. Anasuya Roychowdhury Assistant Professor aroychowdhury@iitbbs.ac.in	University of Texas Medical Branch, 2009	Chemomechanistic physiology and regulation of class of enzyme ATPase; Role of ATPase in Cancer Biology; Role of ATPase in Biological Clock
13	Dr. Ashis Biswas Associate Professor abiswas@iitbbs.ac.in	Bose Institute, 2006	Elucidation of structure-function relationships in small heat shock proteins and its importance in human diseases (leprosy and tuberculosis) using biochemical and biophysical techniques.; Investigating the effect of various post-translational modifications on the eye lens crystalline proteins and their role in developing cataract formation in human lens using biophysical methods.; Elucidating the mechanism behind the interaction of metal complexes (anti-cancer agents) with DNA and proteins using various biochemical techniques.
14	Dr. Chandrasekhar Bhamidipati Assistant Professor chandrasekhar@iitbbs.ac.in	Institute of Physics, 2006	Heat Engines, Thermodynamics and Statistical Mechanics; Black Holes; String Theory
15	Dr. Kousik Samanta Assistant Professor kousik@iitbbs.ac.in	Texas A&M University, College Station, USA, 2009	Quantum Chemistry; Scattering theory; Mixed quantum-classical dynamics
16	Dr. Malay Kumar Bandyopadhyay Assistant Professor malay@iitbbs.ac.in	Jadavpur University, Calcutta, 2008	Open Quantum System; Non-equilibrium Statistical Mechanics; Nanomagnetism
17	Dr. Niharika Mohapatra Assistant Professor niharika@iitbbs.ac.in	IIT Bombay, 2006	Multiferroics; Thermoelectrics; Topological phases of matter
18	Dr. Rajan Jha Associate Professor rjha@iitbbs.ac.in	IIT Delhi, 2007	Optical Devices; Plasmonics; Fiber Optic
19	Dr. Sabyasachi Pani Associate Professor spani@iitbbs.ac.in	IIT Kharagpur, 2004	Variational Inequalites and Complementarity Problems; Applied Functional Analysis; Optimization Techniques
20	Dr. Sasmita Barik Associate Professor sasmita@iitbbs.ac.in	IIT Guwahati, 2007	Combinatorial Matrix Theory; Graph Theory;

Sl. No	Name/Designation/ Email	Ph.D./Year	Specialization/Research Area
21	Dr. Satchidananda Rath Assistant Professor srath@iitbbs.ac.in	Institute of Physics Bhubaneswar, 2006	Semiconductor nanosheets, Dilute magnetic semiconductor, Metal clusters, graphene,; Optical properties, fast transitions, Raman scattering, Small angle x-ray scattering, Rheology; Solar cell, Light Emitting Diodes
22	Dr. Seema Bahinipati Assistant Professor seema.bahinipati@iitbbs.ac.in	University of Cincinnati, Ohio, U.S.A., 2008	Experimental High Energy Physics [B Physics, CP Violation, Beyond Standard Model Physics]
23	Dr. Shantanu Pal Associate Professor spal@iitbbs.ac.in	IIT Bombay, 2006	Development of novel methodology and total synthesis of biologically active natural products; Development of chemically modified small molecules as therapeutic agent; Synthesis of modified nucleic acid as anticancer or antiviral drug.
24	Dr. Shyamal Chatterjee Assistant Professor shyamal@iitbbs.ac.in	The University of Heidelberg, Germany, 2007	Experimental atomic, molecular and surface physics; Nanomaterials; Biomolecules, clusters
25	Dr. Snehasis Chowdhuri Associate Professor snehasis@iitbbs.ac.in	IIT Kanpur, 2005	Theoretical Chemistry; Statistical Mechanics; Molecular Dynamics Simulation
26	Dr. Soumendra Rana Assistant Professor soumendra@iitbbs.ac.in	IIT Bombay, 2007	G-protein Coupled Receptor Biology; Molecular Modelling and Computational Biology; Design, Synthesis and Characterization of Peptides
27	Dr. Srikanta Patra Assistant Professor srikanta@iitbbs.ac.in	IIT Bombay, 2005	Metal Mediated Organic Transformations (Catalysis);Metal Based Anticancer Drugs; Functional Materials, Luminescent Materials, Sensors
28	Dr. Tabrez Khan Assistant Professor tabrez@iitbbs.ac.in	University Of Mumbai, 2009	Synthetic Method Development; Natural products and natural product inspired bioactive molecule synthesis
29	Dr. Tarakanta Nayak Assistant Professor tnayak@iitbbs.ac.in	IIT Guwahati, 2007	Complex Dynamics; Fractals; Independence polynomials and independence fractals of graphs
30	Dr. Bankim Chandra Mandal Assistant Professor bmandal@iitbbs.ac.in	University of Geneva, Switzerland, 2014	Numerical Analysis, Scientific Computing, Partial Differential Equations, Domain Decomposition Methods
31	Dr. Sunil Kumar Prajapati Assistant Professor skprajapati@iitbbs.ac.in	IIT Delhi, 2013	Algebra
32	Dr. Abhijit Sutradhar Visiting Faculty abhijits@iitbbs.ac.in	IIT Kharagpur, 2017	Bioluid mechanics; Magnetic drug targeting; Nanofluid convection in porous media

Sl. No	Name/Designation/ Email	Ph.D./Year	Specialization/Research Area
School of Earth, Ocean and Climate Sciences			
33	Prof. Uma Charan Mohanty Visiting Professor ucmohanty@iitbbs.ac.in	Odessa Hydro-Meteorological Institute, USSR, 1978	Tropical Meteorology, Numerical Weather Prediction, Monsoon Dynamics, Regional Climate Studies and Meso-scale Modelling
34	Prof. Hrusikesh Mishra Visiting Professor hrusikesh@iitbbs.ac.in	University of Wollongong, New South Wales, Australia, 1987	Coal Geology/Petrology, Coal Preparation, Coal Petrology and its application in Coal & Hydrocarbon exploration
35	Prof. Rambhatla G. Sastry Visiting Professor rgsastry@iitbbs.ac.in	Moscow State University, Russia, 1980	Geophysics/ Satellite gravity, Geotechnical geophysics (Engineering Geophysics), Exploration Geophysics
36	Dr. Debadatta Swain Assistant Professor dswain@iitbbs.ac.in	University of Pune, 2009	Satellite & Physical Oceanography; Ocean-Atmosphere Interactions & Modelling; Atmospheric Dynamics
37	Dr Kiranmayi Landu Assistant Professor kiranmayi@iitbbs.ac.in	IISc Bangalore, 2008	Climate Dynamics; Tropical Meteorology; Extreme Weather events
38	Dr Sourav Sil Assistant Professor souravsil@iitbbs.ac.in	IIT Kharagpur, 2012	Physical Oceanography; Ocean Circulation Modelling; Coastal Dynamics
39	Dr. Raj Kumar Singh Assistant Professor rksingh@iitbbs.ac.in	IIT Kharagpur, 2009	Paleoclimatology and Paleoceanography; Marine Micropaleontology; Hydrogeology
40	Dr. Sandeep Pattnaik Assistant Professor spt@iitbbs.ac.in	Andhra University, 2006	Tropical Meteorology; Monsoon, Cloud Physics; Extreme Events (e.g. Tropical cyclone, Heavy Rainfall, Lightning)
41	Dr. Syed Hilal Farooq Assistant Professor hilalfarooq@iitbbs.ac.in	IIT Bombay, 2010	Hydrogeochemistry; Geothermal Energy; Organic Geochemistry
42	Dr. Vinoj. V Assistant Professor vinoj@iitbbs.ac.in	IISc Bangalore, 2009	Aerosol Cloud Climate Interactions; Satellite Remote Sensing, Radiative Forcing, Field Measurements; Monsoon and Climate Change, Climate Modelling
43	Dr. Yengkhom Kesojit Singh Assistant Professor yksingh@iitbbs.ac.in	IIT Bombay, 2011	Structural geology and tectonics; geochronology; photogrammetry; GIS and remote sensing; Natural hazard and disaster management; Augmented reality and virtual reality.

Sl. No	Name/Designation/ Email	Ph.D./Year	Specialization/Research Area
44	Dr. Pathikrit Bhattacharya Visiting Faculty pathikri@iitbbs.ac.in	Princeton University, 2017	Mechanics of earthquakes and faulting; laboratory friction experiments; physics and mechanics of friction; earthquake statistics; fluid-rock interactions; fault-zone hydrology; high performance computing in modelling of earthquake processes; Bayesian inference on highly correlated spaces.
45	Dr. Sourav Bhattacharya Visiting Faculty sourabh@iitbbs.ac.in	IIT Kharagpur, 2014	Ore Geology; Hydrothermal Ore Deposits; Fluid Inclusions & Laser Raman Microspectroscopy
School of Electrical Sciences			
46	Prof. R. V. Raja Kumar Professor, Director director@iitbbs.ac.in	IIT Kharagpur, 1987	Wireless communications systems; Wireless networking protocols; Channel equalization and baseband processing; Detection methods and systems; Tracking algorithms; Adaptive filtering algorithms and their performance analysis; Estimation of time-varying signals and systems; Spectral Estimation methods; Audio and video coding; VLSI based processors for wireless communication systems; Voice and multimedia over IP
47	Prof. N. C. Sahoo Professor ncsahoo@iitbbs.ac.in	National University of Singapore, 2001	Renewable Energy Systems; Power System Optimization and Control; Control of Electric Drives
48	Prof. Ganapati Panda Visiting Professor gpanda@iitbbs.ac.in	IIT Kharagpur, 1982	Digital Signal processing; Machine Learning and applications; Intelligent Instrumentation
49	Prof. Jayanta Pal Visiting Professor jpal@iitbbs.ac.in	University of Roorkee. [Now IIT, Roorkee], 1981	Reduced Order Modelling; Fractional Order Systems; Electrical Power Systems
50	Dr. Chandrashekhar Narayan Bhende Associate Professor cnb@iitbbs.ac.in	IIT Delhi, 2008	Renewable Energy, Distributed Generation; Power Quality, Custom Power Devices; Application of soft computing techniques to power systems
51	Dr. Manoranjan Satpathy Associate Professor manoranjan@iitbbs.ac.in	IIT Bombay, 1997	Software Testing and verification; Advanced Computer Architecture; Programming Languages
52	Dr. Prasant Kumar Sahu Associate Professor pks@iitbbs.ac.in	IIT Kharagpur, 2008	Optical Communication; Remote Sensing; Speech and Signal Processing

Sl. No	Name/Designation/ Email	Ph.D./Year	Specialization/Research Area
53	Dr. Pravas Ranjan Sahu Associate Professor prs@iitbbs.ac.in	IIT Kanpur, 2006	Digital Communications, Mobile Communications, Receiver performance in fading channels.
54	Dr. S. R. Samantaray Associate Professor srs@iitbbs.ac.in	NIT Rourkela, 2007	Power System protection; Smart-Grid; PMU and WAMs
55	Dr. Barathram Ramkumar Assistant Professor barathram@iitbbs.ac.in	Virginia Tech, 2011	Signal Processing; Wireless Communication; Bio-Signal Processing
56	Dr. Debalina Ghosh Assistant Professor deghosh@iitbbs.ac.in	Syracuse University, Syracuse, NY, USA, 2007	Remote Sensing; Electromagnetic Engineering and Antennas; Radar Systems
57	Dr. Debi Prosad Dogra Assistant Professor dpdogra@iitbbs.ac.in	IIT Kharagpur, 2012	Visual Surveillance and Computer Vision; Human Computer Interface; Augmented Reality
58	Dr. Dipankar De Assistant Professor dipankar@iitbbs.ac.in	IISc Bangalore, 2011	Switched Mode Power Converter and Design of Integrated Magnetics; Application of Power Electronics in Power Systems; Wide band-gap Device based Power Conversion
59	Dr. Joy Chandra Mukherjee Assistant Professor Grade-II joy@iitbbs.ac.in	IIT Kharagpur, 2015	Distributed Algorithms, Time-varying Network Algorithms, Intelligent Transportation Systems, Smart Grid
60	Dr. M. Sabarimalai Manikandan Assistant Professor msm@iitbbs.ac.in	IIT Guwahati, 2009	Signal and Image Processing; Biometric and Multimodal Interfaces; VLSI and Embedded System
61	Dr. Neti V L N Murty Assistant Professor murtyn@iitbbs.ac.in	IIT BHU, 2008	Compound Semiconductor Device Modelling and Characterisation; Radiation Effects on Semiconductor Devices; Thin-film Sensors
62	Dr. Niladri Bihari Puhan Assistant Professor nbpuhan@iitbbs.ac.in	Nanyang Technologcal University, Singapore, 2007	Image Processing; Biometrics; Biomedical Imaging
63	Dr. Padmalochan Bera Assistant Professor plb@iitbbs.ac.in	IIT Kharagpur, 2011	Networks and System Security; Cryptography; Software Defined Networks
64	Dr. Sankarsan Mohapatro Assistant Professor sankarsan@iitbbs.ac.in	IISc Bangalore, 2011	High Voltage Engineering; Industrial Application of High Voltage for Pollution Control; Renewable Energy Systems
65	Dr. Srinivas Bhaskar Karanki Assistant Professor skaranki@iitbbs.ac.in	IIT Madras, 2012	Power Quality; DC DC Converters for Renewable energy sources; Power Electronics Applications to Power Systems

Sl. No	Name/Designation/ Email	Ph.D./Year	Specialization/Research Area
66	Dr. Sudipta Saha Assistant Professor Grade-II sudipta@iitbbs.ac.in	IIT Kharagpur,2015	Wireless Sensor Network; Cyber-Physical Systems; Internet-of-Things
67	Dr. Chandrasekhar Perumalla Assistant Professor pcsekhar@iitbbs.ac.in	IIT Delhi, 2014	Integration and Control of Renewable Energy Systems; Design and Development of Smart Controllers for Microgrid/Smart Grid Systems; Control of Active Distribution Systems; Energy Management in Hybrid AC/DC Microgrid Systems; Application of Power Electronics to Power Systems; Application of Soft Computing to Power Quality Problems
68	Dr. Srinivas Pinisetty Assistant Professor spinisetty@iitbbs.ac.in	INRIA Rennes, University of Rennes1, France	Formal methods, runtime monitoring
69	Dr. Srinivas Boppu Assistant Professor srinivas@iitbbs.ac.in	University of Erlangen-Nuremberg, 2015	Programmable Hardware Accelerators
70	Dr. Balakrishna Pamulaparthy Assistant Professor balakrishnap@iitbbs.ac.in	IIT Madras, 2016	Power System Automation; Data Analytics for Smart Power Grids; Smart Grids/Micro Grids Technology; Power Distribution Systems
71	Dr. Debapratim Ghosh Assistant Professor debapratim@iitbbs.ac.in	IIT Bombay, 2017	Microwave components, circuits, and systems, microwave measurement systems, analog and small-scale embedded systems
72	Dr. Adway Mitra Assistant Professor adway@iitbbs.ac.in	IISc. Bangalore, 2016	Data Mining; Machine Learning; Climate Informatics; Modelling complex spatio-temporal processes; Bayesian Modeling; Computer Vision; Video Analytics; Social Network Analysis
73	Dr. Anwoy Kumar Mohanty Assistant Professor adway@iitbbs.ac.in	Texas A&M University, College Station, USA, 2015	Research work related to development of novel algorithms for the analysis of gene sequencing data
74	Dr. Anoop Thomas Assistant Professor anoopthomas@iitbbs.ac.in	IISc. Bangalore, 2018	Coding techniques; Algebraic Error Correcting Codes; Index Coding; Network Coding; Coded caching; Coded Distributed Computing
75	Dr. Olive Ray Assistant Professor olive@iitbbs.ac.in	IIT Kanpur, 2016	Renewable power integration; Converter modeling and control; Digital control of Power Electronics
76	Dr. Soumya Prakash Dash Assistant Professor spdash@iitbbs.ac.in	IIT Delhi, 2019	Communication theory; Powerline communication; Smart grid communications; Diversity combining; Soft and evolutionary computing
77	Dr. Shweta Jain Visiting Faculty shwetajain@iitbbs.ac.in	IISc. Bangalore, 2017	Game Theory; Mechanism Design; Machine Learning

Sl. No	Name/Designation/ Email	Ph.D./Year	Specialization/Research Area
School of Humanities, Social Sciences and Management			
78	Prof. Godabarisha Mishra Visiting Professor gmishra@iitbbs.ac.in	Madras University, 1986	Sanskrit and Indian Philosophy
79	Dr. Amrita Satapathy Assistant Professor asatapathy@iitbbs.ac.in	Utkal University, 2009	Commonwealth Studies, Indian Diaspora Literature, Travel Writings/ Autobiographies/ Memoirs
80	Dr. Anamitra Basu Assistant Professor anamitrabasu@iitbbs.ac.in	IIT Kharagpur, 2010	Laterality ; Psycholinguistics; clinical Psychology
81	Dr. Dukhabandhu Sahoo Assistant Professor dsahoo@iitbbs.ac.in	Institute for Social and Economic Change, Bangalore, 2007	Open Macroeconomics; Development Economics; Environment and Natural Resource Economics
82	Dr. Naresh Chandra Sahu Assistant Professor naresh@iitbbs.ac.in	IIT Kanpur, 2008	Environmental Economics; Finance; Mining and Rural Development
83	Dr. Punyashree Panda Assistant Professor ppanda@iitbbs.ac.in	Berhampur University, 2008	Postcolonial World Literature, Indigenous Writings; Indian Writing in English; ELT, Cross-cultural Communication
84	Dr. Rajakumar Guduru Assistant Professor rajakumarguduru@iitbbs.ac.in	English and Foreign Languages University, Hyderabad, 2011	Developing Critical Vocabulary of ESL Learners; Cognitive Reading Skills; Second Language Aquisition; Teacher Education and Development; Communication Skills; Technology and Language Learning
School of Infrastructure			
85	Prof. Rabindra Kumar Panda Professor rkpanda@iitbbs.ac.in	Indian Agricultural Research Institute, New Delhi, 1984	Hydrology ;Watershed Management; Non-point Source Pollution of Water Resources
86	Dr. Dinakar Pasla Associate Professor pdinakar@iitbbs.ac.in	IIT Madras, 2005	Concrete Technology
87	Dr. Sumanta Haldar Associate Professor sumanta@iitbbs.ac.in	IISc Bangalore, 2008	Offshore wind energy foundation; Soil-structure interaction; Dynamics of soil and foundation
88	Dr. Arindam Sarkar Assistant Professor asarkar@iitbbs.ac.in	IIT Kharagpur, 2006	Flow through submerged and emergent vegetation; Scour around hydraulic structures; Mathematical flow modelling
89	Dr. B. Hanumantha Rao Assistant Professor bhrao@iitbbs.ac.in	IIT Bombay, 2009	Geotechnical Engineering; Environmental Geotechnics;

Sl. No	Name/Designation/ Email	Ph.D./Year	Specialization/Research Area
90	Dr. Debasis Basu Assistant Professor dbasu@iitbbs.ac.in	IIT Kharagpur, 2008	Sustainable Transportation, Operation of Public Transport; Transportation Economics; Traffic Studies
91	Dr. Goutam Mondal Assistant Professor gmondal@iitbbs.ac.in	IIT Kanpur, 2011	Earthquake Engineering and Structural Dynamics; Seismic Analysis of Bridges; Soil-Structure Interaction
92	Dr. Manaswini Behera Assistant Professor manaswini@iitbbs.ac.in	IIT Kharagpur, 2012	Water and wastewater treatment and reuse; Bio-energy recovery during wastewater treatment in microbial fuel cell; Solid waste management
93	Dr. Meenu Ramadas Assistant Professor meenu@iitbbs.ac.in	Purdue University, USA, 2015	Hydrology; Water Resources; Drought Modelling
94	Dr. Partha Pratim Dey Assistant Professor ppdey@iitbbs.ac.in	IIT Roorkee, 2006	Traffic Flow Modelling
95	Dr. Pushpendu Bhunia Associate Professor pbhunia@iitbbs.ac.in	IIT Kharagpur, 2008	Nutrients removal and recovery from wastewater; Vermi-filtration of domestic and industrial wastes; Recovery of energy and biogas generation from biodegradable wastes
96	Dr. Rajesh Roshan Dash Associate Professor rrdash@iitbbs.ac.in	IIT Roorkee, 2008	Environmental Engineering; Treatment of Water and Wastewater; Solid Waste Management
97	Dr. Remya Neelancherry Assistant Professor remya@iitbbs.ac.in	National Chiao Tung University Taiwan, 2010	Microwave photocatalytic treatment of complex wastewater; Catalytic copyrolysis of mixed solid waste; Solar photocatalytic treatment and preparation of supported catalyst
98	Dr. Saikat Sarkar Visiting Faculty saikat@iitbbs.ac.in	IISc Bangalore, 2014	Structural Engineering
99	Dr. Shantanu Patra Assistant Professor shantanupatra@iitbbs.ac.in	IIT Delhi, 2013	Geotechnical engineering, geosynthetics and their application
100	Dr. Suresh R Dash Assistant Professor srdash@iitbbs.ac.in	University of Oxford, 2011	Structural Dynamics and Earthquake engineering; Soil - Structure Interaction; Seismic Analysis and Design of Pipelines
101	Dr. Umesh Chandra Sahoo Assistant Professor ucsahoo@iitbbs.ac.in	IIT Kharagpur, 2009	Pavement Analysis and Design; Pavement Materials; Low Volume Roads
102	Prof. Tian C. Zhang Visiting Professor of Foreign Origin tzhang@iitbbs.ac.in	University of Cincinnati, Cincinnati, OH, 1994	Alternative energy sources/low carbon technologies, nanotechnology and its environmental applications, non-point source pollution control technologies and micro-scale environmental conditions.

Sl. No	Name/Designation/ Email	Ph.D./Year	Specialization/Research Area
103	Dr. Akhansha Tyagi Assistant Professor akanksha@iitbbs.ac.in	National University of Singapore, 2018	Soft soil engineering; Ground Improvement (cement-treated soils); Tunnelling; Centrifuge modelling; Random finite element analysis
104	Dr. Devesh Punera Assistant Professor devesh@iitbbs.ac.in	IIT Bombay, 2018	Structural Mechanics; Composite structures; Continuum theories of beams, plates and shell structures; Smart materials; Bio-mechanics.
School of Mechanical Sciences			
105	Prof. Swarup Kumar Mahapatra, Professor swarup@iitbbs.ac.in	Jadavpur University, 2000	Conjugate Heat Transfer; Radiation Modelling; Bio Heat Transfer
106	Prof. P.K. J. Mohapatra Visiting Professor pkjm@iitbbs.ac.in	IIT Kharagpur, 1978	Industrial Engineering; Systems Dynamics; Operations Research & Management
107	Prof. Sunil Kumar Sarangi Professorial Fellow sks16@iitbbs.ac.in	State University of New York, Stony Brook, 1974	Refrigeration and Air conditioning, cryogenic engineering
108	Dr. Arun Kumar Pradhan Associate Professor akpradhan@iitbbs.ac.in	IIT Kharagpur, 2008	Solid Mechanics, Composite Materials & Structures, Fracture Mechanics & Delamination studies in Composites; Smart Materials & Structures; Natural Fibre Reinforced Composites
109	Dr. Manas Mohan Mahapatra Associate Professor mmmahapatra@iitbbs.ac.in	IIT Kharagpur, 2008	Welding Residual Stress & Distortion control, Friction Stir Welding Tool Design, Friction Stir Processing and Friction Cladding; Thermal Spray and Laser Coating for Wear and High Temperature Applications; In-situ Metal Matrix Composites and their Manufacturability
110	Dr. Mihir Kumar Pandit Associate Professor mihir@iitbbs.ac.in	IIT Kharagpur, 2009	Design and Solid Mechanics; Sandwich Structures; Composite Materials
111	Dr. Satyanarayan Panigrahi Associate Professor psatyan@iitbbs.ac.in	IISc Bangalore, 2007	Underwater acoustic absorbers; Acoustics of mufflers and ducts; Acoustic metamaterials
112	Dr. Akhilesh Barve Assistant Professor akhilesh@iitbbs.ac.in	IIT Delhi, 2009	Supply Chain Management; Humanitarian Logistics; Industrial Engineering Relieved on 30.08.2018 With Lien For 1 Year W.E.F 31.08.2018
113	Dr. Anirban Bhattacharya Assistant Professor anirban@iitbbs.ac.in	IISc Bangalore, 2014	Multi-phase and multiscale transport phenomena; Phase change and grain structure modelling; Boiling heat transfer modelling

Sl. No	Name/Designation/ Email	Ph.D./Year	Specialization/Research Area
114	Dr. K. Srinivasa Ramanujam Assistant Professor sramanujam@iitbbs.ac.in	IIT Madras, 2012	Active Passive Remote Sensing; Engineering Design and Optimization; Atmospheric Radiation
115	Dr. Mihir Kumar Das Assistant Professor mihirdas@iitbbs.ac.in	IIT Roorkee, 2006	Two Phase Heat Transfer; PCM based Cooling System; Internal Combustion Engines
116	Dr. Prasenjit Rath Assistant Professor prath@iitbbs.ac.in	Nanyang Technological University, Singapore, 2007	Transport Phenomena in Materials Processing; Ultrafast Transport; CFD/HT
117	Dr. Sasidhar Kondaraju Assistant Professor sasidhar@iitbbs.ac.in	Wayne State University, 2009	Microfluidics; Micro/Nanoscale Thermofluids; Multiphase Flows
118	Dr. Sathyanarayana Ayyalasomayajula Assistant Professor sathya@iitbbs.ac.in	Cornell University, NY, USA, 2007	Turbulence; DNS & LES, Spectral Methods; Experimental Fluid Mechanics
119	Dr. Satish Dhandole Assistant Professor satish@iitbbs.ac.in	IIT Delhi, 2009	Dynamic Design; Vibro-acoustic; Mechanisms
120	Dr. V. Pandu Ranga Assistant Professor pandu@iitbbs.ac.in	IIT Kharagpur, 2009	Robotics; Manufacturing; Soft Computing
121	Dr. Venugopal Arumuru Assistant Professor venugopal@iitbbs.ac.in	IIT Bombay, 2014	Fluid Structure Interaction and unsteady Aero-Hydrodynamics; Heat Transfer augmentation; Acoustics
122	Dr. Yogesh G. Bhumkar Assistant Professor bhumkar@iitbbs.ac.in	IIT Kanpur, 2012	High performance computing; Computational aero acoustics; Transitional and turbulent flows
123	Dr. Gaurav Bartarya Assistant Professor	IIT Kanpur, 2014	Conventional and nonconventional Machining Processes
124	Dr. Suvradip Mullick Assistant Professor	IIT Kharagpur, 2016	Laser material processing, Non-conventional machining
125	Dr. Ankur Gupta Visiting Faculty ankurgupta@iitbbs.ac.in	IIT Kanpur, 2015	Nanotechnology; Micro-system fabrication; Manufacturing
126	Dr. Pattabhi Ramaiah Budarapu Assistant Professor pattabhi@iitbbs.ac.in	Bauhaus University of Welmar, Germany, 2015	Multiscale methods for fracture; molecular dynamics; fracture in multiphysics problems; structural dynamics
127	Dr. Manish Agrawal Visiting Faculty manish@iitbbs.ac.in	IISc. Bangalore, 2017	Efficient Simulation Strategies for Electromechanical Systems, Contact Mechanics and Time Finite Elements, within the Framework of Hybrid Finite Elements

Sl. No	Name/Designation/ Email	Ph.D./Year	Specialization/Research Area
School of Minerals, Metallurgical and Materials Engineering			
128	Dr. Brahma Deo Professorial Fellow bdeo@iitbbs.ac.in	University of Burdwan, 1975	Iron and steel making; Dynamic process control and optimization; Chaos control in dynamical systems
129	Prof. Golok B. Nando Professorial Fellow golokrtc@gmail.com	IIT Kharagpur, 1979	Rubber Products manufacturing and new materials development, Polymer Blends and Alloys with silicone rubber, Thermoplastic Elastomers and Thermoplastic Vulcanizates, Rubber & Thermoplastic Elastomer nano-composites
130	Prof. Brij Kumar Dhindaw Visiting Professor dhindaw@iitbbs.ac.in	IIT Kharagpur,1971	Solidification Processing and Composites; Physical Metallurgy; Mineral Processing
131	Dr. Amritendu Roy Assistant Professor amritendu@iitbbs.ac.in	IIT Kanpur, 2012	Ferroelectric and multiferroic materials for memory and energy applications; Multi component alloy design; Electronic structure calculations
132	Dr. Animesh Mandal Associate Professor animesh@iitbbs.ac.in	IIT Kharagpur, 2007	Aluminium alloys; Metal matrix composites; Semi-solid processing of metallic systems
133	Dr. Kaushik Das Assistant Professor kaushik@iitbbs.ac.in	McGill University, 2012	Mechanical Behaviour of Nanomaterials; Integration of Nanomaterials to Microelectromechanical Systems (MEMS);
134	Dr. Kisor Kumar Sahu Assistant Professor kisorsahu@iitbbs.ac.in	Kyoto University, 2006	Modelling and simulation of materials; Energy materials and systems; Structural and magnetic frustration of materials
135	Dr. Partha Sarathi De Assistant Professor parthasarathi.de@iitbbs.ac.in	Missouri University of Science & Technology, USA, 2010	Friction stir welding and processing; High entropy alloys; Thermo-mechanical processing of metals
136	Dr. Randhir Singh Assistant Professor randhir@iitbbs.ac.in	Imperial College London, 2009	Computational modelling of electrochemical systems; fuel cell and hydrogen production; electro-metallurgy of Al and Ti reduction
137	Dr. Soobhankar Pati Assistant Professor spati@iitbbs.ac.in	Boston University, 2010	Electrochemistry ;Energy Materials; Sustainable Materials and Process
138	Dr. Srikant Gollapudi Assistant Professor srikant@iitbbs.ac.in	North Carolina State University, 2007	Creep behavior of titanium, zirconium, magnesium and aluminum alloys and solders Mechanical alloying of amorphous and nanocrystalline alloys
139	Dr. Kodanda Ram Mangipudi Assistant Professor kodanda@iitbbs.ac.in	University of Groningen, 2012	Computational Mechanics Mechanical behavior of (nano)composite materials Mechanics of cellular solids
140	Dr. Rama Krushna Sabat Visiting Faculty rsabat@iitbbs.ac.in	IISc Bangalore, 2015	Evolution of microstructure and texture during severe plastic deformation of a Magnesium-Cerium alloy

Adjunct Faculty 2018-2019			
Sl. No.	Name	Parent Institute	Name of the School visited
1	Prof. Samrat L. Sabat	University of Hyderabad	SBS
2	Prof. Ajit Mohan Srivastava	Institute of Physics, Bhubaneswar	SBS
3	Prof. T. K. Biswal	IIT Bombay	SEOCS
4	Prof. Saibal Gupta	IIT Kharagpur	SEOCS
5	Dr. Ashwini Nanda	HPC Research Inc., USA	SES
6	Prof. Bijaya Kumar Rath	Berhampur University	SHSSM
7	Padmashree Kumkum Mohanty	Odisha Sangeet Maha Vidyalaya	SHSSM
8	Dr. Pranaya Kumar Swain	NISER Bhubaneswar	SHSSM
9	Prof. K B L Srivastava	IIT Kharagpur	SHSSM
10	Prof. Fakir Mohan Sahoo	Xavier Institute of Management, Bhubaneswar	SHSSM
11	Dr. Aurobindo Behera	IAS- Retired	SHSSM
12	Prof. G. B. Nando	IIT Kharagpur	SMMME
13	Prof. Omkar Nath Mohanty	Director, Technology & Academic Initiative	SMM&ME
14	Prof. P. V. Satyam	Institute of Physics, Bhubaneswar	SBS
15	Prof. Ram Chandra Majhi	Revenshaw University	SHSS&M
16	Prof. Naresh Chandra Mishra	Utkal University	SBS
17	Prof. Chandal Nahak	IIT Kharagpur	SBS
18	Prof. Mruganka Kumar Panigrahi	IIT Kharagpur	SEOCS
19	Dr. Amarendra Da	NISER, Bhubaneswar	SHSS&M
20	Dr. Jitendra Kumar	IIT Kharagpur	SBS
21	Prof. Utpal Sarkar	IIT Kharagpur	SBS
22	Dr. Najmul Haque	NISER, Bhubaneswar	SBS
23	Dr. Tapan Kumar Chand	National Aluminium Company Limited	SHSS&M
24	Prof. Jayanta Kumar Nayak	IIT Bombay	SMS
25	Prof. Sadananda Sahu	IIT Kharagpur	SMS
26	Shri Namballa Dharma Rao	Jindal Steel	SMM&ME
27	Shri C. Balan	CDAC-Thiruvananthapuram	SES
28	Prof. Dipankar Dasgupta	University of Memphis	SES
29	Prof. Soumitra Sengupta	Indian Association for Cultivation of Sciences (IACS), Kolkata	SBS
30	Prof. Pratap Kumar Rath	Centre of Advanced Study in Psychology	SHSS&M
31	Dr. Sateesh Kumar Peddoju	Indian Institute of Technology Roorkee	SES

PUBLICATIONS

BOOK CHAPTER

SCHOOL OF BASIC SCIENCE

1. Chand, A., Chettiyankandy, P., Moharana, M., Sahu, S. N., Pradhan, S. K., Pattanayak, S. K., Chowdhuri, S. (2018). Computational Methods for Developing Novel Antiaging Interventions. In S. I. Rizvi & U. Çakatay (Eds.), Molecular Basis and Emerging Strategies for Anti-aging Interventions (pp. 175–193). https://doi.org/10.1007/978-981-13-1699-9_12
2. Gander, M. J., Kwok, F., & Mandal, B. C. (2017). Convergence of Substructuring Methods for Elliptic Optimal Control Problems. Domain Decomposition Methods in Science and Engineering XXIV, 291–300. https://doi.org/10.1007/978-3-319-93873-8_27
3. Samanta, K., Tsogbayar, T., Zhang, S. B., & Yeager, D. L. (2018). Electron–Atom and Electron–Molecule Resonances: Some Theoretical Approaches Using Complex Scaled Multiconfigurational Methods.Advances in Quantum Chemistry, 77, 317-390.https://doi.org/10.1016/bs.aiq.2017.06.006.

SCHOOL OF EARTH, OCEAN AND CLIMATE SCIENCES

1. Joseph, K. A., Jayaram, C., Nair, A., George, M. S., Balchand, A. N., & Pettersson, L. H. (2018). Remote sensing of upwelling in the Arabian Sea and adjacent near-coastal regions. In Remote Sensing of the Asian Seas (pp. 467–483). https://doi.org/10.1007/978-3-319-94067-0_26

SCHOOL OF HUMANITIES, SOCIAL SCIENCES & MANAGEMENT

1. Panda, P. (2018). Memory, Empathy, and Narrative in Meena Kandasamy's The Gypsy Goddess. In S. P. Gabriel & N. O. Pagan (Eds.), Literature, Memory, Hegemony: East/West Crossings (pp. 159–175). https://doi.org/10.1007/978-981-10-9001-1_9

SCHOOL OF INFRASTRUCTURE

1. Lee, F.-H., Liu, Y., Tyagi, A., Tan, K.-Q., Pan, Y., & Ho, J. (2019). A Design Framework for Spatial Variability in Cement-Treated Soft Clay in Deep Excavations and Underground Constructions. In K. Ilamparuthi & R. G. Robinson (Eds.), Geotechnical Design and Practice: Selected Topics (pp. 59–69). https://doi.org/10.1007/978-981-13-0505-4_5
2. Neelancherry, R. (2018). Dye Wastewater Treatment Using Carbonaceous Materials by Microwave-Assisted Methods. https://doi.org/10.1007/978-981-10-7551-3_5
3. Vairagi, P. D., & Dash, R. R. (2018). Evaluation of Dolochar as a Filter Media in Slow Sand Filtration. In V. P. Singh, S. Yadav, & R. N. Yadava (Eds.), Water Quality Management (pp. 221–230). Springer Singapore.

SCHOOL OF MECHANICAL SCIENCES

1. Manjunath Patel G. C, Krishna, P., Parappagoudar, M. B., Vundavilli, P. R., Bhushan, S. N. B., Manjunath Patel G. C, … Bhushan, S. N. B. (2001, January 1). Squeeze Casting Parameter Optimization Using Swarm Intelligence and Evolutionary Algorithms [Chapter]. Retrieved May 10, 2019, from http://services.igi-global.com/resolvedoi/resolve.aspx?doi=10.4018/978-1-5225-5134-8.ch010 website: https://www.igi-global.com/gateway/chapter/198929

JOURNALS ARTICLE

SCHOOL OF BASIC SCIENCES

1. Aaboud, M., Aad, G., Abbott, B., Abdinov, O., Abeloos, B., Abidi, S. H., … The ATLAS collaboration. (2018). Combination of inclusive and differential (Formula Presented) charge asymmetry measurements using ATLAS and CMS data at (Formula Presented)= 7 and 8 TeV. Journal of High Energy Physics, 2018(4), 33. https://doi.org/10.1007/JHEP04(2018)033

2. Adachi, I., Adye, T., Ahmed, H., Ahn, J. K., Aihara, H., Akar, S., … (B, a B. ar C. A. (2018). Measurement of cos2β in B0 →d (→)h0 with D →KS0 π+π- decays by a combined time-dependent Dalitz plot analysis of B a B ar and Belle data. Physical Review D, 98(11). https://doi.org/10.1103/PhysRevD.98.112012

3. BABAR Collaboration, Belle Collaboration, Adachi, I., Adye, T., Ahmed, H., Ahn, J. K., … Zupanc, A. (2018). First Evidence for cos2β>0 and Resolution of the Cabibbo-Kobayashi-Maskawa Quark-Mixing Unitarity Triangle Ambiguity. Physical Review Letters, 121(26), 261801. https://doi.org/10.1103/PhysRevLett.121.261801

4. Banik, A. D., Chaudhry, M. L., & Kim, J. J. (2018). A Note on the Waiting-Time Distribution in an Infinite-Buffer GI[X]/C-MSP/1 Queueing System [Research article]. https://doi.org/10.1155/2018/7462439

5. Barik, S., & Sahoo, G. (2018). Results on Laplacian spectra of graphs with pockets. AKCE International Journal of Graphs and Combinatorics, 15(1), 79–87. https://doi.org/10.1016/j.akcej.2017.11.004

6. Barik, S., Kalita, D., Pati, S., & Sahoo, G. (2018). Spectra of Graphs Resulting from Various Graph Operations and Products: A Survey. Special Matrices, 6(1), 323–342. https://doi.org/10.1515/spma-2018-0027

7. Belle Collaboration, Babu, V., Trabelsi, K., Mohanty, G. B., Aziz, T., Greenwald, D., … Zupanc, A. (2018). Search for CP violation in the D+ →π+π0 decay at Belle. Physical Review D, 97(1), 011101. https://doi.org/10.1103/PhysRevD.97.011101

8. Belle Collaboration, Fulsom, B. G., Pedlar, T. K., Adachi, I., Aihara, H., Al Said, S., … Zupanc, A. (2018). Observation of I (2S) →γηb (1S) Decay. Physical Review Letters, 121(23), 232001. https://doi.org/10.1103/PhysRevLett.121.232001

9. Belle Collaboration, Jia, S., Shen, C. P., Yuan, C. Z., Adachi, I., Aihara, H., … Zupanc, A. (2018). Search for (1S,2S) →Zc+ Zc (→) - And e+e- →Zc+ Zc (→) - At s =10.52, 10.58, and 10.867 GeV SEARCH for (1S,2S) →Physical Review D, 97(11), 112004. https://doi.org/10.1103/PhysRevD.97.112004

10. Belle Collaboration, Jia, S., Wang, X. L., Shen, C. P., Yuan, C. Z., Adachi, I., … Zhulanov, V. (2018). Observation of e+e- →γχc1 and search for e+e- →γχc0, γχc2, and γηc at s near 10.6 GeV at Belle. Physical Review D, 98(9), 092015. https://doi.org/10.1103/PhysRevD.98.092015

11. Belle Collaboration, Masuda, M., Uehara, S., Watanabe, Y., Adachi, I., Ahn, J. K., … Zupanc, A. (2018). Study of KS0 pair production in single-tag two-photon collisions. Physical Review D, 97(5), 052003. https://doi.org/10.1103/PhysRevD.97.052003

12. Belle Collaboration, Nakano, H., Ishikawa, A., Sumisawa, K., Yamamoto, H., Adachi, I., … Zupanc, A. (2018). Measurement of time-dependent CP asymmetries in B0 →KS0 ηγ decays. Physical Review D, 97(9), 092003. https://doi.org/10.1103/PhysRevD.97.092003

13. Belle Collaboration, Niiyama, M., Sumihama, M., Nakano, T., Adachi, I., Aihara, H., … Zupanc, A. (2018). Production cross sections of hyperons and charmed baryons from e+e- annihilation near s =10.52 GeV. Physical Review D, 97(7), 072005. https://doi.org/10.1103/PhysRevD.97.072005

14. Belle Collaboration, Pal, B., Schwartz, A. J., Aihara, H., Al Said, S., Asner, D. M., … Zhukova, V. (2018). Measurement of the branching fraction and time-dependent CP asymmetry for B0 →J/ψπ0 decays. Physical Review D, 98(11), 112008. https://doi.org/10.1103/PhysRevD.98.112008

15. Belle Collaboration, Vossen, A., Adachi, I., Adamczyk, K., Aihara, H., Al Said, S., … Zupanc, A. (2018). Measurement of the branching fraction of B →d (→)πν at Belle using hadronic tagging in fully reconstructed events. Physical Review D, 98(1), 012005. https://doi.org/10.1103/PhysRevD.98.012005

16. Belle Collaboration, Yelton, J., Adachi, I., Ahn, J. K., Aihara, H., Al Said, S., … Zhulanov, V. (2018). Observation of an Excited Ω- Baryon. Physical Review Letters, 121(5), 052003. https://doi.org/10.1103/PhysRevLett.121.052003

17. Belle Collaboration, Yelton, J., Adachi, I., Aihara, H., Al Said, S., Asner, D. M., … Zupanc, A. (2018). Observation of excited Ωc charmed baryons in e+e- collisions. Physical Review D, 97(5), 051102. https://doi.org/10.1103/PhysRevD.97.051102

18. Belle Collaboration, Yin, J. H., Yuan, C. Z., Adachi, I., Aihara, H., Al Said, S., … Zhulanov, V. (2018). Observation of e+e- →π+π-π0χb1,2 (1P) and search for e+e- →φχb1,2 (1P) at s =10.96 - 11.05 GeV. Physical Review D, 98(9), 091102. https://doi.org/10.1103/PhysRevD.98.091102

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RESEARCH, DEVELOPMENT AND COLLABORATIONS

The Research and Development activities are increasing with time. The total value of projects received by the Institute so far (2010-19) is around Rs. 107.00 crore through 192 sponsored research and 172 consultancy projects. The breakup values of research and consultancy projects are Rs. 96 crore and Rs. 11.00 crore respectively. During the current year (2018-19), projects worth of Rs. 20.37 crore have been received, which includes Rs. 16.68 crore worth sponsored research projects and Rs. 3.69 crore worth consultancy projects. The major funding agencies are DST, MHRD, CSIR, UGC, ISRO, DRDO, ICSSR, DAE, CPRI, DAC, DBT, Deity, NALCO, NPOL, IUSSTF, INCOIS, MoES, MoWR, IITM, NCAOR, BRNS KPIT, P&C Dept.-Govt. of Odisha etc. In addition to the above, a total number of 90 project proposals worth Rs. 70 crore submitted recently are in pipeline. The major areas covered by these projects are: Advance Materials, Energy, Nanotech Hardware, Health Care, Defense, CS & ICT, Environmental Sciences & Climate Change, Water Resources & River Science, Manufacturing and Sustainable Urban Design. Our faculty members participated in major initiatives of MHRD like IMPRINT, Uchhatar Avishkar Yojana (UAY), Swachhta Action Plan, FIST and Unnat Bharat Abhiyan (UBA) etc.

Some of the worth quoting recent Industry-Academia collaborations and R&D initiatives as well as projects connected to the National/State Missions are as follows.

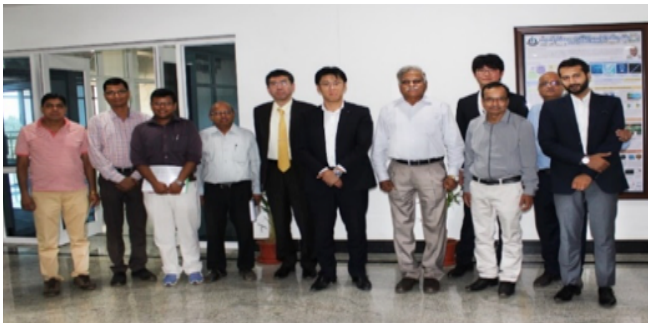
A broad based Research Collaboration Agreement was signed with the Odisha Renewable Energy Development Agency (OREDA) on 17th February 2019 to provide technical support and advice to OREDA in their mission "State Policy for Roof Top Solar Systems".

An international research initiative was taken up with the University of Auckland to foster academic exchange and cooperation between the two institutions in the potential domains namely Civil and Environment Engineering, Electrical and Computer Science & Engineering etc. to explore the possibility of joint guidance, internship & collaborative research projects.

Another MoU was signed by the Directors of IIT Bhubaneswar and CSIR-Institute of Minerals & Materials Technology (IMMT), Bhubaneswar on 13th April 2019 to promote collaborative research, and exchange of knowledge and technical knowhow between the two institutions in the major areas of Metallurgical Engineering, Materials Science and Engineering and Mechanical Engineering.

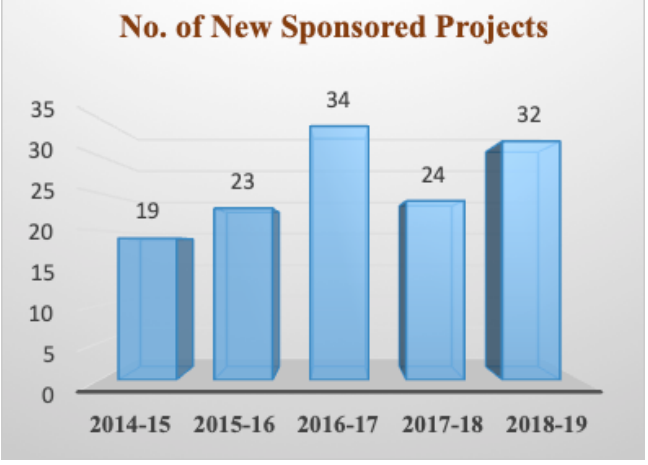
The Institute is also actively participating in the national R&D missions namely: "IMPacting Research, Innovation and Technology (IMPRINT)". Two new project proposals worth Rs. 1.60 Crore has been approved under IMRINT this year making a total of four projects under IMPRINT. Besides the sanctioned projects, a total of 15 proposals worth Rs. 13.21 crore under IMPRINT are in pipeline.

Visit of AOTS JAPAN Officials: A delegation of Association for Overseas Technical Cooperation and Sustainable Partnerships (AOTS), Japan visited our Institute on 10 April 2019 to explore the possibility of R&D collaboration and carrier development opportunities for the students of the Institute by the Japanese industries.



Visit of AOTS JAPAN Officials

Ongoing Sponsored Research Projects



S.No.	Title of the Project	Name of Faculty (Principal Investigator)	Name of the Funding agency
School of Basic Sciences			
1	Development of Heterodimetallic Complexes and their Theranostic and Catalytic Aspects	Dr. Srikanta Patra	DST
2	Development of Cost Effective process and known for production of A1-Mg alloys of enhanced mechanical properties, incorporating graphen/grapheme oxide, suitable for automobile application	Prof. Saroj Nayak	NALCO
3	Independence polynomials of graphs and associated fractals	Dr. Tarakanta Nayak	DST
4	Development of dppz Based Mononuclear Complexes of Iridium and Gold as Ptential Luminescent Probe and Anticancer Agent	Dr. Srikanta Patra	CSIR
5	ION Induced modification of the nanostructured materials and tuning of surface wetting property	Dr. Shyamal Chatterjee	DST
6	Impact of Lysine acetylation in Hsp 16.3 on its structure, chaperone function and the growth, survival as well as pathogenesis of Mycobacterium tuberculosis	Dr. Ashish Biswas	DST
7	Spectra of multidigraphs and their applications to complex networks	Dr. Sasmita Barik	DST
8	Nanostructure Genomics Designing Functionality of 2-Dimensional Nanostructure and Nano-Bio Interfaces	Prof. Saroj Nayak	IUSSTF
9	Materials and related storage devices for grid-deprived communities	Prof. Saroj Nayak	DST
10	Design and study of Nano and micro displacement sensor based on Photonic Crystal Fiber modal interferometer	Dr. Rajan Jha	ISRO

S.No.	Title of the Project	Name of Faculty (Principal Investigator)	Name of the Funding agency
11	Synthesis of some natural marine pyrrole alkaloids and molecules inspired from them for multi-drug resistance (MDR) Cancer Cells	Dr. Tabrez Khan	CSIR
12	Growth and characterization of semiconductor graphene hybrid nanosheets for sola cell applications	Dr. Satchidananda Rath	DST
13	Design and Development of Optical Microfiber based Acoustic Sensors for Under/ Over Water Applications	Dr. Rajan Jha	DST
14	Structural studies on the interaction of hc5a with the N-terminus peptides of C5aR and C5L2 receptor	Dr. Soumendra Rana	DST
15	Ion irradiation induced modification of one-dimensional functional nano-materials	Dr. Shyamal Chatterjee	BRNS
16	Study of hybrid improper ferroelectricity in layered perovskites by high resolution neutron diffraction techniques	Dr. Niharika Mohapatra	UGC-DAE
17	A bound-state electronic structure theory approach to investigate the electron detachment initiated by light	Dr. Kousik Samanta	DST
18	Process for development of new applications of Aluminium based Materials in Solar light, solar roof sheets and in Battery having Superior Thermal and Electronic Properties	Prof. Saroj Nayak	NALCO
19	Atomic Scale Aluminium as Interconnects in Electronic devices	Prof. Saroj Nayak	NALCO
20	Compact Muon Solenoid (CMS) Upgrade, Operation and Utilization	Dr. Seema Bahinipati	DST
21	Design and Development of heterodimetallic complex of ruthenium iridium and palladium and their chemical and biological aspects	Dr. Srikant Patra	DST
22	Magnetic properties of self-assembled bivalent, trivalent and mixed-valent [2x2] transition metal grids	Dr. Akhilesh Ku Singh	UGC-DAE
23	Development of Higher Order Compact Scheme to capture Taylor column phenomena in rotating fluids	Dr. T V S Sekhar	DST
24	Development of a general synthetic approach directed towards the total synthesis of bioactive iridoid class of terpenoids	Dr. Tabrez Khan	DST
25	Center of Excellence for Novel Energy Materials (CENEMA)	Prof. Saroj Nayak	MHRD
26	Design, Synthesis and biological evaluation of novel Ftsz inhibitors a potential anti tubercular agents	Dr. S pal	DBT
School of Earth, Ocean and Climate Science			
27	Evaluation and development of hyperlocal forecasting system for smart city Bhubaneswar and neighbourhood regions	Dr. Sandeep Pattnaik	DST
28	Quality control of HF Radar surface currents for investigation of sub-mesoscale coastal processes and its use for assimilation in the INCOIS model	Dr. Sourav Sil	INCOIS

S.No.	Title of the Project	Name of Faculty (Principal Investigator)	Name of the Funding agency
29	Development of long-term high resolution Land Use Land Cover (LULC) data for Bhubaneswar peri-urban & rural areas and future projection	Dr. Debadatta Swain	DST
30	Decoding the factors controlling the variations in 'metal-package' within W-Sn-polymetallic province of Erinpura-Malani igneous suite, India	Dr. Sourabh Bhattacharya	DST INSPIRE Research Grant
31	Impact of changing aerosol loading and urbanization on surface temperature and rainfall over select cities over India	Dr. V. Vinoj	DST
32	Detection of lighting phenomena and associated process and its now casting	Dr. Debadatta Swain	ISRO
33	Numerical simulation of sub-mesoscale features along Odisha coast using SCATSAT winds	Dr. Sourav Sil	ISRO
34	Estimation of upwelling indices and study of propagating ocean fronts in the Indian and Global Oceans utilizing SCATSAT-1 gridded wind fields	Dr. Debadatta Swain	ISRO
35	Role of cloud physics and dynamics on lifecycle of monsoon low pressure using high resolution observation and modeling	Dr. Sandeep Pattnaik	DST
36	Utilization of ITR Doppler Weather Radar Products in High Resolution Mesoscale Model for Prediction of Severe Weather Over Chandipur	Prof. U. C. Mohanty	ITR Chandipur
37	Assessment and improvement of rainfall forecast skills over the state of Odisha with special reference to Mahanadi and Brahmani-Baitarani river system	Dr. Sandeep Pattnaik	CSIR
38	Seasonal and inter-annual variability of Relative Heat Content (RHC) in the Indian Ocean	Dr. Debadatta Swain	ISRO
39	Establishment of Coastal Ocean Observatory at the Innovation Centre for Climate Change (IC3) and Capacity Building of School of Earth, Ocean and Climate Sciences	Dr. Sandeep Pattnaik	Ministry of Earth Sciences
40	Simulation of coastal circulation on North-West Bay of Bengal	Dr. Sourav Sil	DST
41	Monsoon dynamics and thermodynamics from the land surface, through convection to the continental-scale (INCOMPASS)	Dr. Sandeep Pattnaik	IITM
42	Improved under-standing and representation of land surface processes for short, medium and long range prediction of monsoon rainfall	Prof. U. C. Mohanty	IITM
43	Millennial to centennial scale variability in the Asian summer monsoon: Foraminiferal perspective from the East China Sea	Dr. Raj Kumar Singh	NCAOR
44	Investigations of Aerosol Outflow from Indo Gangetic Plain	Dr. V. Vinoj	ISRO
45	High Resolution regional coupled ocean-atmosphere modelling system for the prediction of intense vortices over the Indian Seas	Prof. U. C. Mohanty	INCOIS

S.No.	Title of the Project	Name of Faculty (Principal Investigator)	Name of the Funding agency
46	Development and application of extended range forecast system for climate risk management in Agriculture phase – II	Prof. U. C. Mohanty	DAC
School of Electrical Science			
47	Smart Grid Security Control Using Nature-Inspired Decentralised Cooperative Metaheuristic Strategies	Prof. N. C. Sahoo	DST
48	Prototype of Imaging Radar in UWB	Dr. Srinivas Boppu	DST – IMPRINT
49	Light weight, Reconfigurable Cognitive Radio Platform for M2M and IoT applications	Dr. Barathram Ramkumar	DST - IMPRINT
50	Minimization of Storage Requirements in Renewable Rich Smart Microgrid through Coordinated Control of Resources	Dr. Chandrasekhar Perumalla	DST
51	FIST Programme - SES	Dr. P. K. Sahu	DST
52	Hub & Spoke Consortia for e2W and e3W Electric Drives – Design, Development and Prototyping of Advanced IM and Synchronous Reluctance Drives and Vehicle Integration for e2W and e3W Applications	Prof. N. C. Sahoo	NFTDC
53	Online Target Scoring system for consistency trails with scintillation removal in images	Dr. N. B. Puhan	DRDO
54	UI-ASSIST: US-India collaborative for smart distribution system with storage	Dr. S. R. Samantaray	Indo-US Science & Technology Forum
55	Development of Speech Interface for Form-filling Application in Five Indian Languages	Dr. M. S. Manikandan	MEIT under IMPRINT
56	Si/SiC Hybrid semiconductor based solid state transformer for PV application	Dr. Dipankar De	DST
57	Brush less DC machine based solar pumping system	Dr. C. N. Bhende	DST
58	UK India clean energy research institute (UKICERI) - UK-India Joint Virtual Centre for Clean Energy	Dr. S. B. Karanki	DST
59	Techniques and tools for verification of network security policies based on formal methods to assess security of networks	Dr. Padmalochan Bera	DRDO
60	Driver behavior modelling for autonomous driving	Prof. N. C. Sahoo	KPIT Technologies Ltd
61	Fabrication and characterisation of CVD diamond detectors for plasma diagnostics in nuclear fusion reactors	Dr. Satchidananda Rath	BRNS
62	Design and implementation of High-speed low-power embedded signal processor based custom power devices for power quality improvement	Dr. S. B. Karanki	DST
63	Design and Development of Affordable and Movable Solar Photovoltaic (SPV) Water Pumping System	Dr. S. B. Karanki and Dr. M S Manikandan	DAFP

S.No.	Title of the Project	Name of Faculty (Principal Investigator)	Name of the Funding agency
64	Diesel engine Emission Control using Electrical Discharge based Technique for Clean Environment: A Non-Conventional Approach	Dr. Sankarsan Mohapatro	DST
65	Aeronautic Telemetry Channel Estimation and Equalization	Dr. P. R. Sahu	ITR Chandipur
66	Real time Implementation of Image Fusion Algorithms for IR and CCD Video	Dr. N. B. Puhan	ITR Chandipur
67	Development of intellegent relaying scheme for micro-grids with DG penetration	Dr. S. R. Samantaray	CPRI
68	Visvesvaraya PhD scheme for Electronics and IT	Dr. M. S. Manikandan	DeitY
69	Computer vision guided mass gathering surveillance using crowd flow analysis	Dr. Debi Prosad Dogra	DST
70	Design and implementation of MIMO based transceiver for emergency applications	Dr. Barathram Ramkumar	DST
71	Special Manpower Development Program for Chips to System Design (SMDP-C2SD)	Dr. M. S. Manikandan	DeitY
72	Development of a comprehensive wide-area based back up protection scheme for power transmission network	Dr. S. R. Samantaray	DST
73	Integration and intelligent management of renewable via ICT for smart Micro-Grid networks	Prof. N. C. Sahoo	DST
74	Speech Based Access of Agricultural Commodity Prices and Weather Information in 12 Indian Languages / Dialects	Dr. P. K. Sahu	DeitY
School of Infrastructure			
75	Impact Assessment of climate change on Hydrometeorological processes and water resources of Mahanadi river basin	Dr. Arindam Sarkar	Ministry of Water Resources, GOI
76	Treatment for domestic wastewater using microphyte assisted vermifiltration system	Dr. R. R. Dash	MHRD
77	Measures for Improving the Attractiveness of Pedestrian Facility Accessing Urban Local Bus Stops	Dr. Debasis Basu	MHRD
78	Characterization studies of Nano-enhanced Phase Change Material (NEPCM) in thermal storage devices for sustainable building designs in India	Dr. B Hanumantha Rao	DST
79	Design and analysis of reactor for catalytic co-pyrolysis of biomass and plastic: A treatment technique for mixed solid waste	Dr. Remya Neelancherry	DST
80	Study of the effects of Climate Change on Hydro-meteorological processes: Droughts and Floods at Different Spatial and Temporal Scales in Eastern India	Prof. R. K. Panda	DST
81	Greywater treatment and reuse by combined sequencing batch reactor and solar photocatalytic reactor	Dr. Remya Neelancherry	DST

S.No.	Title of the Project	Name of Faculty (Principal Investigator)	Name of the Funding agency
82	Bioelectricity recovery during treatment of kitchen waste in combined leach bed reactor and low cost microbial fuel cell	Dr. Manaswini Behera	DST
83	Rice mill wastewater treatment and bio-electricity generation in low cost microbial fuel cell employing ceramic separator	Dr. Manaswini Behera	DST
84	Establishment of Innovation-cum-Incubation Centre at IIT Bhubaneswar	Prof. R. K. Panda	Planning & Coordination Dept.
85	Improving groundwater levels and quality through enhanced water use efficiency in eastern Indian Agriculture	Prof. R. K. Panda	ITRA
School of Minerals, Metallurgical and Materials Engineering			
86	Effect of laser shock peening on the fatigue behavior of Nitinol shape memory alloy	Dr. Srikant Gollapudi	DST
87	Low temperature electro refining process for production of high purity aluminium (4N and above)	Dr. Soobhankar Pati	NALCO
88	Stress Corosion Cracking (SSC) evaluation of Materials for Naval application: New insights from Double Cantilever Beam (DCB) technique	Dr. K. K. Sahu	NRB, DRDO
89	Development of stand-alone, cost effective conversion coatings for Magnesium alloys	Dr. K. K. Sahu	UAY of MHRD
90	Online Corrosion Monitoring in naval structures	Dr. Soobhankar Pati	NRB, DRDO
91	Improving damping capacity of cast Nickel aluminum Bronze (NAB) alloys	Dr. Partha Sarathi De	NRB, DRDO
92	Value added Electrochemical Devices from Zircon Obtained from Beach Sands of Odisha	Dr. Soobhankar Pati	Ministry of Mines
93	Panel head of materials panel of Naval Research Board	Dr. Brij Kumar Dhindaw	DRDO
94	Optimization Of Silos, Bins And Hoppers Designs Through Modelling, Primarily Intended For Iron Ore Storage	Dr. K. K. Sahu	UAY of MHRD & NMDC
95	Recycling of cast alloys scraps to produce alloys with comparable microstructure and properties as that of primary alloys	Dr. Animesh Mandal	UAY of MHRD & NALCO
96	Dissimilar joining of Al with Ti and steel using friction stir welding	Dr. Partha Sarathi De	Naval Materials Research Laboratory (NMRL)
97	Modelling of Chemical Vapor Infiltration (CVI) process for Fabrication of Carbon Reinforced Carbon Matrix Composites	Dr. Soobhankar Pati	ASL, DRDO
98	Study of piezoelectric nanomaterial reinforced polymer nanocomposite films for applications in MEMS	Dr. Kaushik Das	DST
99	Designing of Novel Multiferroic Transition Metal Oxides for Memory and Energy Applications	Dr. Amritendu Roy	DST

S.No.	Title of the Project	Name of Faculty (Principal Investigator)	Name of the Funding agency
School of Mechanical Sciences			
100	Dynamic Analysis and Design of Dynamically Balanced Gait Controller for Lower Limb Exoskeleton	Dr. Pandu Ranga Vundavalli	DST
101	Design and Development of Hybrid "PCM-Synthetic Jet" based Heat Sink for Electronic Cooling	Dr. Mihir Kumar Das	DST
111	Development of continuous gradient Functionally Graded Materials (FGMs) by using gravity die casting under Teachers Associateship for Research Excellence (TARE)	Dr. Manas Mohan Mohapatra	DST
112	Development of a three dimensional unsteady, compressible flow solver (based on LES methodology) to optimize shape of a launch vehicle for reducing aerodynamic drag and flow induced acoustic noise at transonic Mach numbers	Dr. Yogesh Bhumkar	ISRO
113	Development of Metal Matrix Nano-Composites using selective Laser Melting process	Dr. Anirban Bhattacharya	DST
114	Design and Development of Co-axial Synthetic Jet for Electronics Cooling	Dr. Venugopal Arumuru	DST
115	FIST Programme - SMS	Dr. Satyanarayana Ayyalasomayajula	DST
116	Evaluation of residual stress in Alloy 617 boiler tube weld joint and 10Cr Steel/ Alloy 617 dissimilar metal weld joint for welded turbine rotor	Dr. Manas Mohan Mohapatra	IGCAR, DAE
117	Investigation on quantification and prevention of high residual stresses and hydrogen assisted cracking in creep strength enhanced ferritic steel welds for low pollution ultra supercritical power plant applications	Dr. Manas Mohan Mohapatra	DST
118	Performance Improvement of Steam Generator through the Enhanced Hydrophobic Surface	Dr. Mihir Kumar Das	Central Power Research Institute (CPRI)
119	Droplet impact and splashing on oblique surface	Dr. Sasidhar Kondaraju	DST
120	Development of enhanced hydrophobic tube bundle with low pressure drop for two phase shell and tube heat exchanger	Dr. Mihir Kumar Das	DST
121	Study of Wetting and De-Wetting Transition for Fog-Water Harvesting	Dr. Sasidhar Kondaraju	DST INSPIRE Research Grant
122	Impact of disaster risk reduction activities on livelihood patterns, community resilience and socioeconomic vulnerability in coastal districts of Odisha: A case study	Dr. Akhilesh Barve	ICSSR
123	Development of Deep Hole Drilling Technique for Measurement of Residual Stresses and its Validation	Dr. Manas Mohan Mohapatra	BRNS
124	Pool Boiling Crisis on Porous Coated Surface: An Experimental Study and Model Development	Dr. Mihir Kumar Das	DST
125	National Initiative for Design Innovation	Dr. S. N. Panigrahi	MHRD

Consultancy / Development Projects

S.No.	Title of the Project	Name of Faculty (Principal Investigator)	Name of the Funding agency
School of Earth, Ocean and Climate Science			
1	Co-operation and expert advice for improvement of short and extended range (monthly scale) prediction of rainfall in the tropics		RIMES
School of Electrical Science			
2	Implementation of Advanced Machine Learning Algorithms for Cluster Expansion	Dr. Debi Prosad Dogra	Indo Korea Science and Technology Center, Bangalore
3	Design and Testing of Smart Audio Processing and Communication Systems for Voice Processing and Surveillance Applications	Dr. M S Manikandan	M/s Trijatta Technologies Pvt Ltd.
4	Distributed SDN controller with end to end security	Dr. P.L. Bera	M/s Bharat Electronics Limited
5	Person re-identification for video synopsis	Dr. Debi Prosad Dogra	Korea Institute of Science and Technology
6	Designing of video synopsis algorithms for visual surveillance	Dr. Debi Prosad Dogra	Korea Institute of Science and Technology
School of Humanities, Social Sciences & Management			
7	IIT Bhubaneswar Social Outreach Programme	None	IIT Bhubaneswar
School of Infrastructure			
8	Vetting of structure design/drawing for the project of KV for 6 locations at Jharkhand & Odisha State	Dr. Sumanta Haldar	M/s CP & DS Associates

S.No.	Title of the Project	Name of Faculty (Principal Investigator)	Name of the Funding agency
9	Testing of ferro alloy slag granule	Dr. B Hanumantha Rao	M/s Nava Bharat Ventures Limited
10	Mix design for M30 and M35 grade of Concretes	Dr. Dinakar Pasla	M/s Ultratech Cement Ltd
11	Construction of new road at the missing link portion of NH81 along the approved alignment between Harischandrapur & Eastern approach of Kalindri - Bridge from Km 46.550 to Km 59.697 in the district of Malda West Bengal on EPC m	Dr. Partha Pratim Dey	M/s Dynamic Projects Pvt. Ltd
12	Analysis of side slope failure and base failure and suggestion of corrective measures in connection with Angul - Sukinda New Railway Line Project	Dr. S. R. Dash	M/s RVNL
13	Proof Checking of Design and Drawing of Superstructure and Substructure of a ROB at Tata Steel Plant, Kalinganagar (Span 2x36m Composite Girder)	Dr. S. R. Dash	M/s RITES Limited
14	Safety Analysis of Steel Pipeline Crossing Railroad between Surat and Vadodara	Dr. S. R. Dash	M/s DFCCIL
15	Technical vetting of foundations F1 type, F2 type and F3 type and pedestals of ETP shed at IOCL Guwahati	Dr. Goutam Mondal	M/s Minakshi Sarkar Engineering and Valuers
16	Proof checking of detailed design / drawing and calculation of foot over bridge for TSK	Dr. Dinakar Pasla	M/s Tata Steel Limited, Kalinganagar
17	Upgradation of NH-512 with a minimum of 2-Lane with paved shoulder configuration starting from Ch 82.4 km to 99.5 km and minimum of 4-Lane configuration from Ch 104.2 km to Ch 106.607 km on EPC mode in State of West Bengal under Annual Plan 2017-18	Dr. Partha Pratim Dey	M/s Millenium Road Construction Pvt. Ltd
18	Concrete Mix Design for MMLP Paradip	Dr. Dinakar Pasla	M/s Ircon Infrastructure Services Ltd.
19	Construction of widening to 2-lane with paved shoulder including geometric improvement Ch.318.650 km to 339.940 km (Length 21.949 km) on Churaibari to Agartala section of NH8 (Old NH44) in the state of Tripura on EPC mode (Length 21.9 km)	Dr. Partha Pratim Dey	M/s Ram Kripal Singh Construction Pvt. Ltd
20	Technical Scrutiny of Launching Scheme of 2 Nos. Steel girder of RUB No. 46 at NH-49 at NH-49 between Belpahar and Brajrajnagar for OPGC Limited	Dr. Goutam Mondal	M/s L&T Limited
21	Stability Analysis of Core formation with sand and local earth for new BG Rail line from Nuagaon to Paradeep	Dr. Sumanta Haldar	M/s Rail Vikas Nigam Ltd

S.No.	Title of the Project	Name of Faculty (Principal Investigator)	Name of the Funding agency
22	A Model Based Decision Support & Control System for Accretion Control to increase the sponge iron production to the target annual capacity of 4,25,000 Mt through a R&D Project	Prof. Brahma Deo	M/s Tata Sponge Iron Ltd
23	Proof Checking of the design and drawings of 4 Nos. of RCC box culvert and suggestion of suitable soil stabilization for culvert No.4, at Biju Patnaik International Airport, Bhubaneswar	Dr. S. R. Dash	Airports Authority of India, Biju Pattanaik Airport
24	Technical Scrutiny of 60m Box Pushing Section of Underpass	Dr. S. R. Dash	M/s Tata Steel Ltd
25	Evaluation of Composite Cements of Konark & Dalmia	Dr. Dinakar Pasla	M/s Dalmia Cements Ltd
26	Monitor settlements and effectiveness of the PVD-Package 2B (Construction of Roadbed, station buildings, Passenger amenities, Minor bridges, General electrical works in connection with new BR rail line from Dumuka Km 57.000 to Nuagaon Km 68.300 on Khurda road division of East Coast Railway in the State of Odisha	Dr. B. Hanumantha Rao	M/s RVNL
27	Proof Checking of Design of Foundation and Superstructure of Video Board at Kalinga Hockey Stadium at Bhubaneswar	Dr. Sumanta Haldar	M/s SM Consultants
28	Third party audit on fly ash generation and utilization of TTPs in Odisha for the year 2016-17	Dr. B. Hanumantha Rao	State Pollution Control Board
29	Technical scrutiny of structural designs for the grade separator structure at Khandagiri Chowk on NH-16, Bhubaneswar, Odisha	Dr. S. R. Dash	NHAI
30	Technical scrutiny of launching scheme of six nos. 30.5m open web gider of ROER Bridge No. 37 of OPGC Ltd	Dr. S. R. Dash	M/s L&T Limited
31	Third party quality assurance consultancy services for Kendriya Vidyalaya No.2, Sambalpur	Dr. Dinakar Pasla	M/s Braithwaite Burn and Jessop Construction Company Ltd
32	Design Engineering service for the retrofitting works	Dr. Dinakar Pasla	M/s ITC Limited
33	Design proof checking of five no of railway bridges of RITES Ltd in connection with construction of railway siding of NTPC Lara STTP	Dr. S. R. Dash	M/s RITES Limited
34	Checking of design and drawing for the work construction of 7.5 MLD water treatment plant with ancillary structure at Ranibagicha, Sundargarh	Dr. R. R. Dash	PH Dept., Govt. of Odisha

S.No.	Title of the Project	Name of Faculty (Principal Investigator)	Name of the Funding agency
35	Proof checking of the design and drawings of substructure of railway road over bridge of RITES ROB 1Y, 1x2x24m composite girder	Dr. S. R. Dash	RITES Limited
36	Proof checking of the design and drawings of substructure for 2 nos of major bridges (13 revised) and 113) in connection with Angul-Sukinda Railway New BG Link Project	Dr. S. R. Dash	Rail Vikas Nigam Limited
37	UPV Test for primary sludge digestion at STP VI Bhubaneswar	Dr. Dinakar Pasla	Vatech Wabag Ltd
38	Electrical Conductivity Test in Bricks	Dr. Dinakar Pasla	M/s Jindal Steel and Power Ltd
39	Vetting of Structural Design, drawing (Pre-Engineered Building), A/c The Samaja, Mancheswar, Bhubaneswar	Dr. Goutam Mondal	M/s LLoyd Insulations
40	Reconstruction with geometric improvement of existing single/intermediate lane to 2 -lane with paved shoulders configuration from existing KM 92.880 to KM 121.550 of NH-125 in the state of Uttarkakhand on EPC mode, through engineering, procurement and construction (EPC) basis contract	Dr. Partha Pratim Dey	Shivalaya Construction Co. Pvt Ltd.
41	Rehabilitation and upgradation to two-lane with paved shoulders from KM 531/250 to KM 597/946 (Kunkuri to CG/JH border section) of NH-78 in the state of Chhattisgarh under NHDP - IV through engineers, procurement & construction (EPC) basis	Dr. Partha Pratim Dey	GAWAR-S.C.C.(JV)
42	Slope stability analysis for new BG Line from Nuagaon to Paradeep	Dr. Sumanta Haldar	M/s ARSS Infrastructure Project Ltd.
43	Consultancy services for design of structural element of MIG 29K & HAWK-AJT infrastructure at INS DEGA Visakhapatnam	Dr. S. R. Dash	M/s Subhadra Consultants
44	Checking of safe bearing capacity of pile and suitable remedial measures for ROB at Ghantapada, talcher	Dr. Sumanta Haldar	RITES Limited
45	Evaluation of Terrazyme (A bioenzyme) stabilized roads constructed under PMGSY	Dr. U. C. Sahoo	Avijeet Agencies
46	Mix Design of cement treated base/ sub-base for PMGSY road in Odisha	Dr. U. C. Sahoo	Rural Works Department, Govt. of Odisha
47	Database for Principal Technical Agency & State Technical Agency for states of Jharkhand and Odisha	Dr. U. C. Sahoo	NRRDA
48	Improvement of Tara Tarini Temple Ring Road (Regarding with protection works- Hill top portion) in the district of Ganjam	Dr. U. C. Sahoo	Rural Works Department, Govt. of Odisha

S.No.	Title of the Project	Name of Faculty (Principal Investigator)	Name of the Funding agency
49	Analysis of side slope failure, base failure, hydraulic calculations and suggestion of corrective measures and Cross Drainage works in connection with Angul-Sukinda New line Project	Dr. Suresh Dash, Dr. Sumanta Haldar	RVNL
50	Consultant for structural design components of proposed HL bridge over river Biluakhai	Dr. Suresh R. Dash	Eastern India Construction (P) Ltd
51	Service as proof consultant for structural design components of proposed HL bridge over river Biluakhai	Dr. Goutam Mondal	M/s Eastern India Construction (P) Ltd
52	Design and drawing of minor bridges of RVNL proof checking		Rail Vikas Nigam Limited
School of Minerals, Metallurgical and Materials Engineering			
53	Process related improvements at PPL	Prof. Brahma Deo	M/s Paradeep Phosphates Ltd
54	Process control and optimization at Jindal Stainless Ltd, Jajpur, Odisha	Prof. Brahma Deo	M/s Jindal Stainless Ltd
55	Process Optimization for minimization of edge cracks in grades JT, JSLUSD and JSLUDD under Process control and optimization at Jindal Stainless Ltd. Jajpur, Odisha	Prof. B. Deo, Dr. K. Das and Dr. K. Mangipudi	Jindal Stainless Ltd. Jajpur, Odisha
56	Process Optimization, Characterization and Minimization of Ferritic Segregation/Sliver-B in grade 316L	Prof. Brahma Deo (PI), Dr. A. Roy and Dr. K.R. Mangipudi	Jindal Stainless Limited
57	Chemistry control & process optimization to control shape problem in dual phase low Cr Ferritic stainless steels (409M/EN 1.4003/IRSM)	None	Jindal Stainless Steel
School of Mechanical Sciences			
58	Residual stress measurement by Deep-hole drilling technique	Dr. M. M. Mahapatra	NMRL, DRDO
59	Development of FEM model for Design Improvement of multi layered Baffle	Dr. S. N. Panigrahi	NPOL, DRDO
60	Vetting / proof checking of modification of boiler registration No-OR-1537 and OR-1539	Prof. S. K. Mahapatra	Directorate of Factories and Boilers, Govt. of Odisha
61	Design of compact/ miniature ultrasonic transducer	Dr. Venugopal Arumuru	GE Oil & Gas (P). Ltd
62	Design and Development of Gaseous Oxygen Heat Exchanger for Semi-Cryogenic Stage		LPSC-ISRO
63	A model based decision support & control system for accretion control to increase the sponge iron production to the target annual capacity of 425000 MT through a R&D project	Prof. Brahma Deo	Tata Sponge Iron Limited
64	Vetting/proof checking of modification of boiler registration no-or-1537 and or-1539	Dr. P.Rath	Directorate of factories and boiler

Patents Filled In the Year 2018-19

Patents Filled in the year 2018-19					
S.N.	Title	Name of the Faculty	Application No.	Year	School
1.	Melt conditioning of alloys by processing through vibrating inclined slope	Prof. B.K. Dhindaw and Dr. A. Mandal	201831030977	2018	School of Minerals, Metallurgical and Materials Engineering
2	Optical fiber model interferometer based Vortex Flowmeter	Dr. R Jha, Dr. A. Venugopal, Mr. Dhrubaraj Dora	201831019721	2018	School of Basic Sciences/ School of Mechanical Sciences
3	A magnetically separable and recyclable g-C3N4/ Fe3O4/ porous RuNP Nano catalyst for the photocatalytic decomposition of water soluble aromatic amines	Dr. Srikant Patra and Mr. Anoop Sahoo	201931000965	2019	School of Basic Sciences
4	A novel process for synthesis of carbon foam	Dr. Animesh Mandal, Dr. Soobhankar Pati, Mr. Manas Kumar Sahoo		2019	School of Minerals, Metallurgical and Materials Engineering

Invited Lecture /Presentation/Conference/Workshop/ GIAN Programmes/ Seminar/ Lecture/ Colloquium By Faculty

S.N.	Title of Lecture/ Presentation	Author(s)	Conference Name, Year, Duration	Remarks
School of Basic Sciences				
1	Multi-reference electronic structure methods to investigate scattering resonances	Dr. Kousik Samanta	Theoretical chemistry symposium, 2019, Feb 13-16	
2	Adverse Effect of Colored Industrial Effluents on Environment and Its Treatment	Dr. Srikanta Patra	Expert Lecture Sponsored by Department of Civil Engineering, Government College of Engineering, Keonjhar	
3	Effect of two well-known nanoparticles on the structure and chaperone function of Mycobacterium leprae HSP18: An alternative approach towards the treatment of leprosy	Dr.Ashis Biswas	6th World Congress on Nanomedical Sciences (ISNSCON 2018), 2018,9-12th December	

S.N.	Title of Lecture/ Presentation	Author(s)	Conference Name, Year, Duration	Remarks
4	Role of C-terminal domain on the structure and function of Mycobacterium tuberculosis Hsp16.3 - An insight into developing better tuberculosis vaccines	Dr.Ashis Biswas	Chemical & Biological Sciences in Drug Discovery -2019, (ICCBSDD-2019), 2019, 8-10th March	
5	On the spectra of bipartite multidigraphs	Dr.S. Barik and Dr.G. Sahoo	International Congress of Mathematicians (ICM-2018), Rio de Janeiro, Brazil, August 1-9, 2018.	
6	A new matrix representation of multidigraphs	Dr.S. Barik	International Conference on Discrete Mathematics (ICDM-2018), Tiruchirappalli, India, December 14-17, 2018	
7	Career Opportunities in Mathematics	Dr.S. Barik	IWM Workshop-2018, NISER, Bhubaneswar, October 27-28, 2018	
8	Molecular Insights into Pharmacology and signaling of hC5a Binding Receptor (C5aR) for Potential Drug Discovery	Dr.S. Rana	2nd World Conference on Pharmacology and Toxicology	
9	The Chemoattractant Receptors of Druggable Proteome: Opportunities for Therapeutic Intervention	Dr.S. Rana	School of Pharmaceutical Sciences, SOA University, Bhubaneswar	
10	Rational Discovery of "Neutraligands" as Potential Complement Therapeutics.	Dr.S. Rana	Bioengineering-2018, NIT Rourkela	
11	The Structure of the Complement Component 5a Receptor. Opportunities for Drug Discovery	Dr.S. Rana	NBCC-2018, School of Chemical Sciences, NISER, Bhubaneswar	
12	Deciphering Disruptive Pharmacophores for Modulating the Signaling axes of the Complement Peptide Receptor (C5aR)	Dr.S. Rana	Drug Discovery India-2019, Mumbai, India	
13	The Story of Complement Receptors in the World of GPCRs.	Dr.S. Rana	NCBBBIET-2019, Berhampur University, Odisha	

S.N.	Title of Lecture/ Presentation	Author(s)	Conference Name, Year, Duration	Remarks
143	Current Approaches and Future Opportunities in Complement Targeted Therapeutics.	Dr.S. Rana	National Conference on Cell based Drug Development and Therapy, IPT-Salipur, Cuttack	
15	Introduction to Complex Dynamics	Dr.Tarakanta Nayak	Vir Surendra Sai University of Technology Burla, Odisha, 27 Sept 2018	Invited talk
16	Mathematics as a career, why and how?	Dr.Tarakanta Nayak	Larambha College, Odisha, 28 Sept 2018	As part of Madhava Mathematics Competition outreach programme
17	9 lectures on Real Analysis	Dr.Tarakanta Nayak	Teacher's Enrichment Workshop on Real Complex & Functional Analysis (ATM School) during 19-25 June 2018	Funded by National Board for Higher Mathematics
18	3 lectures on Introduction to Complex dynamics	Dr.Tarakanta Nayak	GIAN short-term course on Polynomials with Polynomiography and Applications during 7-11 July 2018	
19	10 lectures on Real Analysis	Dr.Tarakanta Nayak	Undergraduate Interactive Mathematics Training Camp during 14-26 May 2018	Part of annual outreach programme of the Institute of Mathematics and Applications, Bhubaneswar
20	Mathematics as a career, why and how?	Dr.Tarakanta Nayak	Anchal College, Padampur, Odisha, 11 November 2018	Part of Remote Area Lecture Series of Indian National Science Academy, 101 college students participated in it.
21	Numbers, Why and Where?	Dr.Tarakanta Nayak	Bandhu Ashram, Jagatsinghpur, Odisha, 2 December 2018	Part of Remote Area Lecture Series of Indian National Science Academy, total attendance was 25 including teachers and students from local Colleges and Schools.
22	Molecules to Materials	Dr.Akhilesh Kumar Singh	UGC Sponsored Annual Seminar	
23	Molecular Contrast Agents for MRI	Dr.Akhilesh Kumar Singh	National Bio-Organic Chemistry Conference (NBCC-2018)	

S.N.	Title of Lecture/ Presentation	Author(s)	Conference Name, Year, Duration	Remarks
24	CP violating triple product asymmetry in charm decays	Dr.S.Bahinipati	10th International Workshop on the CKM Unitarity Triangle (CKM 2018)	https://arxiv.org/abs/1901.03867
25	Introduction to Geometric Programming Problems and Its Applications	Dr.A.K.Ojha	Seminar, 2018	Invited talk at Ravenshaw University
26	Portfolio Optimization	Dr.A.K.Ojha	Workshop, 2018	Invited talk at KIIT University
27	Special Topics in High Energy Physics	Dr.Chandrasekhar Bhamidipati	Mirco-Credit Course at IIT Mandi	14 Hours, 10 Lectures, 3 Tutorials, 1 Quiz
28	Polymeric Materials in Synthesis to Separation Chemistry	Dr.Vijayakrishna Kari	International Conference on Chemical Sciences and Nanomaterials (ICCSN-2019) Organized by VIT Vellore on March 07-09, 2019	
29	Anomalous Magneto-resistance Behavior of Semimetals And Narrow-gap Semiconductors	Dr.Niharika Mohapatra	Annual Meeting on Physics of Strongly Correlated Electron System, 2019, March 6-8	
30	Simultaneous Conjugacy Classes as Combinatorial Invariants of Finite Groups	Dr.Dilpreet Kaur, Dr.Sunil Kumar Prajapati and Dr.Amritanshu Prasad	Workshop on Group Theory, 2019, 22-23rd February	Invited Talk
31	Tuning surface wetting property by ion beam	Dr.Shyamal Chatterjee	International conference on ion beams in materials engineering and characterization (IBMEC2018), IUAC, Delhi, Oct 9-12, 2018	
32	Ion beam modification of one-dimensional nanomaterials for tuning surface wettability	Dr.Shyamal Chatterjee	21st International conference on ion beam modification of materials, June 24 – 29, 2018, San Antonio, Texas, USA	
33	Science for the people and the people for science	Dr.Shyamal Chatterjee	National Science Day, February 28, 2019, Centurion University, Paralakhemundi, Odisha	
34	Expression analysis of AAA+ ATPase ATAD2 and its probable partners shows their high prognostic significance in cancers.	Dr.Anasuya Roychowdhury ,Aditi Nayak, Asima Bhattacharyya,	International Symposium on Tumor Microenvironment and Cancer Prevention & Therapeutics" (08-09 February 2019) at Jawaharlal Nehru University (JNU), New Delhi, India	Invited talk at Category: Recent Advances in Cancer Research
35	Characterization of AAA+ ATPase ATAD2 expression in gastric cancer cells	Dr.Anasuya Roychowdhury ,Aditi Nayak, Asima Bhattacharyya,	National Conference on Bioengineering-2018 (14-15th December, 2018), Department of Biotechnology and Medical Engineering, National Institute of Technology, Rourkela	Invited Talk and Session Chair

S.N.	Title of Lecture/ Presentation	Author(s)	Conference Name, Year, Duration	Remarks
36	Role of the AAA+ ATPase ATAD2 in Gastric Cancer	Dr.Anasuya Roychowdhury ,Aditi Nayak, Asima Bhattacharyya,	2nd International Conference on Cancer Genetics & Epigenetics (November 12-13, 2018) Tokyo, Japan	Abstract accepted for Oral presentation and invited to be the co-chair for the session; Biomarkers
37	Pan-cancer analyses of AAA+ ATPase ATAD2 and its probable partners reveal their high prognostic significance in cancers	Dr.Anasuya Roychowdhury ,Aditi Nayak, Asima Bhattacharyya,	4th International Conference on Translational Research: "Recent Developments and Innovations in Human Health and Agricultural Research" (October 11-13, 2018), Goa, India	Invited Talk
38	Optical Fiber Devices: Laboratory to Field	Dr.Rajan Jha	29-30 March 2019, TMAP, NISER Bhubaneswar	
39	Current and future trends in Plasmonics: Basics and applications	Dr.Rajan Jha	19-22 September, OSI - International Symposium on Optics (OSI-ISO 2018), IIT Kanpur	
40	Acoustic Sensor based on Post Processed Optical Fiber	Dr.Rajan Jha	19-22 September, OSI - International Symposium on Optics (OSI-ISO 2018), IIT Kanpur	
School of Earth, Ocean And Climate Sciences				
41	Fifteen Years Argos in the Indian Ocean: Unique observations for studying the Subsurface Changes and Model Validations	Dr.Sourav Sil	National Oceanography Workshop	INCOIS, Hyderabad
42	Indian Coastal Radar Network (ICORN): A revolution to Coastal Observations along the Indian Coast	Dr.Sourav Sil	Indian Coastal Radar Network (ICORN) 2008 - 2018	NIOT, Chennai
43	Coal Petrography and its application	Dr.H.K.Mishra	IICM,Ranchi,28-29 March 2019	Took lectures for senior executives of Coal India Ltd
44	Geothermal potential of India	Dr.S. H. Farooq	United Nations University	
45	Effect of equatorial waves on extreme events over Indian region	Dr.Kiranmayi Landu	Invited talk in NARL, Tirupati, 2018	
46	Natural variability of tropical atmosphere	Dr.Kiranmayi Landu	Invited talk in IIT Kanpur, 2019	

S.N.	Title of Lecture/ Presentation	Author(s)	Conference Name, Year, Duration	Remarks
47	Impact of convectively coupled equatorial waves on Indian weather and possible role of airsea interactions	Dr.Kiranmayi Landu	Discussion Meeting on Bay of Bengal Ocean Mixing and Monsoon, ICTS, Bangalore, 2019	
48	Dust and the Indian Monsoon Rainfall	Dr.Vinoj. V.	National Workshop on Severe Weather, March, 2019	
49	Atmospheric Aerosols and their role in modulating Indian Monsoon Rainfall	Dr.Vinoj. V.	International Workshop for Chemistry Climate Interaction, IITM, Pune, March 2019	
50	Frontiers in Atmospheric Science	Dr.Vinoj. V	Helmholtz-Indian Platform on Science, Technology, Education and Research (HIPSTER) workshop, Feb, 2019	
51	Potential Scientific Areas for Collaborative Research: NARL and IIT Bhubaneswar	Dr.Vinoj. V.	Brainstorming Meeting at NARL	
52	Air Quality over the Indian Region: Why it matters?	Dr.Vinoj. V.	India International Science Festival (IISF) at Lucknow, October, 2018	
53	Climate Change, Extremes and Attribution	Dr.Vinoj. V.	Administrative Staff College of India, October, 2018	
54	Dust and its regional effects over India	Dr.Vinoj. V.	National Atmospheric Research Laboratory, July, 2018	
55	Smart City - Bhubaneswar	Dr. D. Swain	CSIR-IMMT & IITBBS Joint Meeting on Smart Cities; 28-08-2018	Joint Science Initiative on Smart Cities
56	Artificial Intelligence: Role & Impact on the Maritime Industry	Dr.D. Swain	Annual Seminar of the Association of Master Mariners; 7 & 8 Dec. 2018	Invited Talk at Kolkata
57	Ocean Heat Content - Research Products from NICES	Dr. D. Swain	Workshop on Utilization of "National Information System for Climate & Environmental Studies (NICES)", 6th April 2018	Jointly organized by CSIR-IMMT & NRSC/ISRO
58	Climate Change and Bay of Bengal	Dr. S.Pattnaik	Workshop on Climate Change and Bay of Bengal, 10-11 March 2019	Invited speaker
School of Electrical Science				
59	Person Discovery in Movie Videos for Summarization		STC on Machine Learning in Image and Video Analytics, 2018, IIT-BHU	
60	Bayesian Learning		3-Day Workshop on Machine Learning and Data Analytics, 2018, Jadavpur University	

S.N.	Title of Lecture/ Presentation	Author(s)	Conference Name, Year, Duration	Remarks
61	Smart Distribution Grid	Dr.Balakrishna P.	Invited Talk for NPTI	
62	Smart Grid Integration & Challenges	Dr.Balakrishna P.	Invited Talk by KIIT BBSR	
63	SOLAR PV SYSTEMS	Dr.Balakrishna P.	Invited Talk by SASI Engg. College	
64	Biosignal Processing and Machine Learning	Dr.M Sabarimalai Manikandan	Machine learning techniques for signal/image processing, 2019	
65	Visual Object Tracking	Dr.D. P. Dogra	Faculty Development Program at IIT Roorkee	Delivered 3 hours of lectures
66	Image and Video Processing	Dr.D. P. Dogra	Faculty Development Program at NIT Rourkela	Delivered 2 hours of lecture
67	Advanced Cryptography and Its Applications	Dr. Padmalochan Bera	NIT, Warangal	Invited Talk
68	Resiliency Improvement in Distribution Network		TEQIP-sponsored Faculty Development Programme, 13th March 2019	CET Bhubaneswar
69	Turning the tables: Journey from a Ph.D student to a faculty member	Dr.Debapratim Ghosh	Students' Reading Group, EE Department, IIT Bombay	
70	Experimental determination of electromagnetic characteristics of switched reluctance motor and various practical issues	Dr. N C Sahoo	Nirma University	
71	Voltage Regulation in Smart Distribution Systems-Challenges and Solutions	Dr. P. Chandrasekhar	FDP on ADVANCED TECHNOLOGIES IN POWER ENGINEERING	NIT Warangal
72	Grid Integration of Renewable Systems	Dr. P. Chandrasekhar	FDP on Power Electronics Application to Power Systems	MVGR Vizianagaram
73	Micrgogrid-A Building Block of Smart Grid	Dr. P. Chandrasekhar	FDP on Research Perspectives on Solar PV Systems: Design, Simulation and Applications	Sasi Inst. Tech. and Engg., A.P.
74	Research Prospectives on Renewable Energy Systems	Dr. P. Chandrasekhar	Guest Lecture	Ramachandra College of Engineering, Eluru
School of Infrastructure				
75	Microwave enhanced membrane technology	Dr. Remya Neelancherry	Membrane Technologies for Water and Wastewater Treatment (MTWWT-2018)	
76	Traffic Control Devices	Dr. P P Dey	Civil Engg. Department, 29 Sept. 2018	

S.N.	Title of Lecture/ Presentation	Author(s)	Conference Name, Year, Duration	Remarks
77	Cement Stabilized Bases for Sustainable Development of Road Infrastructure	Dr. U. C. Sahoo	Development of Cement Technology for Sustainable Infrastructure, organized by Department of Civil Engg., IIT (ISM) Dhanbad, during 22nd -24th February, 2019	Invited Lecture
78	Roller Compacted Concrete Pavement	Dr. U. C. Sahoo	Development of Cement Technology for Sustainable Infrastructure, organized by Department of Civil Engg., IIT (ISM) Dhanbad, during 22nd -24th February, 2019	Invited Lecture
79	Development of Sustainable Road Infrastructure	Dr. U. C. Sahoo	seminar on Transportation and Traffic Engg., during 18-19 January 2019, organized by EATM, Khurda, Odisha	Keynote Lecture
80	Pavement Design for Low Volume Roads	Dr. U. C. Sahoo	short term course on New Technology Applications in Road Pavements, during 12-16 January 2019, organized by Department of Civil Engg., NIT Rourkela	Invited Lecture
81	Stabilized Bases for Road Pavements	Dr. U. C. Sahoo	short term course on New Technology Applications in Road Pavements, during 12-16 January 2019, organized by Department of Civil Engg., NIT Rourkela	Invited Lecture
82	Factors Affecting Pavement Design	Dr. U. C. Sahoo	short term course on Design and Evaluation of Flexible Pavements, during 03-07 December 2018, organized by Department of Civil Engg., VNIT, Nagpur	Invited Lecture
83	Introduction to Pavement Materials	Dr. U. C. Sahoo	short term course on Design and Evaluation of Flexible Pavements, during 03-07 December 2018, organized by Department of Civil Engg., VNIT, Nagpur	Invited Lecture
84	Utilization of Iron and Steel Slag in Rural Road Construction	Dr. U. C. Sahoo	Regional Review Meeting under PMGSY, 17th August 2018, Patna, India	Invited Lecture
85	Cement Stabilized Bases for Rural Roads	Dr. U. C. Sahoo	Regional Review Meeting under PMGSY, 17th August 2018, Patna, India	Invited Lecture
86	Liquefaction of Soil and Ground Improvement Techniques	Dr.S Patra	Earthquake Resistant Low Cost Housing, 21-26 May, 2018	Delivered
87	Application of Geosynthetics in Rural Roads	Dr. S. Patra	Alternative Materials and New Technologies for Construction of Rural Roads, 21-22 December, 2018	Delivered

S.N.	Title of Lecture/ Presentation	Author(s)	Conference Name, Year, Duration	Remarks
88	A critical review on design aspects of screw pile for renewable energy devices	Dr. Kumar, Dr. P.V.P., Dr. Patra, Dr.S. Haldar, Dr. S. Brown, Dr. M.J. Knappett, Dr. J.A. and Dr. Craig, D.	1st International Symposium on Screw Piles for Energy Applications (ISSPEA 2019), May 27-28, 2019	Invited
89	Soil-Structure Interaction in Liquefiable Soils	Dr. Suresh R Dash	All India Seminar on 'Earthquake Resistant Design of Structures'	26th-27th May, 2018
90	Utilization of ERFS monthly and seasonal forecast products in crop models for developing crop yield prediction system	Dr. R. K. Panda	ERFS Training-workshop at IIT Bhubaneswar	8-12 October 2018
School of Humanities, Social Sciences and Management				
91	Cultural Psycho linguistics	Dr. Anamitra Basu	ICSC 2018, September 2018	
92	Tribal Aesthetics in Cross cultural Psycho linguistics	Dr. Anamitra Basu	ICSC 2018, September 2018	
93	Transcultural Memory	Dr. Punyashree Panda	MSA 2019	
94	'The Politics of Travel: A Study of the Travel Memoirs of Mirza Sheikh I'tesamuddin and Sake Dean Mahomed'	Dr. Amrita Satapathy	Politics and Letters: The Function of Criticism at the Present Time	Presented Paper
95	'Unravelling the 'Wonder' in I'tesamuddin's The Wonders of Vilayet'	Dr. Amrita Satapathy	5th International Conference on Arts and Humanities 2018, 27-28 September	Presented Paper and won Best Paper Award
96	Introduction to Advaita	Dr.G. Mishra	Vedic Classes for All sponsored by Maharshi Sandipani Veda Vidya Pratisthan	Organised on January 5, 2019
School of Minerals, Metallurgical and Materials Engineering				
97	Designing of novel room temperature transition metal oxides multiferroics	Dr. Amritendu Roy	SPCAM 2019, VSSUT Burla, April 07, 2019	

S.N.	Title of Lecture/ Presentation	Author(s)	Conference Name, Year, Duration	Remarks
98	Characterization of cryo rolled Al5052 alloy sheets by X-ray and HRTEM	Dr. B. K. Dhindaw	Annual conference of EMSI-2018 18-20 July 2018	
99	SUSTAINABLE TECHNOLOGY FOR ALUMINIUM ALLOY SHEET PRODUCTION	Dr.G. Sree Lakshmi Aditya Dr. Nitin Dr. Gupta, Dr. A. Mandal and Dr. B. K. Dhindaw	INCAL 2019	Invited presentation
100	Joining of dissimilar metals with special reference to application of solid state welding process	Dr. B. K. Dhindaw	International Conference on Advances in Materials and Manufacturing Engineering-2019 (ICAMME-2019, 15-17 March 2019,	Key Note paper
101	Naval Research Board	Dr. B. K. Dhindaw	Anna University	Invited presentation
102	Grain size and grain size distribution effects on the corrosion behavior of materials	Dr. Srikant Gollapudi	Structural Integrity Conference and Exhibition, July 25-27, 2018	Organized in Hyderabad
103	Compression strength and its variability in silicon and its alloys	Dr. Srikant Gollapudi	AEMSD, January 18 and 19, 2019	Jamshedpur
104	Coatings for Metallic Bipolar Plates	Dr. Soobhankar Pati	National Conference of Industrial Coatings, 2019, 2 days	
105	Hydrogen as a Energy Vector	Dr. Soobhankar Pati	TEQIP, VSSUT Burla,2019, 1 day	
106	Thermal stability of Aluminium-Cerium based alloys	R. Gope, R. Sahoo, Dr. A. Mandal	7th International Conference on Aluminium, INCAL, 2019 (Jan 31-Feb 3)	
107	Microstructural changes in hypoeutectic Al-Si alloys by low shear and vibration induced melt conditioning setup	Shristy Jha, Sree Lakshmi Aditya Dr.G., Animesh Mandal, Dr. B.K. Dhindaw	Seventh International Conference on Solidification Science and Processing (ICSSP-7), 2018 (Nov 19-22)	
108	Miniature specimen technique to evaluate bulk mechanical property	Dr. P.S. De , A. Dutta,	INCAL-2019	
109	Recent Advancement of Welding Science and Technology	Dr. P.S. De	Guest Lecture at	
School of Mechanical Sciences				
110	Introduction and Advancements in Robotics	Dr. V Pandu Ranga	Invited talk at Gandhi Engineering College, Gunpur	18th Aug 2018

S.N.	Title of Lecture/ Presentation	Author(s)	Conference Name, Year, Duration	Remarks
111	Scientific Computing of Aeroacoustic Problems	Dr.Y G Bhumkar	Taiwan-India Joint Conference : Recent progress on Flow Simulation and Stability Analysis	Invited lecture
112	Flight of Wright Brothers	Dr.Y G Bhumkar	Regional Science Center Bhubaneswar	Event has been conducted in Dec. 2018 to promote science in School children
113	Modeling and Simulation in Machining	Dr. Gaurav Bartarya	Recent Advances in Machining Processes" (RAMP) during 7th-12th May, 2018 at VSSUT, Burla, Odisha.	
114	Mechanical/Design aspects of innovation	Dr. Gaurav Bartarya	Mentoring workshop on INSPIRE Award- MANAK (Million Minds Augmenting National Aspiration and Knowledge) scheme, jointly organized by National Innovation Foundation and DST at KIIT University Bhubaneswar, Oct 31, 2018	
115	Laser Beam Machining	Dr.S Mullick	AICTE sponsored STC programme on "Recent Advances in Machining Processes" (RAMP) during 7th-12th May, 2018 at VSSUT, Burla, Odisha	
116	Advances in Laser Cutting, Underwater laser cutting & Welding	Dr.S Mullick	AICTE-QIP Short Term Course on "Advanced Laser Material Processing & Additive Manufacturing	
117	Enthalpy based microstructure prediction model: Capabilities, challenges and applications	Dr. Anirban Bhattacharya	Seventh International Conference on Solidification Science and Processing (ICSSP-2018) November 19-22, 2018	
118	CFD in Materials Processing	Dr. P. Rath	EMERGING TECHNIQUES IN MECHANICAL ENGINEERING AND ITS' APPLICATION	BIT Mesra, Ranchi: March 08, 2019
119	Thermal Radiation: Introduction and Applications	Dr.S. R. Kannan	National Conference AME'19, 2019, 3 days	Delivered Keynote Lecture
120	Inverse Problems and Applications	Dr.S. R. Kannan	Workshop on Inverse Problems and Applications, 2019, 5 days	Delivered QIP Lecture
121	Introduction to Bio Heat Transfer	Prof. S K Mahapatra	VSSUT Burla	

Seminar/ Conference /Workshop Attended By Faculty

	Name	Title	Dates		Place	Remarks
SN			From	To		
School of Basic Science						
1	Dr. Kousik Samanta	Theoretical chemistry symposium	2019-02-13	2019-02-16	BITS Pilani	
2	Dr. Sasmita Barik	Indian Women and Mathematics: Regional workshop 2018	2018-10-27	2018-10-28	NISER, Bhubaneswar	Invited Talk
3	Dr. Sasmita Barik	International Conference on Discrete Mathematics (ICDM-2018)	2018-12-14	2018-12-17	Tiruchirap-palli, India	Invited Talk
4	Dr. Sasmita Barik	International Congress of Mathematicians (ICM-2018)	2018-08-01	2018-08-09	Rio de Janei-ro, Brazil	Presented paper
5	Dr.Akhilesh Kumar Singh	UGC Sponsored Annual College Seminar at BJB College	2018-03-28	2018-03-28	BJB Col-lege Bhu-baneswar	Delivered an Invited Talk entitled "Molecules to Materials"
6	Dr.Akhilesh Kumar Singh	National Bio-Organic Chemistry Conference	2018-12-22	2018-12-24	NISER Bhu-baneswar	Delivered an Invited Talk entitled "Molecular Contrast Agents for MRI"
7	Dr Seema Bahinipati	10th International Workshop on the CKM Unitarity Triangle (CKM 2018)	2018-09-17	2018-09-21	Heidelberg, Germany	Remote presentation
8	Dr. Akshay Kumar Ojha	46th Orissa Mathematical Society	2019-01-12	2019-01-13	Silicon Institute of Technol-ogy, Bhu-baneswar	Participated as a member of the Executive Body of OMA
9	Dr.Niharika Mohapatra	International Conference on Magnetic Materials and Applications	2018-12-09	2018-12-13	National Institute of Science Education and Research	
10	Dr.Niharika Mohapatra	Physics of Strongly Correlated Electron System	2019-03-06	2019-03-08	Indian Institute of Technology Delhi	

	Name	Title	Dates		Place	Remarks
11	Dr. Anasuya Roychowd-hury	International Symposium on "Tumor Microenvironment and Cancer Prevention & Therapeutics"	2019-02-08	2019-02-09	JNU, New Delhi	Invited Talk
12	Dr. Anasuya Roychowd-hury	National Conference on Bioengineering-2018	2018-12-14	2018-12-15	Department of Biotechnology and Medical Engineering, National Institute of Technology, Rourkela	Invited Talk and Session Chair
13	Dr. Anasuya Roychowd-hury	The 14th Indo-Australian Biotechnology Conference: Emerging modalities to improve cancer outcomes	2018-10-22	2018-10-23	Advanced Centre for Treatment Research and Education in Cancer - Tata Memorial Centre, Navi Mumbai, India	Poster presentation by my Ph.D. student
14	Dr. Anasuya Roychowd-hury	The 4th International Conference on Translational Research: Recent Developments and Innovations in Human Health and Agricultural Research	2018-10-11	2018-10-13	Goa, India	Invited talk by me and poster presen-tation by my Ph.D. student
15	Prof. Saroj Kumar Nayak	NSRAP-2019	2019-03-23	2019-03-24	Berhampur University, Berhampur,	
16	Prof. Saroj Kumar Nayak	12th India-Singapore Joint Physics Symposium	2019-03-02	2019-03-04	PURI	
17	Prof. Saroj Kumar Nayak	INCAL-2019	2019-01-31	2019-02-02	Bhu-baneswar	
18	Prof. Saroj Kumar Nayak	3rd inter Company CSR Conference	2019-01-17	2019-01-18	Rayagada , Odisha	

	Name	Title	Dates		Place	Remarks
19	Prof. Saroj Kumar Nayak	Conference on Nonlinear Systems and Dynamics	2018-10-11	2018-10-14	JNU, New Delhi	
School of Earth, Ocean And Climate Sciences						
20	Dr. Rambhatla G. Sastry	AEG Conference	2018-11-01	2018-11-03	IIT Bombay	
21	Dr. Hrusikesh Mishra	ICTLT	2019-01-17	2019-01-19	SOA University	As chairman of session
22	Dr. Kiranmayi Landu	Modulation of intense rainfall events over India by convectively coupled equatorial waves and MJO	2019-01-28	2019-02-01	Pune	
23	Dr. Kiranmayi Landu	Relationship between the intensity of intraseasonal oscillations and Indian summer monsoon onset	2019-01-28	2019-02-01	Pune	
24	Dr. Kiranmayi Landu	Effect of convectively coupled equatorial waves on daytime temperature distribution over India	2018-10-24	2018-10-27	Varanasi	
25	Dr. Kiranmayi Landu	An apparent relationship between the Interannual variability of the 10-25 & 30-60 day variation during Indian summer monsoon season	2018-10-24	2018-10-28	Varanasi	
26	Dr. Vinoj V.	Simulation of Changing dust over the Indian region using a regional climate model	2019-01-29	2019-01-31	Pune University	
27	Dr. Debadatta Swain	25 Years Progress in Radar Altimetry Conference	2018-09-23	2018-09-29	Ponta Delgada, Portugal	On invitation and full funding from European Space Agency

	Name	Title	Dates		Place	Remarks
28	Dr. Debadatta Swain	National Oceanography Workshop – 2018	2018-11-14	2018-11-16	INCOIS, Hyderabad	Delivered a Talk titled "Hydrography of the North Indian Ocean using Argos"
29	Dr. Debadatta Swain	2019 URSI Asia Pacific Radio Science Conference	2019-03-09	2019-03-15	New Delhi	Delivered a presentation titled "Validation of Tropical Cyclone Heat Potential (TCHP) derived from satellite products over the North Indian Ocean"
30	Dr. Sandeep Pattnaik	Simulation and Validation of a Heavy Rainfall Event	2018-10-24	2018-10-27	BHU Varanasi	Oral Presentation Tropmet-2018
31	Dr. Sandeep Pattnaik	Sensitivity Analysis of Cloud Microphysical Process on Monsoon Depression	2018-10-24	2018-10-27	BHU Varanasi	Oral Presentation Tropmet-2018
32	Dr. Sandeep Pattnaik	WRF Model based prediction of Extreme Rainfall event: Impact of cloud microphysics parameterization scheme	2018-10-24	2019-10-27	BHU Varanasi	Oral Presentation Tropmet-2018
33	Dr. Sandeep Pattnaik	Observations and research on Northern Arabian Sea	2019-02-25	2019-02-26	INCOIS Hyderabad	Resource Scientist
34	Dr. Sandeep Pattnaik	INCOMPASS Science meeting	2018-07-23	2018-07-26	IISc Bangalore	Project Investigator
35	Dr. Sandeep Pattnaik	DST SPLICE Review meeting	2018-10-11	2018-10-13	CU Hyderabad	Project Investigator
School of Electrical Science						
36	Dr. Srinivas Bhaskar Karanki	PEDES 2018	2018-12-18	2018-12-21	IIT Madras Chennai	Presented two Papers in the Conference
37	Dr.Srinivas Bhaskar Karanki	UK-India Joint Virtual Clean Energy Conference	2018-09-17	2018-09-21	Loughborough UK.	Presented one paper

	Name	Title	Dates		Place	Remarks
38	Dr.Srinivas Boppu	Tightly-Coupled Processor Arrays	2019-02-19	2019-02-19	Rawal Institutions, NCR, Delhi	
39	Dr.Srinivas Boppu	Tightly-Coupled Processor Arrays	2019-02-20	2019-02-20	ILM Academy of Higher Learning	
40	Dr. Padmalochan Bera	IEEE SDS 2018	2018-04-23	2018-04-26	Barcelona, Spain	to present paper
41	Dr. Dipankar De	4th IEEE Southern Power Electronics Conference, SPEC 2018	2018-12-10	2018-12-13	Singapore	
42	Dr.Debapratim Ghosh	IEEE MTT-S International Microwave and RF Conference	2018-11-28	2018-11-30	Kolkata	
School of Infrastructure						
43	Dr. Manaswini Behera	11th International Conference on the Challenges in Environmental Science and Engineering, CESE, 4-8 November, 2018, Bangkok, Thailand	2018-11-04	2018-11-08	Bangkok, Thailand	Oral presentation
44	Dr. Rajesh Roshan Dash	11th International Conference on the Challenges in Environmental Science and Engineering (CESE-2018)	2018-11-04	2018-11-08	Bangkok	
45	Dr.Arindam Sarkar	International Dam Safety Conference	2019-02-13	2019-02-14	Bhubaneswar	
46	Dr. Umesh Chandra Sahoo	4th Int. Conference on Transportation Infrastructure	2018-07-09	2018-07-10	Pretoria, SA	
47	Dr. Shantanu Patra	Indian geotechnical conference	2018-12-13	2018-12-15	Bengaluru	
48	Dr. Meenu Ramadas	International Dam Safety Conference - 2019	2019-02-13	2019-02-14	Bhubaneswar	
49	Dr. Suresh Ranjan Dash	2-day National Workshop on National Building Code of India 2016	2018-10-30	2018-10-31	Bhubaneswar	

	Name	Title	Dates		Place	Remarks
School of Humanities, Social Sciences and Management						
50	Dr. Punyashree Panda	Environmental Concerns in Contemporary Indigenous Writings: A Study of The Marrow Thieves by Cherie Dimaline, The Swan Book by Alexie Wright and The Mysterious Ailment of Rupi Baskey by Hansda Sowmendra Shekhar in two-day national conference "language, literature and diversity"	2019-02-15	2019-02-16	Bhubaneswar	
51	Dr. Amrita Satapathy	Politics and Letters: The Function of Criticism at the Present Time	2018-01-23	2018-01-24	Utkal University, Vani Vihar, BBSR	Presented Paper on 'The Politics of Travel: A Study of the Travel Memoirs of Mirza Sheikh I'tesamuddin and Sake Dean Mahomed'
52	Dr. Amrita Satapathy	5th International Conference on Arts and Humanities 2018 (ICOAH 2018)	2018-09-27	2018-09-28	Colombo, Sri Lanka	Presented Paper on 'Unravelling the 'Wonder' in I'tesamuddin's The Wonders of Vilayet' and won Best Paper Award
53	Dr. Godabarisha Mishra	International Conference on Historical, Sociological, Philosophical and Spiritual Significance of Shaktatantra with Special Reference to Srividya Tradition	2018-12-17	2018-12-19	Sanchi, Madhyapradesh	Two Realms of the Beautiful – Immanent and Transcendent (Saundaryalaharī – An Aesthetic Revelation of the Absolute in Śrīvidyā)

	Name	Title	Dates		Place	Remarks
54	Dr. Godabarisha Mishra	International Workshop on Social Theory and Asian Dialogues: India, China and the World and the Calling of Regional Imaginations and Planetary Conversations	2019-03-27	2019-03-28	Dept. of Public Administration, Utkal University, Vani Vihar	Walking With Vedanta and Phenomenology, Between Tradition and Modernity: J.N. Mohanty and Philosophy as Planetary Conversations
School of Minerals, Metallurgical And Materials Engineering						
55	Dr. Kaushik Das	56th National Metallurgists' Day (NMD) and the 72nd Annual Technical Meeting (ATM) 2018	2018-11-15	2018-11-16	Kolkata	
56	Dr. Amritendu Roy	EMSI-2018 Preconference workshop (WS08) on Electron Backscattered Diffraction Technique	2018-07-16	2018-07-17	IIT Bhubaneswar	
57	Dr. Brij Kumar Dhindaw	The annual conference EMSI-2018 at Bhubaneswar	2018-07-18	2018-07-20	Bhubaneswar	Presented paper
58	Dr. Brij Kumar Dhindaw	INCAL 2019	2019-01-31	2019-02-03	Bhubaneswar	Presented paper
59	Dr. Brij Kumar Dhindaw	International Conference on Advances in Materials and Manufacturing Engineering-2019 (ICAMME-2019)	2019-03-15	2019-03-17	Bhubaneswar	Presented paper
60	Dr. Animesh Mandal	G. Sree Lakshmi Aditya , Nitin Gupta, A. Mandal, Dr. B. K. Dhindaw, Sustainable technology for Aluminium alloy sheet production, INCAL	2019-01-31	2019-02-03	Bhubaneswar	

	Name	Title	Dates		Place	Remarks
61	Dr. Animesh Mandal	R. Gope, R. Sahoo, A. Mandal, Thermal stability of Aluminium-Cerium based alloys, INCAL	2019-01-31	2019-02-03	Bhu-baneswar	Invited talk
62	Dr. Animesh Mandal	R. Sahoo, R. Gope, A. Mandal, Studies on microstructure of cast Aluminium-Neodymium alloys, INCAL	2019-01-31	2019-02-03	Bhu-baneswar	
63	Dr. Animesh Mandal	Microstructural changes in hypoeutectic Al-Si alloys by low shear and vibration induced melt conditioning setup	2018-11-19	2018-11-22	Thiruvanan-thapuram	Invited talk
School of Mechanical Sciences						
64	Dr. B. Pattabhi Ramaiah	International Workshop on Mechanics of Energy Materials	2018-11-19	2018-11-22	IIT Madras	
65	Dr. Yogesh G. Bhumkar	International Institute of Acoustics and Vibration (IIAV) 2018.	2018-07-06	2018-07-15	Hiroshima, Japan	
66	Dr. Yogesh G. Bhumkar	Taiwan-India Joint Conference : Recent progress on Flow Simulation and Stability Analysis	2019-03-13	2019-03-18	Taipei, Tai-wan	
67	Dr. Anirban Bhattacharya	Fifth International Conference on Computational Methods for Thermal Problems (THERMACOMP 2018)	2018-07-09	2018-07-11	IISc, Banga-lore	
68	Dr. Anirban Bhattacharya	Seventh International Conference on Solidification Science and Processing (ICSSP-2018)	2018-11-19	2018-11-22	Trivandrum, Kerala, India	
69	Dr. Mihir Kumar Das	Comparison of Bundle Effect During Flow Boiling of Distilled Water over Plain and Plasma Coated Tube Bundles	2018-08-09	2018-08-13	Beijing, China	

GIAN Programmes Organised

S.N.	Course Name and Duration	Course Coordinator	Foreign Faculty
1	Challenges for welding and fabrication of CSEF steel structures for low polluting ultra-supercritical power plant applications. From 9th July 2018 to 13th July 2018	Dr. Manas Mohan Mahapatra	Leijun Li, University of Alberta Canada
2	Extreme Weather Events over India: Observations, Assimilation and Modeling with special focus on Tropical Cyclones. From 18th June, 2018 to 25th June, 2018	Prof. U C Mohanty	S.G. Gopalakrishnan, Hurricane Research Division United States of America
3	Polynomials with Polynomiography and Applications. From 2nd July, 2018 to 11th July, 2018	Dr. Tarakanta Nayak	
4	Land surface processes in the tropics in context of high impact weather systems and climate resiliency From 03rd July, 2018 to 10th July, 2018	Prof U C Mohanty	Dev Niyogi, Purdue University, United States of America
5	Cost Effective and Sustainable Solutions For Management Of Hazardous Waste. From14th Dec, 2018 to 18th Dec, 2018	Dr. Rajesh Roshan Dash and Dr. Manaswini Behera	Chittaranjan Ray, University of Nebraska United States of America

Institution Seminar

S.N.	Title of the talk	Speaker	Date
1	Future of the world: Innovation and Entrepreneurship	Anindya Maitra, Associate Vice President, Mindtree	07.08.2018
2	Liquid feedstock thermal spraying: A pathway to new generation functional coatings	Prof. Shrikant Joshi (Former Additional Director, International Advance Research Centre for Powder Metallurgy & New Materials, India)	13.11.2018
3	Shaping of Ambitious "TRAIN-18" (India's First Semi High Speed Train)	Shri. Sudhanshu Mani, Former GM, Integral Coach Factory; Team Leader 'Train-18'	06.03.2019
School of Basic Sciences			
4	Quantum Science Comes of Age	Prof. Prasanta K. Panigrahi, Physics, IISER Kolkata	24 .04.2019
5	Solid State Phenomenon at short length and time scales – probed by high spin nuclear isomers.	Prof. S. N. Mishra, Professor, TIFR, Mumbai	11.04.2019
6	Collective organization: emergent behaviour in physical systems	Prof. A. Taraphder, Department of Physics, IITKGP	16.11.2018
7	What's Common Between Robotics and Low Energy QCD?	Prof. Sachindeo Vaidya from Centre for High Energy Physics (CHEP), IISc, Bangalore	07.09.2018
8	Astro Particle Physics	Prof. Utpal Sarkar (IITKGP)	08.05.2018

S.N.	Title of the talk	Speaker	Date
9	Black Holes and the Reversibility of Time	Prof. Suvrat Raju (TIFR-ICTS, Bangalore).	17.04.2018
School of Electrical Science			
10	Demystifying Latest Trends in Video Analytics & Video Quality Engineering - A Practitioner's Perspective	Debasish Das, Enterprise Architect, Video Engineering Research Lab, Tata Consultancy Services.	12.04.2019
11	How to file online patent in India for engineering Innovations electronically?	Dr. Pritam G. Shah, Chief Editor of Australian Journal of Wireless Technologies, Mobility and Security	28.03.19
12	Designing Scalable HPC, Deep Learning, Big Data and Cloud Middleware for Exascale Systems	Prof. D. K. Panda, Ohio State University	07.03.19
13	Synchronous neural networks for cyber-physical systems	Prof. Partha Roop, Auckland University	11.02.19
14	Multi-robot task allocation in warehouse	Chayan Sarkar, TCS Research and Innovation	08.02.19
15	Anomaly Detection and Identification of Natural Data Using Benford's Law	Prof. Anthony T. S. Ho, University of Surrey	06.02.19
16	Accelerator based irradiation studies of materials -Role of Defects and diffusion	Prof. G. Amarendra, Indira Gandhi Centre for Atomic Research, HBNI	05.02.19
17	Security in SDN.NFV and 5G Networks-Opportunities and Challenges	Dr. Ashutosh Dutta, John Hopkins University Applied Physics Lab	10.01.19
18	Future Grid 2.0- Solid state transformer and matrix converter	Prof. Sanjib K. Panda, National University of Singapore	02.01.19
19	Biosensing Microsystems : Integration, Personalisation and Autonomy	Dr. Khalid Mirza, Centre for Bio-Inspired Technology, UK	09.11.18
20	Document Image Processing for Real Estates and Building Information Modeling	Dr. Chiranjoy Chattopadhyay, IIT Jodhpur	12.09.18
21	National Nanofabrication Centre: Facilities and collaboration opportunities	Dr. Y. P. Prabhakar Rao Dr. Vijayraghavan, IISc Bangalore	10.09.18
22	Machine Learning: Low-Energy Architectures and Applications	Prof. Keshab K. Parhi, University of Minnesota	06.09.18
23	Accelerated Computing Using FPGAs	Prof. Viktor Prasanna, University of Southern California	06.08.18
24	Smart Cities- Myths and Realities	Prof. Saraju Mohanty, University of North Texas	25.07.18
25	Environmentally Supportive Trans formative Technologies Based on Modern Power Electronic Semiconductors	Prof. Tangali Sudarshan, University of South Carolina	24.07.18

S.N.	Title of the talk	Speaker	Date
26	Optical Chaos: Analysis and Applications in Communications	Prof. Anjan K. Ghosh, Tripura University	11.07.18
27	Uncertainty in Filter bank Design	Prof. V. M. Gadre, IIT Bombay	06.07.18
School of Humanities, Social Sciences & Management			
28	Roadmap to Reforming Education	Prof. Ramarao Pappu , Miami University, Oxford, Ohio, USA	08.02.2019
29	Child Sexual Abuse' (CSA)	Mr. Ashwini N.V (Muktha Foundation),Bangalore	01.03.2019
School of Infrastructure			
30	Training Program on 3-day Summer School seminar "Low Clinker High performance Cement Composites"	Prof. Victor C Li of University of Michigan, Prof. Dhanada Kanta Mishra of KMBB College of Engineering Technology under Biju Patnaik University of Technology. Indian Concrete Institute (ICI), Prof. Ravindra Gettu of IIT Madras, Prof. D.N. Singh of IIT Bombay, Prof. K Subramanian of IIT Hyderabad, Dr. Dinakar Pasla & Dr. B. Hanumnatha Rao of IIT Bhubaneswar, Dr. Dhanada Kanta Mishra, Prof. Durgesh C Rai of IIT Kanpur, Dr. Piyush Chaunsali & Dr. R. Pillai of IIT Madras, Dr. Nilanjan MItra of IIT Kharagpur, Prof. Christopher Y K Leung, Dr. Jing Yu and Ms. Pavithra Parthasarathy of Hong Kong University of Science and Technology and Dr. Behzad Nematollahi of Swinburne University. Internationally acclaimed for his research in green cement Prof. Ravindra Gettu of IIT Madras and Prof. K Subramaniam of IIT Hyderabad	13.07.2018-15.07.2018
31	Modelling hydro climatic extremes in a Changing Environment	Prof. Ashok K Mishra, Department of Civil Engineering Clemson University, USA	23.07.2018
32	Training Program "Capacity Building of Engineers on Road Safety"	Mr. Atul Kumar, Deputy Director of Asian Institute of Transport Development (AITD), Prof. K Ramachandra Rao, Professor of IIT Delhi. Dr. Umesh Chandra Sahoo, Dr. D. Basu and Dr. P. P. Dey of IIT Bhubaneswar, Dr. Mansoor Ahmed Khan. Prof. P.K. Sarkar, Director (Transportation) of AITD, Mr. Maharanjan Mishra, Executive Engineer PWD	26.12.02018-30.12.2018
33	Workshop "Alternative Materials and New Technologies for Construction of Rural Roads	Dr. M. A. Reddy, IIT Kharagpur, Mr. U. K. Guruvittal, Chief Scientist Geotech. Engg. Div. CRRI, Dr. Mahavir Panda, NIT Rourkela	27.07.2018-28.07.2018 and 21.12.2018 - 22.12.2018
34	Development of cutting edge biological nitrogen removal: Anaerobic ammonium oxidation in Taiwan	Prof. Jih-Gaw Lin, National Chiao Tung University Taiwan	7.12.2018

S.N.	Title of the talk	Speaker	Date
35	An Insight into Research Opportunities and Life in China: From Perspective of International Research Scientists". An abstract and biography of the speakers are attached for circulation	Dr. Xiong Bin Peng, Assistant Professor and Dr. Akhil Garg, Associate Professor of Department of Mechatronics Engineering, Shantou University, China, Dr. Ankit Garg, Associate Professor, Department of Civil and Environmental Engineering, Shantou University, China.	21.01.2019
36	Polyurethane Grout Injection as a Remedial Measure to Reduce Differential Heave in Pavement Sections Constructed over Expansive Soils	Dr. Deb Mishra, Assistant Professor, Boise State University	13.02.2019
School of Mechanical Sciences			
37	Microfluidics at Microfocus X-ray Sources: from Microflow Chips to Microfluidic Liquid Jet Systems	Dr. Ramakrishna Vasireddi, University of Hamburg, Germany	1.01.2019
38	Multidisciplinary Aspects of Energy Storage Systems with Emphasis on Monitoring, Safety and Recycling	Dr. Akhil Garg, Department of Mechatronics Engineering, Shantou University, Guangdong, China	22.01.2019
39	Surrogate Thermal Modelling and Parametric Optimization of Battery Thermal Management for EVs	Dr. Xiongbin Peng, Department of Mechatronics Engineering, Shantou University, Guangdong, China	22.01.2019
40	Training program on ANSYS Fluent Meshing and Writing UDF in Ansys Fluent	Dr. Sofen K. Jena, Whirlpool Global Technology and Engineering Centre, PUNE	26.10.2019
41	Production and Mechanical Characterization of Electrospun Ceramic Nanofiber for Future High Power Targets.	Dr. Sujit Bidhar, Fermi National Accelerator Lab, Batavia, IL 60510	05.04.2018






Faculty Awards/ Honours/ Distinction/Fellowships/Industry Internships/ Scholarships/ Memberships

S.N.	Faculty Name	Details of the Awards/ Honours /Fellowship	Remarks
School of Basic Sciences			
42	Dr. Sasmita Barik	ICM Travel Grant-2018 from National Board for Higher Mathematics, 2018	Rs. 3 lakhs was awarded from Department of Atomic Energy to attend International Congress of Mathematicians- 2018 in Rio, Brazil
43	Dr. Kousik Samanta	Teaching Excellence Award 2018, IIT Bhubaneswar	
44	Dr. Tarakanta Nayak	Ramanujan Prize for 2018	This is given by Ramanujan Institute for Advanced Study in Mathematics, University of Chennai for a research paper.
45	Dr. Rajan Jha	Core Committee Member, Indian National Young Academy of Sciences	
46	Dr. Shyamal Chatterjee	"Chief Guest" in the National Science Day program (Feb 28) at Centurion University, Paralakhemundi - 2019	
47	Dr. Bankim Chandra Mandal	Award for Commendable Teaching	
48	Dr. Tarakanata Nayak	Ramanujan Prize 2018 by Ramanujan Institute for Advanced Study in Mathematics, University of Madras	
School of Earth, Ocean and Climate Sciences			
49	Dr. Raj Kumar Singh	Re-elected as Executive Council Member of Paleontological Society of India, Lucknow	
50	Dr. Syed Hilal Farooq	United Nations University Fellowship	25.05.2018 to 05.10.2018
51	Prof. Uma Charan Mohanty	Biju Patnaik Award for Scientific Excellence	August, 2018
52	Prof. Uma Charan Mohanty	Odisha Citizen Award	October 2018
School of Electrical Sciences			
53	Dr. Srinivas Bhaskar Karanki	JUICE Early stage Exchange Award to Visit University of Warwick UK	Awarded GBP 2500 to visit and conduct academic research at University of Warwick, UK
54	Dr. Srinivas Boppu	Research Ambassador, DAAD	
55	Dr. Srinivas Pinisetty	Guest faculty November and December 2018 (University of Gothenburg, and Chalmers University, Gothenburg Sweden)	
56	Dr. Padmalochan Bera	Best Paper and Oral Presentation Award in IEEE SDS conference held in Barcelona, Spain 2018	

S.N.	Faculty Name	Details of the Awards/ Honours /Fellowship	Remarks
57	Dr. Prasant Kumar Sahu	Fellow Institution of Engineers , IE(I)	Year of Award 2018
58	Dr. Debalina Ghosh	Fellow of IETE	
School Of Humanities, Social Sciences & Management			
59	Dr. Rajakumar Guduru	Award for Commendable Teaching	
School of Infrastructure			
60	Dr. Manaswini Behera	Best Young Scientist Award for oral presentation at the 11th International Conference on Challenges in Environmental Science and Engineering, 2018 (CESE 2018), Bangkok from 4th to 8th November, 2018	Paper "Evaluation of performance for the treatment of low strength greywater using sequencing batch reactor".
61	Dr. Puspendu Bhunia	The paper titled "Assessing Possible Applications of Waste Organic Solid Substances as Carbon Sources and Biofilm Substrates for Elimination of Nitrate Toxicity from Wastewater" by Prangya R. Rout, Dr. Puspendu Bhunia, and Dr. Rajesh R. Dash from School of Infrastructure, has been selected by the editor of Journal of Hazardous, Toxic, and Radioactive Waste to receive the 2019 Best Practice-Oriented Paper Award. The authors will be presented with this award during the World Environmental & Water Resources Congress 2019 in Pittsburgh, Pennsylvania, during the Environmental Council Luncheon and Awards.	
62	Dr. Remya Neelancherry.	Received full financial support from Ministry of Education Taiwan to attended International workshop on "Sustainable Environment and Energy Development (SEED) 2019" from 16th to 25th May 2019, held at National Tsing Hua University, Hsinchu, Taiwan	
School Of Minerals, Metallurgical And Materials Engineering			
63	Prof. Brij Kumar Dhindaw	Outstanding reviewer citation for reviewing research papers in the following journals: 1. Material Science and Engineering A 2. Material Science and Engineering B, 3. Journal of Alloy and Compounds and 4. Journal of Material Processing Technology. All high impact factor journals in the domain of metallurgical and materials engineering	They are refreshed on new reviews done

S.N.	Faculty Name	Details of the Awards/ Honours /Fellowship	Remarks
School of Mechanical Sciences			
64	Dr. Anirban Bhattacharya	Early Career Research Award, DST - SERB (2018)	
65	Dr. Ankur Gupta	"IEI Young Engineers Award 2019-20"	The award consists of Plaque and Certificate which is presented during the Inaugural Session of the 34th National Convention of Production Engineers held during May 25-26, 2019 at Tiruchirapalli.
66	Dr. Venugopal Arumuru	Distinguished Teaching Award Overall Best Performance 2018-19, IIT Bhubaneswar	
67	Dr. Mihir Kumar Pandit	Awarded with Teaching Excellence Award for the session Autumn 2018-19.	

Awards and Achievements of Student

1	Mr. Manikanta Varma, one of the 3rd year B. Tech. (Computer Science) students of the Institute has won the First Prize in the National Competition of StockMIND 6 organized by ICICI Securities in the Graduate category with a cash prize of Rs. 50,000.
2	Mr. Virendra Kumar, a research scholar working in the field of Chemistry in School of Basic Sciences, IIT Bhubaneswar, has won the best poster award at J-NOST, held at IICT-Hyderabad
3	Mr. Ajit Kumar Nayak was awarded third prize in National Essay Writing competition organized by Agriculture minister, Govt. of India.
4	Mr. Anupam Sahoo, has been awarded the prestigious "Kulamani Das Memorial Award in Environmental Science' by Orissa Chemical Society.
5	Shri Rahul Mahanot & Shri Rahul Kumar, B.Tech Students from SES (Team Prajjawala) won 1st Prize in the prestigious "Grand India Internet of Things (IoT) Innovation Challenge" hosted by TATA & CII
6	Team Champions_Sam and Team Prajjawala, IIT Bhubaneswar secure First and Third Prizes at Smart Hackathon 2019.
7	Team Prajjawala secures first prize for their invention, "Internet of Things and Data Analytics based Price Fragmentation, Pay-As-You-Use and Supply Chain Automation and Optimization in LPG Distribution System" at Asia's largest technical and Entrepreneurial fest-Techkriti 2019 by IIT Kanpur.
8	Team Prajjawala received 2nd Prize in Techkriti Social Track B-Plan, Techkriti 2018 at IIT Kanpur.
9	Team Prajjawala received 3rd Prize in GES Pitchers Elevators Pitch Competition, Ges 2018, IIT Kharagpur.
10	Team Prajjawala received 1st Prize In SRIJAN, B-Plan Competition Purvodaya 2018, Vgsom-IIT Kharagpur.
11	Team Prajjawala received 1st Prize In E-Summit 2018, IIT Bhubaneswar, Product Design Competition.
12	Team Prajjawala received 1st Prize In Techkriti Pitch Premier, Techkriti 2019, IIT Kanpur.
13	Shibu Meher, Gurudev Singh and Parida Himanshu Prakashchandra won the second prize in Grand Finale of MindRover Season 7 for T-Schools organized by Tata Motors.
14	Pritam Das, research scholar in SBS, received Madhusudan Memorial Award from Institute of Engineers (India)

15	Gopinath Sahoo was awarded with ICM-Open Arms Travel Grant, April 2018.
16	Mr. Palton Laha Received 1st prize in ACS Omega Oral presentation in three days International Conference entitled ' Chemical and Biological Science in Drug Discovery - 2019, (IC-CBSDD)
17	Mr. Dillep Kumar - Received one of the best flash poster award in three days International Conference entitled ' Chemical and Biological Science in Drug Discovery - 2019, (IC-CBSDD)
18	Mr. Prangya R Rout, has been selected for the Young Scientist Award 2018 by Odisha Vigyan Academy for his outstanding research contribution on "DEVELOPMENT OF ADVANCED TREATMENT SYSTEMS FOR NUTRIENT REMOVAL FROM DOMESTIC WASTEWATER" under the supervision of Dr. R.R. Dash and Dr. P. Bhunia
19	Mr. Prangya Ranjan Rout, Dr. Puspendu Bhunia and Dr. Rajesh Roshan Dash have been selected to receive the 2019 Best Practice Oriented Paper by American Society of Civil Engineers (ASCE) for their published paper entitled "Assessing possible applications of waste organic solid substances as carbon sources and biofilm substrates for elimination of nitrate toxicity from wastewater" in the Journal of Hazardous, Toxic and Radioactive Wastes

Distinguished Visitors

Sl. No	Name of the Visitor	Designation & Organization
1	Dr. Sarat Chandra Sahu	Director, IMD Metrological Centre Bhubaneswar
2	Prof. Gitanjali Batmanabane	Director, AIIMS Bhubaneswar,
3	Sundararaman G Gopalakrishnan	Hurricane Research Division, United States of America
4	Dev Niyogi	Purdue University, United States of America
5	Leijun Li	University of Alberta Canada
6	Dr. Jashobanta Mohapatra	Head Department of Clinical Pschyology, SCB Medical College & Hospital Cuttack
7	Prof. Ashutosh Sharma	Secretary, Dept. of Science and Technology
8	Shri. Pankaj Ramanbhai Patel	Ex-Chairman, Board of Governor, IIT Bhubaneswar
9	Mr. Sourav Roy	Chief, Corporate Social Responsibility, Tata Steel
10	Prof. Jih-Gaw Lin	National Chiao- Tung university
11	Prof. Shrikant Joshi	Former Additional Director, International Advance Research Centre for Powder Metallurgy & New Materials, India
12	Adv. Namrata Chadha	A social activist and a member of Internal Complaint Committee, IIT Bhubaneswar
13	Adv. Snehanjali Mohanty	Member of State Women's Commission
14	Shri Sashikanta Mishra,	OSJS, Principal Secretary, Department of Law, Govt. of Odisha
15	Prof. K. V. Ramana Chary	Director, IISER, Berhampur
16	Shri Narendra Damordas Modi	Honorable Prime Minister of India
17	Shri Bishunprasad Sethi	Secretary of Higher Education Department, Govt. of Odisha
18	Shri P K Mohapatra,	DGM, NABARD, Odisha
19	Prof. Vinay Kumar Nangia	Emeritus Professor at IIT Roorkee
20	Mr. Nirmal K. Bharadwaj	Founder member of PanIIT India
21	Mr. Anil Chhikara,	Chairman of Start-up India foundation

Sl. No	Name of the Visitor	Designation & Organization
22	Ms. Mosako Ono	Founder of Mudra foundation
23	Dr. Aniruddha Malpani	Director of Malpani ventures
24	Prof. Vinay Kumar Nangia	IIT Roorkee
25	Shri Manoj Sharma	Social Entrepreneur
26	Shri Gagan Baradia	Career counsellor and motivational speaker
27	Parijatham Rao	Digital Marketing Specialist
28	Vijay Raghavan	Digital Marketing Specialist
29	Shri Akhilesh Desai,	Facilitator, Focus U Engage India Pvt Ltd
30	Simon Sinek	British-American author, motivational speaker and organizational consultant
31	Mr. Sushant Verma	Design Technologist + Design Entrepreneur, Architect + Computational Designer & Educator + Leading RAT[LAB] Studio (Research in Architecture and Technology
32	Mr. Rohit Suraj	Architect and Founder, Urban Zen's
33	Ms. Aditi Sharma	Actress+ Model
34	Mr. Anuj Tiwari	Author + Speaker
35	Dr. Jagdish Chaturvedi	Ear Nose Throat Surgeon + Serial Medical Devices Innovator + Author + Stand-up comedian
36	Ms. Sanjana Sangha	Actress + Model
37	Dr. K Radhakrishnan	Former Chairman ISRO
38	Ms. Suhasini Paul	Eminent Toy designer,
39	Mr Siddhartha Das	Founder of Siddhartha Das studio
40	Dr. Luis Dias	Founder of Child's Play India Foundation
41	Kenny Sebastian	King of Stand-up comedy
42	Mr. Haraprasad Das	Poet, Essayist and Columnist.
43	Mrs. Gayatri Mavuru	Writer, poet, artist, social activist, choreographer, educator and social entrepreneur, Founder and managing trustee of Sri Gayatri Vidya Vikash Education Trust, founder and Director Cherry Blossoms Pre School.
44	Prof. Ganeshi Lal	Honorable Governor of Odisha
45	Dr. S. Christopher	Former Chairman, Defence Research and Development Organisation (DRDO),Ministry of Defence, Govt. of India
46	Prof. Jatindra Kumar Nayak	Eminent Writer and Retired Professor in English, Utkal University,
47	Dr. P. V. Venkitakrishnan,	Outstanding Scientist and Director, Capacity Building Programme Office, (CBPO), ISRO
48	Ms. Amrita Dash	Assistant Director, National Police Academy, Hyderabad

Sl. No	Name of the Visitor	Designation & Organization
49	Prof. Swagata Dasgupta	IIT Kharagpur
50	Prof. Pratim Kumar Chattaraj	IIT Kharagpur
51	Prof. Suneel Kumar Srivastava	IIT Kharagpur
52	Prof. Hiroshi Yanagihara	Department of Applied Science Faculty of Engineering, Yamaguchi University, Japan
53	Prof. Utpal Sarkar	IITKGP, Former Director & Outstanding Scientist, Physical Research Laboratory, Ahmedabad
54	Prof. Prasanta K. Panigrahi,	Dean of International Relations and Outreach, IISER Kolkata
55	Prof. Soumitra Sengupta	Dean Academic/Student Affairs, IACS, Kolkata
56	Prof. Wolfang Kuhnt	Kiel Univercity, Germany
57	Dr. Anna Holbourn	Kiel Univercity, Germany
58	Prof. Abhijit Gangopadhya	Massachusetts Institute Of Technology, USA
59	Prof. Dev Niyogi	Purdue University, USA
60	Prof. Viktor Prasanna	University of Southern California
61	Prof. Keshab K. Parhi	University of Minnesota
62	Prof. Tangali Sudarshan	University of South Carolina
63	Prof. D. K. Panda	Ohio State University
64	Prof. Anjan K. Ghosh	Tripura University formerly IIT-Kanpur
65	Prof. V. M. Gadre	IIT Bombay
66	Prof. Ramarao Pappu	Miami University, Oxford, Ohio, USA
67	Mr. Ashwini N.V	Muktha Foundation, Bangalore
68	Supriya Choudhary	Muktha Foundation, Bangalore
69	Sruthi Chaithanya	Muktha Foundation, Bangalore
70	Annette Shaju	Muktha Foundation, Bangalore
71	Nupura Byramudi	Muktha Foundation, Bangalore
72	Prof. Pradeep Gokhale	Savitribai Phule Pune University

CENTRAL LIBRARY

The central library is one of the central facilities working with a mission to provide quality information resources in all forms to the academic and research community of IIT Bhubaneswar. With a commitment to excel, the Library plays a vital role starting from acquiring to disseminating all types of information resources by timely and innovative services to support the academic and research need of the user community. The range and quality of services offered by the Central Library are comparable to any modern libraries in India of International standard.

In 2016, Central Library has extended its services at Argul campus i.e. the permanent campus of Institute. Further, it has also extended the Library timing up to 11 pm at permanent campus w.e.f. March 2016. In a nut shell, currently it is having over 18500+ volumes of books, 52+ full text as well as bibliographical database subscriptions, and other resources like popular magazines/print journals, theses, and reports in Engineering, Science & Technology, Management, Humanities and Social Sciences. Apart from the procurement on print books, the Central Library achieved phenomenal progress in the subscription of e-resources which includes more than 8645 e-journals to its digital collection making "24 x 7 Library" in real sense on institute-wide network and off-campus access to e-resources through Ezproxy.

Library Collections

The total collection of library as on March 2019 stands as follows:

- Printed Books: 18345+
- E- Books: 30 Lakhs +
- Journals & Magazines: 24 Nos.
- Daily Newspapers: 12 Nos.
- E-resources: 8750+ e-journals
- (Technology: 3122+; Science: 3079+ & Humanity & Social Sc.: 2299+ e-journals)
- Full text online databases: 42 Nos.
- Bibliographical databases: 04 Nos.
- CD/Multi-media databases: 01 Nos.
- Patent Database: 01 No.
- E-Book Database: 02 No.
- Web tools: 02 Nos.

Library Services & Facilities:

- Reader's Assistance
- Membership and Borrowing Facilities
- Photocopying Facility
- Hindi Collection (Rajbhasa Collection)
- Leadership Corner
- Non-Book Materials
- Reserved Collection in reading area
- Special Collection for Scheduled Castes & Scheduled Tribes
- Display of Scholarship and fellowship information
- Display of Forthcoming conferences, other events, employment opportunities, and prospectus of foreign universities
- Orientation Programmes
- Document deliver services

Online Subscriptions:

There are 49+Electronic Resources including e-journals, online databases, bibliographic databases, data sets, software tools, e-Books etc. are being subscribed and renewed annually in collaboration with eSS (e-ShodhSindhu: A nationwide initiative by Ministry of HRD for Higher Education e-Resources).

Full Text Online Databases

- AAAS (Science)
- ACI Materials journals
- ACM Digital Library
- American Chemical Society
- American institute of Aeronautics and Astronautics
- American Institute of Physics
- American Mathematical Society
- American Meteorological Society
- American Physical Society
- American Society of Civil Engineers (ASCE)
- American Society of Mechanical Engineers (ASME)
- American Welding society
- Annual Reviews Journals
- ASTM International Standards and Engineering DL
- Begell House Engineering Research Collection
- Cambridge Journals
- Cell Press Journals
- ECS Digital library Online
- Economic & Political Weekly New
- Emerald CFTI Collection
- Geo Science World
- ICE+ Thomas Telford
- IEEE Xplore Digital Library
- IOP Science Extra
- ISID
- JSTOR
- McGraw-Hill Access Engineering Library
- NATURE - 14 Titles
- Optical Society of America
- Oxford University Press
- Project Muse
- Proquest Dissertation & Theses
- Royal Society of Chemistry
- Sage (2 Journals)
- Science Direct Option-1 (5 Sub- Phy, Chm, Mat, Eng, & Mt.Sc)
- 36) Earth & Planetary Sc. - Elsevier (Science Direct Additional)
- 37) SIAM Journals
- 38) South Asia Archive
- 39) Springer Journals
- 40) Taylor & Francis Online (Sc. & Tech, Business & Mgmt. & Ecos)
- 41) Transportation Research Board
- 42) Wiley Online - 68 titles

Bibliographical E-DATABASES:

- SCIFINDER Scholar (web enabled version)
- MATHSCINET
- SCOPUS
- Web of Science (SCIE) (back files since 1965)

Patent Database:

- WIPS Global Advanced

E book

- McGraw-Hill Access Engineering Library
- World eBook Library

CD/ Multi-media Databases:

- Cambridge Structural Database System (Researcher License)

Web tools:

- Turnitin : An anti-plagiarism software.
- EZproxy

Computing Infrastructure and Services:

The Library has its own sub-LAN, which is connected to the Campus LAN. It has more than 20 PCs dedicated for the user to access electronic resources (e-journals, e-databses, etc), SUN Fire Server and Blade Server. The Central Library has a comprehensive Home Page as a part of the Institute's web site. The Library Home page serves as an integrated interface for all services available from the Central Library. The interface, available at http://library.iitbbs.ac.in/ and offers the following web-based services:

- Recent Additions to the IIT Library (http://library.iitbbs.ac.in/)
- New Arrival Display & Alert Services (both physical & online)
- Electronic Resources subscribed (http://library.iitbbs.ac.in/online-e-resources.php)
- Web-based Library OPAC (http://10.10.32.47/ -intranet; http://14.139.204.213/ - outside Argul network)
- Web Access to Journals subscribed in Print.
- Off Campus Remote Access to all e-Resources through EZProxy (http://14.139.204.214:2048/login)\
- Institutional Repository (http://idr.iitbbs.ac.in:8080/xmlui/)

Open Source Software (OSS) for Library Automation and Institutional Repository:

Open source Library Management Software (KOHA) has been installed and the day-to-day housekeeping activities are being done through this system. Central Library has also successfully implemented an IR (Institutional Repository) using the open source software DSpace in accordance with the National Digital Library (NDL), IIT Khargpur mandate.

OUT-REACH AND OTHER PROGRAMS:

Book Exhibition

Central Library organized the three day long 1st Techno Book Exhibition during 18- 20th of August, 2018 under the leadership of Director Prof. R. V. Rajakumar. . The exhibition was inaugurated on 18thAugust 2018 (Saturday) in a very informal way due to the demise of former prime minister Late Shri Atal Bihari Vajpayee. In the inaugural event Dr. Rajesh R. Dash, Chairman, Central Library welcomed the vendors, publishers, students, staff and faculty members and inaugurated the exhibition in the presence of Dr. Bibhuti B. Sahoo, Deputy Librarian, Library Advisory committee members Dr. Manaswini Behera, Dr. Sasidhar K. and other faculty members namely Dr. Rajan Jha, Dr. Arindam Sarkar, Dr. Sumanta Haldar, Library staffs and students. Reputed publishers and all 16 numbers of empanelled suppliers were invited to participate and displayed textbooks and reference books in the areas of Science & Technology, Engineering Systems , Manufacturing & Systems Engineering, Natural Resources Management, VLSI Design and Wireless Technology, Management & Control of Power Equipment and Systems, Photonics, Electronic Application in Human Endeavours, Nano-science and Nanotechnology, Rural Technology , Nobel, Laureates, works of Celebrated Indian Scientists & Technologists and remarkable classics books on literature, fiction, philosophy, and books of interest for the children. Central Library received the huge number of indents which were recommended by the faculties and staffs of different schools. Nearly 1000 students, faculty members and staffs witnessed book exhibition with great enthusiasm and interest.

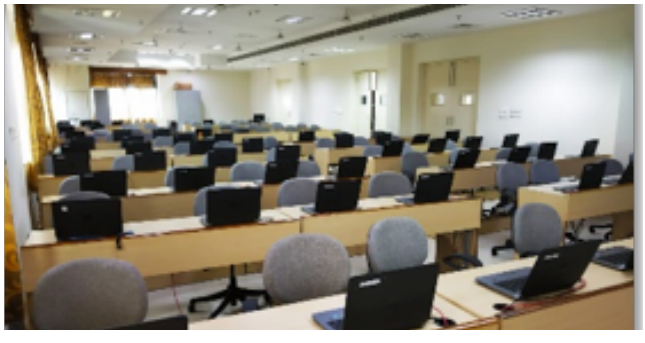
Author Workshop

Central Library organized an Author Workshop on publishing Papers in collaboration with Wiley on 20th November 2018. The workshop was helped the participants gain insight into the types of academic publications available, the processes involved in getting their work published, and the expectations that editors have from authors and their work. Participants was gained an in-depth knowledge of how to pitch & position their papers and identify niche publications best suited to meet their needs. Towards its objective of providing useful information to current & prospective authors, the whole workshop has focused on these following topics.

- Structuring manuscript to impress SCI journal editors.
- Selecting a journal and preparing a great submission package and
- Responding to reviewer comments.

COMPUTER AND INFORMATION TECHNOLOGY SERVICES CELL (CITSC)

The Computer and Information Technology Cell (CITSC) of IIT Bhubaneswar has state of art servers, connected on a high speed Gigabit Optical Fiber /UTP based network in a distributed environment. All the Audio-Visual facilities of class rooms are implemented and maintained by the in-house team of CITSC. All the laboratories, faculty offices and staff offices are provided with desktop/ laptop, printer, and telephone as well as with wired and wireless internet/intranet connectivity. All the faculty members and students have accesses to the Institute developed ERP system. The ERP system is being used for students grading, feedback & administrative applications including inventory management, Academics, accounts, and admissions as well as for placement related applications. The campus network is protected with state of the art antiviruses and next generation UTM. All the members of IIT Bhubaneswar campus including students, faculty, staffs and officers are provided with e-mail ID a user-friendly e-mail system to access mails, both from inside and outside of the campus. The Institute is connected with high speed Gigabit Connectivity under NKN. Besides this the institute is also having 200 Mbps Vodafone ILL. The Institute is having its own telephone exchange which can cater up to 10,000 users. The Institute is also having a number of hot-spot Wi-Fi points which is being used by the IIT Bhubaneswar users for wireless connectivity as well as a E-class room that allow users to access different academic video content. CITSC also provides video conferencing facilities to the Institute users by means of desktop video conferencing as well based on hardware videoconferencing. All the ICT needs of the institute is being planned and executed by the in-house team of IIT Bhubaneswar. CITSC team provides round the year network and hardware supports to all the members of the Institute. Our team encourage use of free and open source software among the campus inmates. Our team also provide supports to a number of advanced and special purpose software's such as Ansys, Matlab, Mathematica, etc.



CAREER DEVELOPMENT CELL

The Career Development Cell (CDC) offers a wide range of portfolio which include empowering students to explore, define, and realize their career goals. The CDC also engages in one-on-one counselling sessions, consultations throughout the career planning process, and assistance with goal-setting and goal achievement through a variety of career exploration activities. The ultimate aim is to provide lifetime tools and skills for professional development, job search success, and career satisfaction, supporting the students in shaping and managing their careers by building key ingredients required for a student to be a complete professional.

Campus placements of 2018-19 has been eventful in terms of many new recruiters visiting IIT BBS. Most of them were only visiting older IITs before. Also the placements 2018-19 has seen majority of the previous recruiters being repeated this year too, indicating faith/trust in the quality of our students and having a lower attrition rate.

Key highlights of placement of 2018-19

- Total 121 students from UG received offers.
- Undergraduate placement is about 90%.
- Highest domestic CTC offered was 39.02 Lakhs per annum.
- M.Tech placements are close to 69%.
- Highest number of job offers have been received from core industries.
- No. of companies participated in the campus drive are 70.
- Average salary is 11.44 Lakh per Annum for UG.
- PSU's like ISRO, IOCL, NCCBM participated in the campus placements.
- MNC companies like Goldman Sachs, GE India, Honeywell, Maruti Suzuki, Mahindra & Mahindra, Infosys, TCS R & D, Adobe have participated in this year of placements.
- 3rd year students have received internship offers in reputed industries. Majority of CS brand engaged in Internships and has the possibility of a full-time offer.

Course/stream wise distribution of placement: 2018-19

Branch (B.Tech)	No. of students Participated	No. of students Placed	Percentage
Civil	26	23	88%
Comp. Science	37	38	100%
Electrical	32	27	84%
Mechanical	30	25	83%
MMME	9	7	77%

Branch	No. of students Participated	No. of students Placed
M.Tech	94	64
M. Sc	52	09
Ph.D	19	09

Sector wise placement analysis:

IT: 16 %

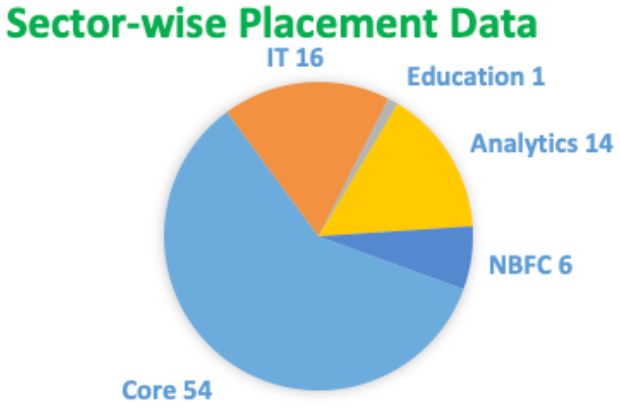
Core: 54 %

Analytics: 14%

Education: 1%

NBFC: 6%

Companies recruited in the Academic year 2018-19



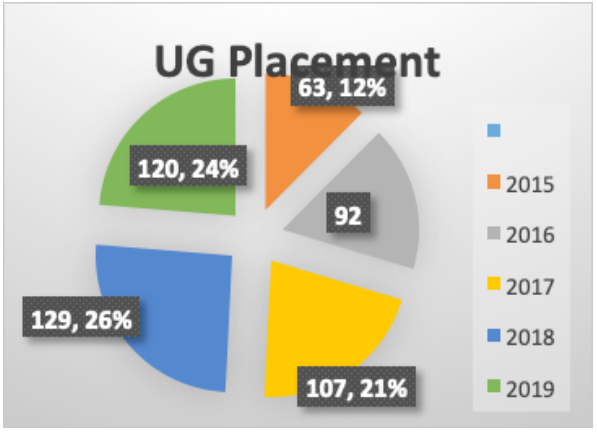
Companies recruited in the Academic year 2018-19

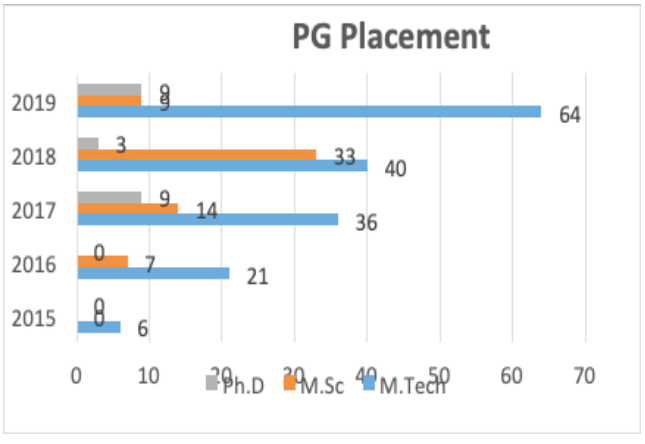
Name of the Company					No of students Placed	Minimum salary Offered	Maximum salary offered	Average salary offered	Median salary offered
Adobe	Amazon	Accenture	Affine Analytics	Angel Broking	120	4.8 (LPA)	39.02 (LPA)	11.4 (LPA)	9 (LPA)
Atkins	Aakash Institute	Axxela Advisory Services	BYJU's	Capgemini					
Caterpillar	CEWIT	C V Raman Engg. College	CVRS Educational Services	DELL					
Deloitte	Delta Power	FIITJEE	Flinto Solutions	Fractal Analytics					
Futures	Flytxt Mobile Solutions	General Electric India	Goldman Sachs	Gupta Power					
HCL	Honeywel	Infosys	Intel Technology	ISRO					
IOCL	Jindal Stainless Ltd	KEC International	KIIT	L & T Construction					
L & T	Maq Software	Mastercard	MathWorks	Microsoft					
NCCB	P2 Power Solutions	PNB Metlife	Raam Group	Rao Edusolutions					
RE Connect Energy	Sapient	Tatat Steel	Tata BSL	Tata Advanced System					
TCS	TESCO	TETCOS	Thermax	UHG					
Vedanta	Wolfram	Zolo Stays	Hatch	Cognizant					
Lowe's	Mahendra & Mahendra	Sasken Technologies Ltd	CTS Research	Adobe					
TCS Digital	Tescra Software Services	Nexright Software Solutions	Manikaran Power Infrastructure	Inspire Automation					

Details for jobs for year 2015-16 , 2016-17, 2017-18 , 2018-19

	2015-16	2016-17	2017-18	2018-19
Percentage of students placed for jobs	93%	85%	87%	90%
Average salary offered per annum (in Rs. lakhs)	7.05	10.52 (LPA)	11.15 (LPA)	11.44(LPA)
Median salary offered per annum (in Rs. lakhs)	6.5	8.33 (LPA)	8.8 (LPA)	9 (LPA)
Maximum salary offered per annum (in Rs. Lakhs)	16	38 (LPA)	39 (LPA)	39.02(LPA)
Minimum salary offered per annum (in Rs. lakhs)	3	4.5 (LPA)	5.1 (LPA)	4.8 (LPA)
Total number of companies participated in the campus drive	35	45	52	70

Year wise Placement





Pre-Placement Talk

Selected Candidates and Officials from the Company

Group Discussions Sessions

START-UP CENTRE AT IIT BHUBANESWAR

hot-spot Wi-Fi points which is being used by the IIT Bhubaneswar users for wireless connectivity as well as a E-class room that allow users to access different academic video content. CITSC also provides video conferencing facilities to the Institute users by means of desktop video conferencing as well based on hardware videoconferencing. All the ICT needs of the institute is being planned and executed by the in-house team of IIT Bhubaneswar. CITSC team provides round the year network and hardware supports to all the members of the Institute. Our team encourage use of free and open source software among the campus inmates. Our team also provide supports to a number of advanced and special purpose software's such as Ansys, Matlab, Mathematica, etc.

Important dates

Date of selection letter received by the Institute	: 22nd March 2016
Date on which the IIT startup Centre was inaugurated	: 20th June 2016
Date of selection of first round of startups	: 28th September 2016
Date of selection of second round of startups	: 6th May 2017
Date of selection of 3rd round of startups	: 29th December 2017
Date of selection of fourth round of startups	: 15th January 2019

Activities

- Invitation for opening startups and the relevant application forms are uploaded on the Institute Website and are also sent to various college/ universities/ industrial enterprises in and around the State of Odisha which includes Andhra Pradesh, West Bengal, Jharkhand, Chhattisgarh etc.
- 56 applications were received in the first round of advertisement out of which 13 Startups were selected.
- 30 applications were received in the second round of advertisement. The second round selection committee meeting was held on 6th May 2017 and 12 startups were selected.
- 16 applications were received in the third round of advertisement. Selection committee meeting was held on 29th December 2017 and 4 startups were selected.
- 17 applications were received in the fourth round of advertisement. Selection Committee meeting was held on 15th January 2019 and 6 startups were selected.
- Villa Mart, one of the promising startup incubated in the IIT Bhubaneswar's startup center has made it to the top 10 list of social enterprises at the sixth edition of Tata Social Enterprise Challenge (TSEC). Currently operational in Nayagarh District, Villa Mart provides a mobile market place besides making available around 260 items of vegetables, grocery and other essential commodities forb the villagers at their door steps.

Facilities for Startups

- Furnished/Semi-furnished/Unfurnished space as per the requirement of the entity
- Internet, electricity, and water facility
- Hostel facility, if available
- Library facility, Laboratory and workshop facilities
- Networking
- Mentoring support by faculty members
- Support for legal and financial advice by empanelled consultants
- Availability of IIT students for internship
- Interactive workshops with Angel Investors and venture capitalists
- Workshop on different issues of Entrepreneurship
- Entrepreneur skill development
- Guidance and support for filing patents
- Fooding and lodging facility available in nearby Atmaram Hotel

IIT Bhubaneswar Research and Entrepreneurship Park

There are numerous colleges and universities offering courses on engineering, science, and agriculture in and around Bhubaneswar. The available rich pool of talent needs to be guided for innovation, research, and the entrepreneurship activities. Professor R. V. Raja Kumar, Director, IIT Bhubaneswar reiterated to promote entrepreneurship and innovation not only in this state but also in the surrounding states.

IIT Bhubaneswar received license and incorporation certificate from Registrar of Companies (RoC) to run IIT Bhubaneswar Research and Entrepreneurship Park, a section-8 (not for profit) company. This company operates from the Samantapuri campus of IIT Bhubaneswar, at the heart of the capital city Bhubaneswar and promotes entrepreneurship, research, and startup activities. The section-8 company has also been successfully registered under section 12AA of the Income Tax Act, 1961 so that it can receive grants under various government schemes promoting entrepreneurship, research, and startup activities. Eventually the park will operate from the permanent campus of the Institute. To shape student's innovation and promote their entrepreneurship interests, IIT Bhubaneswar Research and Entrepreneurship Park will act as a nodal centre.

IIT Bhubaneswar Research and Entrepreneurship Park operates under the chairmanship of Prof. R. V. Rajakumar, Director, IIT Bhubaneswar. He is assisted by Prof. R. K. Panda, Dean R&D IIT Bhubaneswar, and Dr. Yogesh Bhumkar, PIC Startup Centre IIT Bhubaneswar, as two other directors of the company.

The Research and Entrepreneurship Park has already received funds for establishing the Centre of Excellence on Virtual and Augmented Reality (VARCoE) as given below:

I.	Ms Susmita Bagchi	Rs. 2.50 crores
II.	Govt. of Odisha	Rs. 2.50 crores
III.	STPI	Rs.2.50 crores

Institute has around 36000 Sq. Ft. of area dedicated for the incubation activities in the Institute premises at Samantapuri, Bhubaneswar. In addition, School of Mechanical Sciences and School of Electrical Sciences have provided a space of around 400 sq.ft. Each for VAROCE laboratories in the Argul campus. Apart from these facilities, workshop facilities and different laboratories in the various Schools are used for carrying out research work associated with VARCoE. All the workspaces are well equipped with internet connectivity. At present, there are around 10 faculty members from various Schools who are actively involved in carrying out VARCoE projects.

One of the major activity at VARCoE will be to provide support to the incubates and start-ups in the area of virtual and augmented reality. This centre will act as a feeder for the Start-up centre of STPI, Bhubaneswar. The STP registered units across the country working on AR/VR will get preferential access in AR/VR Lab on concessional rate. All admission in to Centre of Excellence for Virtual and Augmented Reality for Immersive Visualization (VARCoE) will be through a defined process of IIT under the guidance/consent of Project Advisory Committee (PAC). However, the STP registered units across the country working on AR/VR will get preferential access as recommended by STPI.

Various activities report under VARCoE are given below:

A brief timeline of events associated with the Center of Excellence in Augmented Reality and Virtual Reality (VARCoE) has been given below.

1. MOU was signed by IIT Bhubaneswar, MSME Dept. Govt. of Odisha and STPI towards creation of Center of Excellence in Augmented Reality and Virtual Reality (VARCoE) on 19th January 2018.
2. Director IIT Bhubaneswar had a meeting with faculty members from IIT Bhubaneswar and research proposals were invited under VARCoE on 20th January 2018.
3. On February 9, 2018 around ten such research proposals were discussed in front of Mr. Bagchi and Mrs. Bagchi.
4. There was a meeting at the Chief Secretary's office on 21st April 2018 regarding activities at VARCoE.
5. There was a first project advisory committee meeting at IIT Bhubaneswar on July 24, 2018 to review progress for various projects.
6. A Mind map workshop was conducted at VARCoE to address development of the large scale incubation facility by Mr. A. Mitra from the company Mindtree.
7. On 26th October 2018 and 1st January 2019, Director IIT Bhubaneswar had a meeting with faculty members from IIT Bhubaneswar regarding possible research proposals which can be included under VARCoE.
8. On 2nd January 2019, the Chief Secretary of the State of Odisha along with Mr. Bagchi visited VARCoE to review progress of various research projects and expressed their satisfaction.
9. Group of faculty members from IIT Bhubaneswar visited Army Air Defence College at Gopalpur to observe a war training simulator on 5th January 2019.
10. On 15th January 2019, startup center IIT Bhubaneswar conducted interviews for providing incubation to young aspiring startups.

Events at VARCoE

Visit of Chief Secretary of Odisha and Chairman, Skill Development Authority of Odisha to VARCoE Center at IIT Bhubaneswar.

An official visit to Virtual and Augmented Reality Center of Excellence (VARCoE) of IIT Bhubaneswar was organized on 2nd January 2019 for Shri Aditya Prasad Padhi, Hon'ble Chief Secretary & Chief Development Commissioner, Govt. of Odisha, Shri Subroto Bagchi, Hon'ble Chairman, Odisha Skill Development Authority, Govt. of Odisha along with Prof. R. V Raja Kumar, Hon'ble Director, IIT Bhubaneswar. Dr M. Satpathy, Professor in Charge of the Center (VARCoE), Dr S. N Panigrahi, HoS, School of Mechanical Sciences (SMS), Dr P. K. Sahu, HoS, School of Electrical Sciences (SES) along with different faculty members of VARCoE were present during the official convention. Shri Aditya Prasad Padhi and Shri Subroto Bagchi expressed their satisfaction towards the various research activities carried out in VARCoE.

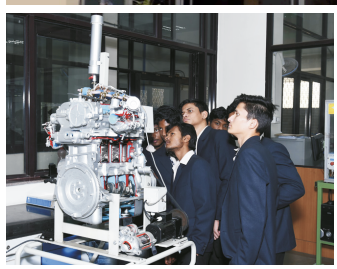


Subroto Bagchi expressed their satisfaction towards the various research activities carried out in VARCoE.

VARCoE participation in the 2nd Open Day Celebration at IIT Bhubaneswar Indian Institute of Technology observed its 11th Foundation Day on 12th February, 2019 at its Arugul Campus, Jatni, Bhubaneswar. Professor R V Raja Kumar, Director welcomed the Guests and the invitees and graced the occasion with his treasured words. He expressed his warmth to the students of IITBBS for making us proud by reaching at global heights.

As it's the Open Day and as a part of IITBBS, VARCoE at School of Mechanical Sciences (SMS) exhibited its facilities and different projects. Around 5000 school students from class- VI to class- XII along with junior engineering students from across the city and state have participated in the observation within the scheduled time from 9:30 AM to 6:00 PM. The students came in contact with the live projects and garnered knowledge about the versed techniques with enthusiasm.






E-CELL

E-Cell of IIT Bhubaneswar is committed to infuse an entrepreneurial environment in the institute. It organises annual entrepreneurial conclave E-Summit and also calls for proposal under Technology Incubation Centre every year. This year too, these activates witnessed an encouraging response. The details are as under-

E-Summit'19

The flagship event of E-Cell the entrepreneurship conclave "E-Summit 2019" was held during 18-20 January 2019. The event witnessed a plethora of events such as vision night, Guest talks on various entrepreneurship issues. Entrepreneurial Ideation was one of the new initiatives of E-Summit'19 which was organised in 30 colleges around the country. It received a participation of around 1500 engineering students. Around 180 students were selected for the second round, which was organised during the Summit. The event covered various engineering and medical colleges from Odisha, Telangana, Andhra Pradesh, Karnataka, and Gujarat. During event days at IIT Bhubaneswar, Investors' drive was a popular competition among the student start-ups to show case their product of investors. Around 15 start-ups participated in the event. The investors were Shri Anil Chhikara, Chairman Start-Up India Foundation Shri Aniruddha Malpani; Angel Investor, Malpani Ventures and Shri Nirmal K. Bhardwaj, Founder, Bangaluru Angels. In Start-up Expo, Start-ups get a platform to showcase their product or prototype to the public and guests in the event. Around 10 children teams participated in the event to showcase their innovative products. IIT Bhubaneswar start-ups also participated in the event to display their product to the audience. Other E-Summit event like B-Plan, Stock wars, IPL auction etc. also received high participation. Workshops on Digital marketing and Design thinking and innovation also were well attended.

TIC 3th round:

E-Cell also looks after Technology Incubation Centre of the institute which helps final year students and faculty to incubate their technical ideas into workable products and processes. The activity was started in 2016. In year 2018 too, students and faculty members applied for the funding under TIC and two of them were chosen for to incubate their ideas into working product/technology in the areas of Metal foam and Biofuel.

RAJBHASA EKAK

In pursuance of the Official Language Policy of the Government of India, Rajbhasha Ekak of the Institute is promoting the progressive use of Hindi in IIT Bhubaneswar. Presently the Cell has one sanctioned post of Junior Hindi Translator, which is lying vacant. The Institute is completely tried to follow the rules and regulations of the Govt. of India related to Official Languages Hindi by deputing other staffs and officers of the Institute. Further the Rajbhasa Ekak was look after the Town Official Language Implementation Committee (TOLIC) Bhubaneswar (Central) activities and our director Prof. R. V. Rajakumar was Chairman of TOLIC Bhubaneswar (C) till February 2019. Some of the highlights of Rajbhasha activities are as follows:

ON GOING ACTIVITIES

Translation of Institute Annual Report, Annual Accounts, Audit Report and various other documents which comes under Section 3(3) of Official Language Act, 1963. In addition, various other letters and correspondence, replies etc. are either translated or prepared in Hindi. The Rajbhasha Ekak also try to ensure the effective implementation of Official Language policy of Govt. of India at Institute. The Ekak ensures the bilingual display and use of different nameplates, notice boards, rubber stamps, routine type forms and also help in preparing bilingual Degrees certificate awarded by the Institute during Convocation. The Ekak involved the students and motivated them to use official language and organise official language program during different institute function with the help of Hindi literary society "Abhivyakti" under student gymkhana.

HINDI TRAINING AND WORKSHOP

Time to time, Rajbhasha Ekak impart Hindi training to all Institute employees who has no working knowledge in Hindi. To solve the problem faced by the employees in using official language, the Rajbhasha Ekak organized workshops/training for the employees of the Institute and member office of TOLIC Bhubaneswar (C). In the report year, the following workshops were organized:

- On 12th September, 2018 a Hindi Workshop on "Voice Typing (shruti lekhan)" was organized for the employees. Dr. Raj K. Singh, PIC Rajbhasha Ekak trained the employees, how to use "Voice typing" using computer or mobile phone to type in 'Hindi' and other regional languages. He also informed the employees about various 'voice typing' software to type in official language Hindi.

- On 08th November, 2018 a workshop was organised on "Hindi computing and its official usage" for all the member offices of TOLIC Bhubaneswar (C). Sri Rajeev Kumar Rawat, Senior Hindi Translator was main speaker of the workshop. During the workshop, the participants were trained to use computer and different software developed by C-DAC to work in Hindi. The participants were also trained to use different computer software for the hindi translation work. Dr. Raj K. Singh, PIC Rajbhasha Ekak was other resource person for the workshop. The workshop was graced by presence of Prof. R. V. Rajakumar, Director IIT Bhubaneswar, who motivated the participants to work in Hindi.

VISWA HINDI SAMMELAN

Dr. Raj K. Singh, PIC Rajbhasha Ekak was nominated by the Institute to participate in the Viswa Hindi Sammelan held at Mauritius between 18 and 21st August 2019. Dr. Singh attended the viswa hindi sammelan and on return he briefed the outcome and highlights of the meeting to the members of OLIC and TOLIC in separated meeting and submitted a report to the institute.

HINDI PAKHWADA CEREMONY

During 01-14 September, 2018 Rajbhasha Ekak organized "Hindi Pakhwada" in the Institute. Several Programmes and competition in Hindi were organized for employees and students of our as well as nearby Institutes. This year intra institute competition was attended by number institutes including KIIT Bhubaneswar. The intra institute competition for the students were organised with support of "Abhvyakti" a hindi literacy society formed under students gymkhana. Various neighbouring colleges and institutes were participated in these programs. The popular programs were "Vaad Vivad" and "Awaz Dil Ki". The other programmes organised were "Rachnatmak Lekhan", "Bas ye Pal", "Nibandh lekhan"and "Aashubhashan". On 14th September, 2018 Hindi Diwas was celebrated in the Institute. Sri Debraj Rath, Registrar (O), IIT Bhubaneswar, graced the Hindi Diwas and distributed the prizes to the winner of the various competitions. A very motivational speech on progressive use of hindi was delivered by Sri Rath. On the occasion Dr. Raj K. Singh PIC Rajbhasha ekak shared the importance of hindi diwas celebration and read message of Hon'ble Home Minister Sri Rajnath. He also thanked Director Prof. R. V. Rajakumar for constant support and encouragement. The programme was ended with vote of thanks by Smt. Suhana Parveen.

A Glimpse of Hindi Pakhwada activities

PUBLICATIONS

This year Rajbhasha Ekak published TOLIC Bhubaneswar (C) E-magzine "Nagrik" last edition and handed over to Principal Accountant General Bhubaneswar office. Dr. Raj K. Singh, PIC Rajbhasha Ekak published a report on viswa hindi sammelan entitled "Viswa Hindi Sammelan – Ek Jhalak".

BILINGUAL WEBSITE

As per the Official Language policy, Govt. of India, Rajbhasha Ekak maintains bilingual updation in Institute's website. Rajbhasha Ekak and TOLIC links are active in our institute website which contains various useful information related to effective use of Official Language Policy, besides new website for TOLIC Bhubaneswar (C).

OFFICIAL LANGUAGE IMPLEMENTATION COMMITTEE

The Institute has an Official Language Implementation Committee to look after the implementation of Official Language policies of Govt. of India and to review the progressive use of Hindi in Institute. Four quarterly meetings of the committee were held last year under the chairman ship of the Director of the Institute. In the meeting discussion were made to accelerate the progressive use of Hindi in the Institute.

TOWN OFFICIAL LANGUAGE IMPLEMENTATION COMMITTEE (TOLIC)

In addition of this, Rajbhasha Ekak plays a vital role in coordinating the implementation the Official Language policy in the city and adjoining area. Rajbhasha Vibhag, Ministry of Home Affairs, Govt. Of India has selected our Institute Director as Chairman, TOLIC Bhubaneswar (C). All the Heads of Central government offices of the city and its adjoining areas are the ex-officio members of TOLIC. The 63rd meetings of the TOLIC was organized on 09.11.2018 under the chairmanship of Hon'ble Director Prof. R.V.Rajakumar. At present, there are nearly 120 central government offices and institutes are member of TOLIC Bhubaneswar (C). Workshop and training programs were also organised under the aegis of TOLIC (C) Bhubaneswar. In February 2019, the TOLIC was official handed over to Principal Accountant General Bhubaneswar office. The event was covered by local hindi media. The 64th meeting of TOLIC Bhubaneswar (C) was organised by Principal Accountant General Bhubaneswar office on March 2019 at Institute of Physics, Bhubaneswar. Dr. Raj K. Singh, PIC Rajbhasha Ekak attended the meeting.

A glimpse of 63rd TOLIC meeting

EVENTS

RUN-UP ACTIVITY TO THE CELEBRATION OF INTERNATIONAL DAY OF YOGA 2018

1st April 2018 and 2nd May 2018

IIT Bhubaneswar organized two Yoga practice session on 1st April 2018 and 2nd May 2018, and gave wide publicity for celebrations of IDY 2018. The Institute has observed run-up activity to the celebrations of IDY-2018 on 2nd May-2018 (50 days to the event) preceding to the celebrations of the International Day of Yoga on 21st June 2018. An expert Yoga teacher briefed on origin and essence of yoga and its importance on health and life. A long practice session with demonstrations were held with a participation from faculty, staff and students. The participants were introduced to Yogasanas, Kapalbhati, Pranayama, Dhyna, Sankalpa and Meditation, as per the common protocol issued by Ministry of Ayush, Govt. of India. Prayers were recited before and after the programme on each day.

NATIONAL TECHNOLOGY DAY

11th May 2018

Indian Institute of Technology observed National Technology Day on 11 May 2018. An eminent environmental scientist Prof U C Mohanty of IIT Bhubaneswar was the Chief Speaker and Dr Sarat Chandra Sahu, Director Metrological Centre Bhubaneswar was the Guest of Honour of the day. The theme of this year celebration was "Science and Technology for sustainable future".

Speaking on the occasion Prof Mohanty outlined the effect of climate change on mother earth and activities of various research group of IIT Bhubanesewar on the theme and its contributions to the society. It may be mentioned that IIT Bhubaneswar with the help of Ministry of Earth Sciences is establishing a Bay of Bengal Coastal Observatory near

Brahmapur with an estimated cost of Rs 10 crore. Dr Sahu gave a presentation on the climate change and adaption process to reduce its effect through meteorological forecast using modern technology. He also elaborated the role of Indian Metrological Department and the activities of Metrological Centre Bhubaneswar in predicting the weather conditions of Odisha. Director IIT Bhubaneswar Prof R V Raja Kumar in his speech emphasized on the utilization of the research outcomes and use of technology for future, highlighting on rediscovery of technology from age of Mohenjo-Daro and Harappa and its use in current times.

Dean (Research & Development) Prof R K Panda outlined the supportive role of the Research & Development in promoting the research activities of IIT Bhubaneswar. Assistant Registrar (Research & Development) Dr S N Routray proposed vote of thanks.

COMMISSIONING OF SOLAR POWER GENERATING STATION

14th May, 2018

IIT Bhubaneswar has successfully commissioned a solar power generating station of 490 KWp capacity at its permanent campus. Roof tops of all the existing buildings are utilized for installing solar panels and power generating equipment. The project was inaugurated by the Director, Prof. R V Raja Kumar on 04.06.2018 and the power generation is commissioned.

The project provides not only power saving to the campus through solar generation, but also provides enough data & information for doing research work on solar PV renewable energy systems. The solar PV panels have been successfully commissioned on 14th May, 2018 for testing and the generation is found to be fully intact till date. The Project provides benchmark for future installation of solar PV generation systems in the campus and also provides inspiration for surrounding institutes in the Bhubaneswar to go for clean and green energy.

Prof R V Raja Kumar, Director, IIT Bhubaneswar said that the institute has decided to make the campus "green", installation of solar power generation is one step in this endeavor alongside of undertaking a massive tree plantation drive of 30,000 trees during the last three rainy seasons. He also said that the institute has already awarded contract to create STP and ETP in the campus through NBCC and it is working on rain water harvesting in the campus with the buildings already designed to equip with rain water collection system.

VIGYAN JYOTI PROGRAMME

4th June-24th June, 2018

Vigyan Jyoti is an initiative of DST, Govt. of India aimed at inspiring girl students to pursue higher education in the field of Science and Technology.

Indian Institute of Technology (IIT) Bhubaneswar is organizing this program for Odisha region under the aegis of DST, Govt. of India during June 04-24, 2018. The event was inaugurated on June 4, 2018 in the campus of the Institute at Arugul by Prof. Gitanjali Batmanabane, Director, AIIMS Bhubaneswar, who graced the occasion as the Chief Guest. Prof R.V Raja Kumar, Director, IIT Bhubaneswar, the Chief Patron presided over the function.

The Director, Prof. R. V. Raja Kumar, welcomed all the young girl participants for their choice to pursue science and technology as part of their career. Speaking on the occasion, the Director thanked Department of Science and Technology (DST), Govt. of India for initiating such an inspiring program with a pious objective of encouraging girl students across the country, which carries enormous value in preparing our next generation to be tomorrow's leaders. The initiative would help the students not only to empower them with good knowledge but also to interact with academic leaders across the country and to get inspired to pursue a brighter careers in science and technology. He also called upon students to participate whole heartedly and gather actual knowledge than only securing marks in the examination and utilize this program for their overall development.

The Chief Guest Prof. Gitanjali Batmanabane called upon students and urge them to dedicate their mind to the process of learning and encouraged them to pursue their career as a passion. Hard work and passionate learning can make them through their dreams. Todays' world is witnessing a blend between scientists, engineers and doctors. Integrated knowledge between both the communities will enrich the spectrum of knowledge.

Prof. V. R. Pedireddi, Nodal Officer welcomed all the participants and shared the vision of DST in this initiative and its implementation through Centrally Funded Institutes of MHRD. Dr. Sasmita Barik, Coordinator welcomed and introduced the guests to the audience. Dr. Seema Bahinipati, Coordinator delivered vote of thanks.

Thirty girl students of Class XI (Science stream) across the state of Odisha covering the places like Sambalpur, Sundargarh, Jajpur, Balasore, Keonjhar, Jagatsinghpur, Puri, Malkangiri, Bolangir, Mayurbhanj, Nuapada etc. were selected and are attending the program. In addition, IIT Bhubaneswar made a special provision for five Class XI (Science stream) girl students from its six adopted villages of the institute under Unnat Bharat Abhiyan Program to participate on supernumerary basis. All the students are being provided full support (travel, boarding, and lodging) to attend the program. Moreover, a scholarship of Rs. 5000/- will be given to the participants after the completion of the program. Prominent female scientists, faculties, entrepreneurs and administrators have been invited to deliver lectures and conduct interactive sessions with the students to motivate them to pursue their career in science and technology.

The three-week long program that will follow, is expected to ensure easy access to scientific and technological information for the participants. The schedule also includes trips to planetariums, science labs, research centers and places of historical interest. Knowledge will be imparted to the students through screening of inspirational movies and documentaries on interesting science topics and biographies of famous female achievers to enrich the student-participants by providing them with ample exposure to numerous avenues in the field of scientific and technology.

OPEN HOUSE DAY ON JEE COUNSELLING

17th June, 2018

IIT Bhubaneswar organized an Open House, JEE Counselling and Interaction meeting on 17 June 2018, for the benefit of IIT aspirants, including those who are qualified in JEE 2018 (Advanced) and those who are going to appear in 2019. A large number of participants, including 45 JEE 2018 (Advanced) rank holders and their parents/ guardians participated in the counselling session. The registered participants came not only from Odisha, but also from several other states like Telangana, Andhra Pradesh, Maharashtra, West Bengal, Jharkhand, Chattisgarh, Rajasthan, Karnataka, etc. Outstation candidates were provided accommodation in the Institute campus.

The session started with welcome remarks by Prof. V. R. Pedireddi, Dean Student Affairs. Prof. R. V. Rajakumar, Director IIT Bhubaneswar gave an in depth presentation on IIT system including the 1st , 2nd and 3rd generation IITs, IIT education in general and about the rapid strides being made by IIT Bhubanewar on all fronts, including education, research and infrastructure building. This was followed by an introduction to programs of study by Prof. N. C. Sahoo and presentation on general procedures to be followed for admission and counselling at IITs by Chairman JEE, Dr. C. Bhamidipati. The inclusion of supernumerary seats for female students from 2018 as per the policy of the Central Government, aimed at bring gender balance in the engineering education was highlighted. The girl students were also counselled by the JEE help desk team to fill as many choices as possible to maximize their chances of getting a seat in IITs. Various schemes of financial assistance (including Vidyalaxmi scheme introduced last year by MHRD, Govt. of India), to the admitted students were presented by the SBI Regional Manager, Mr. S Panigrahi.

4TH INTERNATIONAL DAY OF YOGA

21st June 2018

IIT Bhubaneswar celebrated the 4th International Day of Yoga on Thursday i.e. 21st June 2018 in its campus with grandeur. The Institute has been celebrating the Yoga Day ever since inception for the last four years, ever since inception and this year's celebrations received overwhelming participation. Students, faculty members, staff and their families, have enthusiastically participated in large numbers in making this event a success. In addition, school children of nearby villages like Khudupur, Kansapada and Podapada, which have been adopted by IIT Bhubaneswar, and students of Vigyan Jyoti

programme in large numbers have also participated in the celebrations.Preceding to the celebrations of final International Day of Yoga on 21st June-2018, practice sessions were held on 13th March, 2nd May and on 18th, 19th & 20th June, 2018, in order to acclimatize a body to yogic exercises and Yoga as per the protocol of the Ministry of Ayush, Govt. of India. Yogasanas, Kapalbhati, Pranayama, Dhyana, Sankalp, and Meditation were imparted to all participants by the experts from Sri Pandit Ravishankar University. About 180 participants gracefully embraced Yoga and pledged to start a new journey of awareness to health by participating in the initiative of IIT Bhubaneswar to promote International day of Yoga.

The final event presided by the Director Prof. R. V. Rajakumar on Thursday started with an enthralling practice session with his active participation. Prof. Rajakumar addressed the gathering and shared his own wisdom on how Yoga has helped him stay fit and has provided inner energy to lead a vibrant institute as a director. He also emphasized the importance of daily practice of Yoga that can enhance efficiency and hone the skills of multitasking in both professional and personal life. He said, "Yoga is an essential part of extra academic activity at IIT Bhubaneswar. On this occasion, Mr. Shyam Agarwal, Trainer and Faculty at The Art of Living Institute, delivered an expert talk on "Mind and its role in leading a healthy, peaceful and successful life". He also conducted a short session on meditation & breathing techniques.

The programme was coordinated by Dr. B. Hanumantha Rao, co-coordinator of the institute and arranged by Dr. S. S. Yadav, OSD Sports. Also participated were Prof. Peddireddi, Dean (SA) & Dr. Sankarshan Mohapatra, President Gymkhana.

72ND INDEPENDENCE DAY

15th August, 2018

IIT Bhubaneswar celebrated the 72nd Independence of Day in its campus at Argul on 15th August 2018 at 9:00 AM. Prof. V R Pedireddi, acting Director on behalf of Prof. R V Raja Kumar, hoisted the national flag and offered tribute to the Father of the Nation and Bharat Mata. He delivered Independence Day address followed by Guard of honor by the security forces and the students. Faculty, staff, and students from the institute participated in the celebrations in large numbers with patriotic fervour.

Prof. R V Raja Kumar, the Honorable Director of the Institute, in his absence paid respectful homage to the great personalities and conveyed the Independence Day greetings and Best wishes to all the students, faculty members and staff. He admired to note that the 72nd Independence Day Celebrations is very special to the institute as it is first such event in the fully operational campus. He noted that on this day 71 years back, at the

stroke of midnight, India gained it's Independence from colonial rule after a long freedom struggle and supreme sacrifices by thousands of our country men and women. In his message, he desirous of the IIT Bhubaneswar fraternity shall reignite their hearts with patriotic fervour, re-resolve to maintain unity in diversity and work towards strengthening of the nation in all its dimensions through hard work, adopting high ethical standards, spirited performances of our duties and innovating to bring in positive differences to the society.

Prof. V R Pedireddi, in his address to the audience, emphasized the necessity of remembering the great sacrifices of our freedom fighters, whose struggles through non-violence gave us freedom that we enjoy today. He also emphasized the need for thoughtful retrospection to take India forward and excel in the areas that we still lag behind and catch-up with the dynamically changing world by fostering and inculcate the great leadership qualities and valor of the freedom fighters, and re-resolve ourselves to make India "Ek Bharat Shreshtha Bharat".

The celebrations continued with exciting performances of native traditional martial arts by the security unit. The day was celebrated with patriotic songs and recital of poetry by the students.

3 DAYS LONG 1ST TECHNO BOOK EXHIBITION

18th to 20th Aug, 2018

Central Library IIT Bhubaneswar had organized three day long Techno Book Exhibition for the first occasion, under the able leadership of Director Prof. R.V. Rajakumar, in IIT Bhubaneswar campus at Argul from 18th to 20th August 2018. In the book exhibition, 16 number of vendors and many publishers of national and international repute had participated. The exhibition had 31 book stalls having more than 1.5 Lakh books. The books were mostly focused on Science, Engineering, Technology, Social Sciences and Management, Soft skills, etc. In addition, there were many books on literature, children education and entertainment, story books, etc. Food stalls had also been set up in the exhibition venue for the convenience of visitors for refreshment. The exhibition was aimed to promote the culture of reading habit of students and instil a love for reading that lasts a lifetime. It also had objective to provide opportunity for students, faculty, staff and IIT Bhubaneswar community members including children, and Institutions around IIT Bhubaneswar, such as NISER, IOP, Centurion, ITER, GITA, CV Raman, to choose from wide variety of books and buy from a single point. This exhibition also facilitated publishers and vendors to showcase new and classic book collections to inculcate the reading habit. This provided an opportunity to Faculty members to recommend books related to the curriculum and new research areas in order to participate in the movement of Library collection building process. The exhibition was inaugurated on 18thAugust 2018 (Saturday) in a very informal way due to the demise of former prime minister Late Shri Atal Bihari Vajpayee. In the inaugural event Dr. Rajesh R. Dash, Chairman, Central Library welcomed the vendors, publishers, students, staff and faculty members and inaugurated the exhibition in the presence of Dr. Bibhuti B. Sahoo, Deputy Librarian, Library Advisory committee members Dr. Manaswini Behera, Dr. Sasidhar K.and other faculty members namely Dr. Rajan Jha, Dr. Arindam Sarkar, Dr. SumantaHaldar, Library staffs and students. Students and faculty members of IIT

Bhubaneswar and from nearby Institutions visited theexhibition enthusiastically. Senior faculty members namely Prof. R.K. Panda, Prof. Sujit Roy, Prof. V.R. Pedireddi, Prof. Bramha Deo and many others expressed their pleasure and appreciated the sincere efforts of library team for taking such initiative. The news of the event had been published in many reputed national and local newspapers.

INAUGURATION OF PM YUVA ORIENTATION PROGRAM

21st August, 2018

PMYUVA (Pradhan Mantri Yuva Udyamita Vikas Abhiyan) program of Ministry of Skill Development and Entrepreneurship, Govt. of India was inaugurated on the evening of 21st August 2018 by the officiating Director of IIT Bhubaneswar Prof. V.R. Pedireddi at its campus, Argul. The Hon'ble Director of IIT Bhubaneswar Prof. R.V. Rajakumar was instrumental in bringing regional hub status to IIT Bhubaneswar for PMYUVA program, which will help in inculcating Entrepreneurship among the young graduating minds of IIT Bhubaneswar. This helps in molding the young minds to become job givers rather than job seekers. Around 50 E-cell students of IIT Bhubaneswar registered for the course. During inauguration, Prof. V.R. Pedireddi, officiating Director, Prof. S.K. Mahapatra, Dean Continuing Eduction and Dr. V. Pandu Ranga, Coordinator PMYUVA addressed the students and advised them on the importance of Entrepreneurship in the present global scenario.

ENGINEER'S DAY 2018

15th Sept, 2018

IIT Bhubaneswar celebrated Engineer's Day on 15th September, 2018, to mark the birth anniversary of Bharat Ratna Sir Mokshagundam Visvesvarayya, as a tribute to one of the greatest engineers of the country for his outstanding contribution to society. The celebration was attended by a large number of students, faculty, officers and staff members. Prof. R.K.Panda, Dean (R&D) gave the welcome address.

Prof. R.V. Raja Kumar, the Director of the Institute delivered the Engineer's Day lecture on "A Passive Sonar System Developed for DRDO and Optimization Research Therein". The topic dealt with solving a live defence challenge of underwater dynamic target tracking using signal processing and recursive estimation technique. He also emphasized on the importance of understanding the physics behind a challenging real life problem and use of mathematical tools to find unique solution for solving live problems. The talk was quite interesting and educative for the students and faculty members. On this occasion a working model making competition was held, where 12 No. of models were demonstrated by the Student & Research Scholars. Cash prizes were awarded to most innovative working models and all participants received certificates of participation. Dr. S.N.Routray, Assistant Registrar (R&D) proposed vote of thanks.

MOTIVATIONAL TALK ON "E-DAY" BY MR. ARJUN MALHOTRA, CO-FOUNDER, HCL TECHNOLOGIES

17th Sept 2018

IIT Bhubaneswar organized "E-day" on 17 September 2018 and is honoured to host Mr Arjun Malhotra, co-founder, HCL Technologies, one of India's largest Info-Tech corporations. The event started with his warm welcome by Honourable Director of IIT Bhubaneswar, Prof. R. V. Raja Kumar.

He advised students to have motivation from the entrepreneurial journey of Mr Arjun Malhotra. Afterwards, Mr Arjun Malhotra enlightened the young minds by giving glimpses of his entrepreneurial experiences which range from how he began his career as a senior management trainee at Delhi Cloth & General Mills Co. Ltd to how he cofounded HCL. He shed light on how tactfully and intellectually he faced all the challenges of being a pioneer of the information technology industry in India. His suggestions to all the students out there aspiring to become successful entrepreneurs are invaluable. He made interesting analogies to inculcate complex business ideas into the minds of the students. After his talk, students interacted with him in the question-answer session enthusiastically. The vote of thanks speech was given by V. V. Gopinadh, Chief-coordinator, E-summit-2019. Prof. Saroj Nayak, Dean Faculty & Planning, Prof. R. K. Panda, Dean R & D, Dr Ankur Gupta, Chairman, E-summit-2019, Dr Srinivas Boppu, Vice-chairman, E-summit-2019 and students from IIT as well other institutes were present in this occasion.

7TH ANNUAL CONVOCATION

22nd September, 2018

The Institute celebrated its 7thAnnual Convocation at 11.00 AM on 22ndSeptember 2018 in the Community Centre of the Institute at Argul, Jatni. Chief Guest of the 7thConvocation, Dr. Ashutosh Sharma, Secretary, Department of Science & Technology, Govt. of India while addressing the gathering congratulated the students and the mentors for sowing seeds of innovative ideas in these fresh, young and fertile minds.

This is the clear evidence of IIT Bhubaneswar's commitment to the cutting-edge engineering education and research. He called upon students to be job creators not to job seekers. Today, there are un-precedented global stress and challenges in sustainable economic growth and job creation, but there are also huge opportunities for technology led transformative changes in the sectors such as energy, water, environment, transport, cyber physical systems and hygiene a and health. A strong team work is the key to the solutions of the real interdisciplinary problems. Chairman, Board of Governors, Shri Pankaj Ramanbhai Patel, while giving his vote of thanks gave guru mantra to the students to aim high, be innovative, respect and trust the surroundingsto grow in life. Interdisciplinary approach is essential to reach at the pinnacle. He impressed upon the students to work hard and contribute significantly to the nation building and development of the country. Director, Prof. R V Raja Kumar presented the annual report of the Institute and congratulated the Gold Medal winners for their outstanding success and wished them best of luck.He stressed upon the Plans of Alumni to promote interest of the mentor and the country as a whole. The President of India Gold Medal has beenawarded to Shri Nanduri Divakar of the School of Mechanical Sciences for best academic performance among the entire outgoing B. Tech. batch of students. The Director's Gold Medal has been awarded to Shri Sayan Roy of the School of Basic Sciences for best academic performance among the entire outgoing M. Sc. batch of students. For the best academic performance in the respective Schools, the Institute Silver Medals have been awarded to Shri Nanduri Divakar, Shri Ramreddygari Rahulreddy, Ms.Kola Lakshmi Sai Sri, Ms.Sneha Susan George, Shri Sudhansu Srivastava among the outgoing B. Tech. batch of students. For the best academic performance in the respective Schools, the Institute SilverMedals have been awarded to Ms.Debaleena Mukherjee, Shri Vikas Sharma B S, Ms.Barik Aanasuya Anupam Swati, Shri Palash Swarnakar, Shri Kuppili Raviteja, Ms. Nazneen Nighar Sultana among the outgoing M. Tech. batch of students.

For the best academic performance in the respective Schools, the Institute Silver Medals have beenawarded to Shri Sayan Ray, Ms.Asmita Singha Roy, Shri Rahul Rana, Ms. Dipanjali Haldar among the outgoing M. Sc. batch of students.Total 215 students took their certificates in person.

A SESSION ON "YOUTH AND POSITIVE WELLBEING" ON THE OCCASION OF WORLD MENTAL HEALTH DAY.

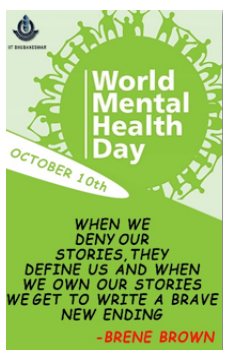
10th Oct, 2018

Institute Counselling Centre, IIT Bhubaneswar had organized a session on "Youth and Positive Wellbeing" on the occasion of World Mental Health Day on 10th October 2018 (Wednesday) to boost awareness on mental health in the campus.

The world now has more young people than ever before. Of the 7.2 billion people worldwide, over 3 billion are younger than 25 years, making up 42% of the world population and around 1.2 billion of these young people are adolescents aged between 10 and 19 years. Mental Health is a state of well-being in which every individual realizes his or her own potential, can cope with normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community (WHO).

Dr. Jashobanta Mohapatra Head, Department of Clinical Psychology (Centre of Excellence), Mental Health Institute, SCB Medical College and Hospital, Cuttack was the Key Note Speaker of the Session. He lighted upon transitions of adolescence, prevalence of psychological disorders among adolescents/ youths, risk taking behavior of youths, mental health determinants, early detection and treatment of disorders and preventive measures.

The session was followed by a triumphant interaction by the participants.



VIGILLANCE AWARENESS WEEK

29th Oct to 3rd Nov, 2018

Vigilance Awareness Week is being observed in the Institute from 29 October to 3 November 2018. In connection with this, the integrity pledge was undertaken on 29 October 2018 at 11:00 AM in the Admin. Building (Ground Floor).

RASHTRIYA EKTA DIWAS

31st Oct, 2018

IIT Bhubaneswar organized "Rashtriya Ekta Diwas" on the occasion of Sardar Vallabh Bhai Patel's birth anniversary on 31.10.18 at its Permanent Campus, Argul. The event was initiated with a floral ceremonial tribute by the Honourable Director Prof. R. V. Raja Kumar, Dean R&D Prof. R. K. Panda, Registrar Mr. Debaraj Rath and other organising committee members. This was followed by a pledge by the budding engineers of the country where they swore to protect the unity, integrity, and diversity of the Nation. Director, Prof. R. V. Raja Kumar addressed the audience where he emphasised the actions of Sardar Vallabh Bhai Patel, the monumental importance and the gruelling groundwork of the efforts put by The Iron Man. Theme of the event was to make people believe in their unique identity and respect their collective identity. Afterwards, "Ek Bharat Shreshtha Bharat (EBSB)" program was continued which was packed with a myriad of dance performances and a troveof musical acts performed by people of all ages and backgrounds. It also included a neat informative video that got the ear that it deserved. All the organizing members including President-Students' Gymkhana Dr. Sankarsan Mahapatro, Faculty Advisor-Social& Cultural Activities Dr. Ankur Gupta, EBSB Coordinator-Dr. Rajesh Roshan Dash and other team members organized the event successfully. The event concluded with a quick engaging quiz and prize distribution by the organising committee members of the event.

143RD BIRTH ANNIVERSARY OF SARDAR VALLABHBHAI PATEL, IRON MAN OF INDIA.

04th Nov, 2018

Indian Institute of Technology Bhubaneswar organized Unity Run (a mini marathon) on 04.11.2018 at 7.00 am on the occasion of 143rdbirth anniversary of Sardar Vallabhbhai Patel, Iron Man of India. Prof. R. V. Raja Kumar, Director, offered floral tribute to Sardar Vallabhbhai Patel and flagged off the Unity Run. Director reminded the students about the sacrifice and contribution of Sardar Vallabhbhai Patel in the freedom struggle and in unifying the nation and about the pledge undertaken by all for maintaining the spirit of unity in all sphere of life, on 31stof Oct 2018. He reiterated that the objective of the unity run is to make the citizens to be aware of the importance of unity all sections and to maintain regional cooperation.

Director lauded the efforts of Govt. of India under the leadership of Hon'ble Prime Minister, Shri Narendra Modiji in spreading the message of unity across the country through this initiation. Unity Run started from IIT Administrative Building went up to Hari Bhaina Chaka, Jatni and return to end up at the Main Gate of the institute, covering a distance of approximately 8 Km. Around 550 students, faculty and other staff took part in the event enthusiastically giving a visual perception that the road is painted white over a kilometer of length, to the on lookers. Prof. V. R. Pedireddi, Dean, Student Affairs, Dr Sankarsan Mohapatra, President Gymkhana, and Dr. Venugopal Arumuru, organized the mini marathon and participated in the unity run. Mr Debaraj Rath, Registrar, other faculty and staff joined the students. The event witnessed an unprecedented welcome and participation of the local people throughout the run. The local administration and police extended all their cooperation in making it a grand success.

GENDER SENSITIZATION WORK SHOP ORGANIZED BY WOMEN WELFARE CELL

9th Nov, 2018

Women's Welfare Committee (WWC), IIT Bhubaneswar had organized a gender sensitization workshop on 9thNovember 2018. The speakers of the workshop were Adv. NamrataChadha, social activists & member of the Internal Complaints Committee, IIT Bhubaneswar and Adv.Rajalaxmi Das, member, Child Welfare Committee, Odisha. The workshop gave an insight to "Sexual Harassment of Women at Workplace -Acts and Rules." Emphasis was on gender biasness and related issues. The Do's and Don'ts prescribed in the act, ways to prevention gender based malpractices and the current judicial scenario were explained during the workshop.The workshop

was conducted to make the students, staff and faculty members aware of the sexual harassment of women at workplace act and as well as the procedure for filing a complaint and the procedures and legal consequences of the complaints if lodged. The audience were also made to understand the importance with which such grievances are handled and the sincere investigation carried out when the matter is taken to the complaint committee of the National Institutes.

"SAMVAAD: A TRIBAL CONCLAVE" ORGANIZED BY THE SCHOOL OF HUMANITIES, SOCIAL SCIENCES & MANAGEMENT, IN COLLABORATION WITH CORPORATE SOCIAL RESPONSIBILITY, TATA STEEL.

10th Nov, 2018

The School of Humanities, Social Sciences & Management, IIT Bhubaneswar in collaboration with Corporate Social Responsibility, Tata Steel organized a one day Academic Conference titled "Samvaad: A Tribal Conclave" on November 10, 2018 at its permanent campus in Argul. The Conference was inaugurated by Professor R.V. Rajakumar, Director IIT BBS, who was the Chief Guest of the function and was presided by Prof. S.K. Mahapatra, Dean Continuing Education. The program began with the welcome address by the Academic Coordinator, School of Humanities, Social Sciences & Management, Prof. Godabarisha Mishra. This was followed by the inaugural address by the Director. In his very informative and enlightening speech, Professor R.V. Rajakumar highlighted the various aspects of tribal welfare including the need for an aggressive and proactive program for inclusivity and a serious necessity for providing access to quality education. He also stressed upon the need for carrying out further research on tribal medicine, culture and linguistics. In addition, he related his personal experience as the founding Vice Chancellor of Rajiv Gandhi University of Knowledge Technologies, Telengana, where he made all efforts towards the inclusion of students from rural areas including those of tribal community. Mr. Sourav Roy, Chief, Corporate Social Responsibility, Tata Steel, in his speech, stressed on the tribal studies and research and the role TATA STEEL has been playing in promoting awareness on tribalism. A formal vote of thanks was proposed by the Academic Coordinator, School of Humanities, Social Sciences & Management, Prof. Godabarisha Mishra. A total of 14 presentations by various participants from across the country was scheduled in the morning and afternoon sessions. The papers dealt with various tribal issues, social political, ecological, cultural, linguistics, ethnographical and economic aspects relating to tribal communities of India. The jury for the presentations were Dr. Dukhabandhu Sahoo, Dr. Naresh Chandra Sahu from the School of Humanities, Social Sciences & Management, IIT Bhubaneswar and Dr. Ambika Prasad Nanda, Head of CSR, Tata Steel.

WOMEN WELFARE COMMITTEE OF IIT BHUBANESWAR ORGANIZED WORKSHOP ON RIGHTS OF WORKING WOMEN.

22nd Nov 2018

At present times, women employees are seen in almost every establishment. But the discrimination against women still exists in various forms, particularly in the workplace. Thus, it is important to make today's women aware of their rights, make them informative and empower them to live their lives with dignity. For the said purpose, Women's Welfare Committee of IIT Bhubaneswar had organized a session on "Rights of Working Women" on 22.11.2018.

The speakers of the event were Adv. Namrata Chadha, a social activist and a member of Internal Complaint Committee, IIT Bhubaneswar and Adv. Snehanjali Mohanty who is a member of State Women's Commission. The session started with a brief information about Women's Welfare Committee by its chairperson, Prof. Remya Neelancherry. The welcome address was given by our honourable Director- Prof. R V Rajakumar. Though the event mostly focused on faculties and staffs, few students were also present in the event. The discussion was not just limited to rights of working women but also on the rights of a child. The seminar was more of an interactive session where various situations were discussed, the precautions that can be taken, the various laws and rights of humans were informed.

CELEBRATION OF THE "CONSTITUTION DAY" TO COMMEMORATE THE 125TH BIRTH ANNIVERSARY OF DR. B R AMBEDKAR.

26th Nov, 2018

Indian Institute of Technology Bhubaneswar celebrated the "Constitution Day" on 26th November 2018, Monday at 5.00 PM at its permanent campus at Argul to commemorate the 125th birth anniversary of Dr. B R Ambedkar, the father of Constitution as per the directives of the Ministry of HRD, Govt. of India. The programme was graced by Prof. K. V. Ramana Chary, Director, IISER, Berhampur as Chief Guest and Shri Sashikanta Mishra, OSJS, Principal Secretary, Department of Law, Govt. of Odisha as Guest of Honour.

In his welcome address, Prof. R V Raja Kumar, Director of the Institute lauded the initiatives by the Ministry of HRD, Govt. of India in celebrating Constitution Day which is an innovative thought to make all the people of India aware of their rights and duties. He called upon the students to get guided by spirit of the Constitution while aiming at holistic education. Speaking on the occasion, the Chief Guest of the evening Prof. K. V. Ramana Chary

said that even the framers of the constitution very consciously have incorporated the ideology of development of scientific temper as part of the Fundamental Duties which speaks that Law of Land also recognizes scientific endeavors as the basis of Governance.

In his thought provoking address, Shri Sashikanta Mishra summarize the entire philosophy of the Constitution in two basic principles i.e. Right to Life and Right to Justice, as two main pillars of the Constitutional thought. Vote of thanks was given by the Registrar.

ALMA FIESTA (ANNUAL SOCIO CULTURAL FEST) OF IIT BHUBANESWAR.

11th Jan, 2019

The inaugural session of the 10th edition of the annual socio-cultural fest of IIT Bhubaneswar, Alma Fiesta 2019 took place in the Permanent Campus of the Institute, Jatni, Odisha on 11 January 2019. Ceremony started with lighting of the lamp: marked the beginning of "The 90's Carnival: A Nostalgic Ride", which is the theme of Alma Fiesta in 2019The inaugural session of the 10th edition of the annual socio-cultural fest of IIT Bhubaneswar, Alma Fiesta 2019 took place in the Permanent Campus of the Institute, Jatni, Odisha on 11 January 2019. Ceremony started with lighting of the lamp: marked the beginning of "The 90's Carnival: A Nostalgic Ride", which is the theme of Alma Fiesta in 2019.

Director of IIT Bhubanesar, Prof. R. V. Rajakumar mentioned that the two of the Nation's important dignitaries, namely the President and the Prime Minister of India visited the Institute in 2018 for convocation and dedication of the Institute to the Nation, respectively. IIT Bhubaneswar has made rapid strides in imparting global class education together with innovation and creativity in science, arts and technology. Prof. Rajakumar also highlighted the importance of Indian classical music and dance in today's times, and urged the students to use the fine arts as a medium to enhance their technical creativity.

Chief Guest of the evening, Shri Bishnupada Sethi, Higher Education Secretary, Govt. of Odisha and a noted poet, expressed happiness at the rapid growth shown by IIT Bhubaneswar and congratulated the Institute for making green, serene and beautiful campus. He also stressed on the importance of having good teachers as role models for the students to take up careers in science, technology and creative arts.

Chairman Alma Fiesta Dr. C. Bhamidipati welcomed all the members to participate wholeheartedly in the events to follow on 12th and 13th January, together with families. The inaugural session also involved the children's fest "Bachpan Ka Rangmanch". The event was held in association with Swabhiman Foundation and Akshara Foundation in which students from Arugul School, Podapada School and Khudupur School participated with enthusiasm. The award ceremony of the Children's Fest followed and up next was "Leela", the musical and dancing extravaganza which marks the first "Star Nite" of Alma Fiesta.

The vote of thanks was delivered by Dr. Ankur Gupta, vice-chairman of Alma Fiesta. The cultural performances of the inaugural session were an utter treat, as the specially-abled children and performers from the Swabhiman foundation mesmerised everyone with their brilliant performances. The performances earnt praise from the Director, the chief guest and the Deans. The performers such as the 'one-footed' Odissi dancer Padma Shri Nityananda Das and the 8 year old kid genius Asit with his flutes didn't disappoint at all, and the night ended on a high note that proved Alma is truly set to guarantee entertainment to all over the next two days.

E-SUMMIT HAS SUCCESSFULLY LAUNCHED ITS 5TH EDITION.

18th January, 2019

"E-summit'19", with the theme -'Fostering a Passel of Innovators' in the lush green campus of IIT Bhubaneswar on the evening of 18thJanuary. Prof. R. V. Raja Kumar, Director IIT Bhubaneswar, Prof. Vinay KumarNangia and Shri P. K. Mohapatra inaugurated the summit by lightening the lamp.In his address to the gathering, Prof. R. V. Raja Kumar called upon the young minds of the country to utilize the human capital to the fullest potential and thus realize Hon'ble Prime Minister Shri Narendra Modi's dream of 'Make in India'. Shri P. K. Mohapatra emphasized on the need to take up challenges and innovate in agriculture marketing field of rural India. Prof. Vinay Kumar Nangia initiated

his talk with fundamentals of entrepreneurship and shared inspiring and amusing anecdotes from his 30+ years of experience in mentoring startups. Dr. Ankur Gupta, Chairman E-Summit 2019 described about the

Entrepreneurial journey of few bright students and motivated students with his words. Dr. Srinivas Boppu, Vice-chairman of E-Summit elaborated the plethora of events and competitions in the upcoming two days. Vote of thanks was delivered by E-Summit'19 Chief coordinator, Mr. V. V. Gopinadh. The inaugural evening ended with an expo by Dr. A. P. J. Abdul Kalam Ignite award winners.

The inaugural session had an active participation from the student community of various colleges. The second day of the E-Summit initiated with the final round of Entrepreneurial ideation. The teams who qualified the first round at college level took part actively in the on-campus finale. Followed by this event, the most awaited Investors' Drivewas held. Participants presented their start up ideas to Dr. Aniruddha Malpani, Director of Malpani ventures, angel investor for frugal innovation India and Ms. Mosako Ono,founder of Mudra foundation for seed funding.An open session on career innovation and entrepreneurship was conducted by Prof. V. K.Nangia from IIT Roorkee. Other speakers include Shri Manoj Sharma, a social entrepreneur and Shri Gagan Baradia, career counsellor.

Further, the enthusiastic participants competed to showcase their knowledge of business world in the 'BizQuiz' competition. Stock wars, a simulation of real time stock market played with virtual money and stocks achieved a huge participation and attention. Keeping in view that marketing is the most desirable skill of an entrepreneur besides innovation,Digital marketing workshop was conducted by Mrs. Parijatha Rao and Mr. Vijay Raghavan. Fireside chat with Dr. Aniruddha Malpani and Ms. Mosako Ono ended the day perfectly.The day 3 took off with a workshop on 'Design thinking and Innovation' by Shri Akhilesh Desai. The second round of stock wars turned every participant into a serious virtual trader brainstorming on their investments. Followed by the stock wars, the next big competition 'IPL auction' was unveiled. The auction was no less than the real one and the participants enjoyed it to the fullest. Winners of different competitions were awarded by Prof. Saroj Kumar Nayak, Dean Faculty and Planning in the closing ceremony on the evening of 20th January after his thought provoking talk. The three days reflected the theme comprehensively.

TEDX.

27th January, 2019

TEDxIITBhubaneswar was organized on 27th January 2019, at the Community center at Argul Campus of IIT Bhubaneswar. The event was carried out in 2 sessions. The morning session started at 10:00 am with the screening of the TED talk "How great leaders inspire action" by Simon Sinek, followed with talks by

Mr. Sushant Verma-"Does Technology affect culture?"
Mr. Rohit Suraj -"Architecture: When aspirations inspire!"
Ms. Aditi Sharma - "Explore your curiosity"
In the order given above. The session concluded with the presentation of mementos to the speakers by Hon. Director Prof R.V Raja Kumar and Chairperson Wissenaire'19 Dr. Meenu Ramadas.

Evening Session started at 3:00 PM with the screening of the talk "The Dawn of the age of Holograms" by Alex Kipman. It was followed with talks by Mr. Anuj Tiwari - "Give your heart a break" and Dr. Jagdish Chaturvedi - "Art of being funny". A TEDx video was screened hereafter "The world through the eyes of a Cinematographer" by K.K Senthil Kumar. It was succeeded by the last talk of the event by Ms. Sanjana Sanghi -"Satisfaction Guaranteed".
The event concluded with the vote of thanks and presentation of mementos to the speakers of the evening session by Hon. Director Prof R.V Raja Kumar and Chairperson Wissenaire'19 Dr. Meenu Ramadas.

OPEN DAY AND EXHIBITION

12th Feb 2019

IIT Bhubaneswar organized a Grand Science & Technology Exhibition in the campus on 12th Feb 2019 on the eve of its 11th Foundation Day. The event will be open to the public. All are welcome. The timings are 9.30am to 6pm. The exhibition is being put up by the students of all Depts./Schools of IIT Bhubaneswar and more than205live exhibits and experiments will be displayed and presented, to inspire students of Universities, Engineering colleges and Schools. Students from class 5to Engineering and Postgraduate Science are likely to find the event exciting. For additional details, one may visit the web site at: http://www.iitbbs.ac.in/openday/.

The institute already received a phenomenal response from the school and colleges across the state of Odisha and the Institute is expecting a footfall of over 10,000 students and teachers on the day. Given the large number of expected visitors, the Institute has made provision for drinking water kiosks throughout the campus and will provide a simple, healthy working lunch to the visiting students in a hygienic environment. For the safety of the campus community, the visiting students and the accompanying guardians are requested not to carry any packets or bags inside the campus and certainly not to the exhibition areas. The Foundation Day programme will be inaugurated by Prof Ganeshi Lal, Hon'ble Governor of Odisha as Chief Guest at the Community Center of the Institute at 11am for the fraternity of IIT. Prof RV Raja Kumar, Director will preside over the event. The Foundation Day lecture will be delivered by Dr S Christopher, Former Chairman, Defence Research and Development Organization (DRDO). On this occasion, students, faculty and other staff of the institute who have put up outstanding performance will also be felicitated. Director Prof Raja Kumar said that the institute is keen on doing its best in inspiring the school children and university students in the region as a part of its ambitious Outreach Programme and keen on continuing the tradition of conducting the 'Open House' on the Foundation Day, which was started, last year with about 1000 school children and 100 experiments were displayed.

MATRIBHASHA DIWAS

21st Feb, 2019

Indian Institute of Technology, Bhubaneshwar celebrated the Matribhasha Diwas at its Community Center located in its sprawling Argul Campus on 21st Feb, 2019 at 4:30 PM to commemorate the International Mother Language day- a day dedicated to promote the dissemination of mother tongues and fuller awareness of linguistic and cultural traditions throughout the world and to inspire solidarity based on understanding, tolerance and dialogue.

The programme was graced by Prof. R.V. Raja Kumar, Honorable Director, IIT Bhubaneswar, Dr. Prof. Jatindra Kumar Nayak, Eminent Writer and Retired Professor in English, Utkal University, who was also the Chief Guest for the evening along with Prof. R.K. Panda, Dean, Research and Development, IIT Bhubaneshwar.

Speaking on the occasion, Prof. R.V. Rajakumar says, "Bhasha is not just a means for communicating, it has expressions of emotions, heritage and culture of the land attached to it. India is a land of rich linguistic diversity. This multilingualism is an asset we have inherited and is, in fact, a resource for each one of us. We can confidently say that all the mother tongues of this country are various expressions of a single soul and each one of us should be proud of this fact."

Mr. Jatindra Kumar Nayak addressing the audience stressed on the fact that Orrisa being the only state born out of language agitation, known for its linguistic diversity, rich culture and tribal dialects continuing since 2000 B.C (Buddhist Era) is today facing threat owing to globalization. He gave special credits to IIT-Bhubaneshwar being the premier Institutions for celebrating Matribhasa Diwas at its campus. He also emphasized the need for knowing one's Mother Tongue, feeling proud about it and promoting it from getting extinct. The programme witnessed cultural performance by students, staff and faculty members and their wards in different languages. Vote of thanks was done by the Public Relation Officer. (PRO).

NATIONAL SCIENCE DAY

28th Feb, 2019

Indian Institute of Technology Bhubaneswar celebrated the National Science Day and 9th Research Scholar Day on February 28, 2019 in order to commemorate the invention of the Raman Effect by the Indian physicist and Nobel Laureate Sir C. V. Raman. The event was comprised of a poster presentation session by the Research Scholars of the Institute held at the Institute Community Centre.

The poster presentation session was inaugurated by the Prof. R.V. Rajakumar, Honorable Director, IIT Bhubaneswar along with Dr. P.R Sahu, Dean, Academic Affairs, IIT Bhubaneswar. In the poster presentation session, the Research Scholars showcased their research findings through posters and explained their research works to all. The chief

guest for the event was Dr. P. V. Venkitakrishnan, Outstanding Scientist and Director, Capacity Building Programme Office, (CBPO), ISRO. The event was celebrated in the presence of the students, research scholars, faculty members and the functionaries of the Institute.

Speaking on the Occasion, Prof. R.V. Rajakumar, Honorable Director, IIT Bhubaneswar, says, "On this day, we need to re-dedicate ourselves to cause of science and technology helping us to shape the face of a new growing India along with betterment of mankind. At present the need of the hour is to stretch ourselves to, be somewhat more productive, come out with better science and technology creations, conscious about the need for improve upon our system, technology and have more reliable manufacturing."

Dr. P. V. Venkitakrishnan, Director, Capacity Building Programme Office, (CBPO), ISRO explained several complex aspects of science and technology lucidly and in an easy to understand manner by giving day to day life examples. He also emphasized that since India as a country has multiple dimensions in form of skilled workforce, resources, talent so having a concrete plan in place will help to retain the manpower from going out of India so that we can prevent the brain-drain from happening.

It was followed by announcement of the three best posters, as evaluated by a panel members Prof. R.K. Panda, Dean (R & D), IIT Bhubaneswar and Prof. P. V. Satyam, Institute of Physics, IIT Bhubaneswar. The prize winners were: Suman Malik from School of Electrical Sciences (1st prize), 2nd Prize was shared by Aditi Nayak, School of Basic Sciences and Pintu Prushty, School of Earth Ocean and Climate Sciences and 3rd prize too was shared by Babita Jangir, School of Earth Ocean and Climate Sciences and Shreeja Das, School of Minerals, Metallurgical and Materials Engineering. The cash prizes and certificates were awarded to the Research Scholars of these posters. The programme ended with vote of thanks to all the dignitaries, research scholars, students, staff, colleagues, security and housekeeping for their commendable support for the event.

A TWO-HOUR WORKSHOP ON THE TOPIC 'CHILD SEXUAL ABUSE' (CSA) ORGANIZED BY SCHOOL OF HUMANITIES, SOCIAL SCIENCES AND MANAGEMENT IN ASSOCIATION WITH AN NGO, MUKTHA FOUNDATION.

1st March, 2019

School of Humanities, Social Sciences and Management in association with an NGO, Muktha Foundation (Organisation committed to the prevention of interpersonal abuse and promotion of mental health), Bangalore organised a two-hour workshop on the topic 'Child Sexual Abuse' (CSA) on March 1, 2019. Muktha Foundation is led by Ashwini N.V, Founder-Director, a mental health professional who has worked for over a decade in the domain of abuse prevention and mental health promotion. The other team members who were involved in the project are Supriya Choudhary, Sruthi Chaithanya, Annette Shaju, Nupura Byramudi – All four are mental health professionals with specializations/research and training interest in Counselling Psychology, Clinical Psychology, and Mental Health Education respectively.

AWARENESS PROGRAM ON SUBSTANCE ABUSE

5thMarch, 2019

Institutions should be an exciting, enriching experience to help ensure students and their parents to choose an Institute that fosters students' academic, social development and promotes campus and community safety, so keeping in tune with the same, the Counselling Services Team, IIT Bhubaneswar had organised an Awareness Program on Substance Abuse for the student community on 05th April, 2019. The event was presided by Prof. V.R. Pedireddi, Dean of Student Affairs along with Mr. Pranit Sarma, Superitendent and Mr. Viswanath Ghosh, Narcotics Control Bureau, Bhubaneswar, Odisha. Speaking on the occasion, Prof. V.R. Pedireddi, Dean of Student Affairs says, "It is vitally important that we educate our youth about the dangers of drugs abuse, and that we provide them with the emotional support so that they do not develop the need to turn to substance use for comfort. It is also essential that parents, teachers and the youth themselves are educated about the signs and symptoms of substance abuse, so that they can identify it early on and get the affected person help as soon as possible. He also thanked the Chief Guests for taking time out to share their invaluable knowledge on such a vital topic." Mr. Pranit Sarma explained several complex aspects of substance abuse lucidly through the mode of power point presentation. He also touched upon on the different kinds of addiction along with citing the reasons such as curiosity, recreation being the main reason behind addiction. In addition, he brought into the knowledge of all present the preventive methods of tackling addiction along with showcasing the major change in the person's appearances before and after consumption of drugs. Mr. Viswanath Ghosh, explained several complex aspects of substance abuse in an easy to understand manner by quoting live examples. To arouse and ascertain the curiosity of students, he put forward a direct question to the student whether they have ever seen brown sugar by taking out small folded paper packet from his pocket to which many students showed their keen interest and eagerness. In fact the paper was empty and was done just to arouse the curiosity. He also touched on the gravity of substance abuse and its harmful effects. Both the speakers urged the students not to try drugs even for once as some narcotics and Psychotropic drugs are so powerful that they can make the person addicted in mere three doses and make them crave for the next dose by consuming it once. The session concluded with mementos being presented to the esteemed guests by Dean of Student Affairs followed by a vote of thanks to the dignitaries, students and all those present by Ms. Manisha Mishra, Counselling Psychologist. Also present at the event were Dr. Shantanu Pal, Associate Professor, Dr. Srinivas Bhaskar Karanki, Assistant Professor, School of Electrical Sciences along with Ms. Gagandeep Kaur, Clinical Psychologist.

INTERNATIONAL WOMEN'S DAY.

8th March, 2019

International Women's Day is celebrated on 8th March every year to celebrate the womanhood and is a time to reflect courage and determination by ordinary women who have played an extraordinary role in the history of their countries and communities. IIT Bhubaneswar too celebrated International Woman's day at its Community Centre located at its Argul Campus. This year's theme for International Women Day , "Think Equal, Build Smart, Innovate for Change" explores the way in which innovation can work for gender equality, boost investment in gender responsive social systems and enhance public services and infrastructure that the meets the need of women.

Speaking on the occasion Prof. R.V. Raja Kumar, Honorable Director, IIT Bhubaneswar says, "International Women's Day encourages us all to reflect on the importance of gender equality, to celebrate the successes of women, and to acknowledge the work that is still left to be done. Today fortunately the country has come up with a mechanism for rise in seats of women for education, so we look forward to have an increasing ratio of women going forward. With women being the main link for the family and connection to the community, there remains a great deal of work to be done to ensure equal rights in all aspects of life".

The Chief Guest of the evening Ms. Amrita Dash, Assistant Director, National Police Academy, Hyderabad expressed her heartiest congratulations to the students and faculties for toiling hard to reach IIT Bhubaneswar-the elite class institution of the country along with special mention to Prof. R.V. Raja Kumar, Honorable Director, IIT Bhubaneswar for his valuable guidance as a fellow teacher. She appealed to the audiences to bring the children into a genderless womanhood by breaking the stereotypes of today, ready to accept the path of change and living up with challenges every day.

The celebration was a three day affair starting from 6th March to 8th March with a series of activities ranging from debate, poetry writing on first day followed by a talk on the topic, "Handling Relationship" by Dr. Gagandeep Kaur Makar, Student Counsellor, IIT Bhubaneswar, slogan writing and quiz on the second day. The event final day witnessed the presence from Prof. R.V. Raja Kumar, Honorable Director, IIT Bhubaneswar, Chief Guest Ms. Amrita Dash, Assistant Director, NPA, Hyderabad along with Ms. Remya Neelancherry, Chairperson, Women Welfare Committee (WWC).

The event was followed by the illumination of the lamp, prize distribution, cultural programs followed by vote of thanks by student co-ordinator, WWC, IIT Bhubaneswar.

The first prize winner for poster (digital) was won by Madhukrishna Priyadarsini and Pratik Kumar Padhee being the runner up. For the short film, the first prize was won by Pathuri Jitendra Tirumala and Gopinaah Vennagiri being the runner up. The first prize for painting was won by Himani Narjinari and the runner up being Piyush Raut. For the debate, the first prize was won by Chinmay Gupta and Ajit Kumar Nayak being the runner up. For the poetry, the first prize was won by Navinya Chirmurkar and Harsh Mantri being the runner up. For Quiz, the first prize was won by Prudvi and Sarthak being the runner-up. Last but not the least, for the slogan writing, the first prize was won by Pruther and Pragna Parimita Mishra being the runner up.

PLANTATION DRIVE CARRIED OUT BY IIT BHUBANESWAR.

28th March, 2019

On the advice of Prof. R.V. Raja Kumar, Director and continuing with the tradition of eco-friendly activities for preserving the environment, IIT Bhubaneswar in association with Syndicate Bank, carried out an external plantation drive from the IIT main gate (Khudupur Square) to NISER Square, Jatni-Argul road on the 28th March, 2019. The main intention is to promote a greener ecosystem along with providing a pollution-free atmosphere to the local inhabitants.

Speaking on the occasion, Prof. R.V. Rajakumar, Honorable Director said, "With this initiative, we would like to set an example to the citizens and particularly motivate the nearby villagers to contribute to the protection of the environment as active stakeholders. We see this as a great means for all of us to give back to our mother nature by contributing to a sustainable ecosystem. We at IIT Bhubaneswar are committed towards building a green campus and have achieved a fairly good success in this endeavour, and it will continue. This initiative, I am sure would help in creating more awareness among the general public about the importance of growing trees to prevent global warming and thereby reducing pollution." Prof. Rajakumar also thanked the Syndicate Bank for joining the Initiative and shouldering the plantation.

The plantation of the trees was successfully carried out as per the said schedule. The plantation saw active participation from the Institute members, faculties and staff. Also present at the event were Mr. K.C. Tudu, Regional Manager, Syndicate Bank along with his staff members. There were 240 plants of fully grown size of 8 feet planted at an approx. cost of Rs. 2lacs (Inclusive of Plant, Labour and Transportation etc.). The total budget approved by Syndicate Bank was Rs. 2 Lacs for the initiative.

COMMUNITY SERVICE WITH A DIFFERENCE BY STUDENTS

30th March, 2019

IIT Bhubaneswar students took up a massive cleanliness drive taking inspiration from the Prime Minister's "Swacch Bharat Abhiyaan" on the behest of a proposal put forward by Prof. R.V. Rajakumar, Director, IIT Bhubaneswar at the Jatni playground and surroundings located on the Argul Jatni road. The Jatni ground has been serving as a place for mass addresses, events and festivities and has been heavily littered and strewn around with plastics posing a major health concern for the nearby residents including the commuters. This was removed by IIT students and the area was cleaned and sanitised. The cleanliness drive was carried out with vim and vigour by the NSS students of IIT Bhubaneswar.

EK BHARAT SHRESHTHA BHARAT

During April, 2018 – March, 2019

India is a unique nation, whose fabric has been woven by diverse linguistic, cultural and religious threads, held together into a composite national identity by a rich history of cultural development, coupled with a rousing freedom struggle that was built around the tenets of non-violence and justice. The spirit of mutual understanding amidst a shared history has enabled a special unity in diversity, which stands out as a tall flame of nationhood that needs to be nourished and cherished into the future.

The "Ek Bharat Shrestha Bharat (EBSB)" programme, is an idea of a sustained and structured cultural connect between denizens of different regions was mooted by Prime Minister Shri Narendra Modi during the Rashtriya Ekta Divas held on 31st October, 2015, to commemorate the birth anniversary of Sardar Vallabhbhai Patel. Hon'ble Prime Minister propounded that cultural diversity is a joy that ought to be celebrated through mutual interaction & reciprocity between people of different states and union territories so that a common spirit of understanding resonates throughout the country. All the 36 States/ union territories (UTs) in India have been sixteen paired for an entire year, during which they would carry out a structured engagement with one another in the spheres of language, literature, cuisine, festivals, cultural events, tourism etc.

Under able supervision of Director, Prof. R. V. Raja Kumar, IIT Bhubaneswar geared up fully responding to directive of MHRD for this integrative initiative to celebrate the unity in diversity of our Nation and to sustain and toughen the fabric of traditionally existing emotional bonds between the people of our country. Indian institute of Technology Bhubaneswar organized sixteen informative and cultural events for cultural exchange between the paired states and union territories in a span of one year out of which eleven events were conducted in the period of April 2018 to March 2019 in the following schedule.

Event	Date	Paired States/UTs
1	01-Apr-18	Maharashtra-Odisha
2	29-Jun-18	Goa-Jharkhand
3	05-Aug-18	Bihar-Tripura & Mizoram
4	15-Aug-18	Himachal Pradesh-Kerala
5	25-Aug-18	Uttarakhand-Karnataka
6	07-Sep-18	Uttar Pradesh-Arunachal Pradesh & Meghalaya
7	15-Sep-18	Jammu Kashmir-Tamil Nadu
8	02-Oct-18	Gujrat-Chattisgarh
9	27-Oct-18	Chandigarh- Dadra Nagar Haveli
10	10-Nov-18	Puducherry-Daman & Diu
11	10-Nov-18	Lakshadweep -Andaman & Nicobar

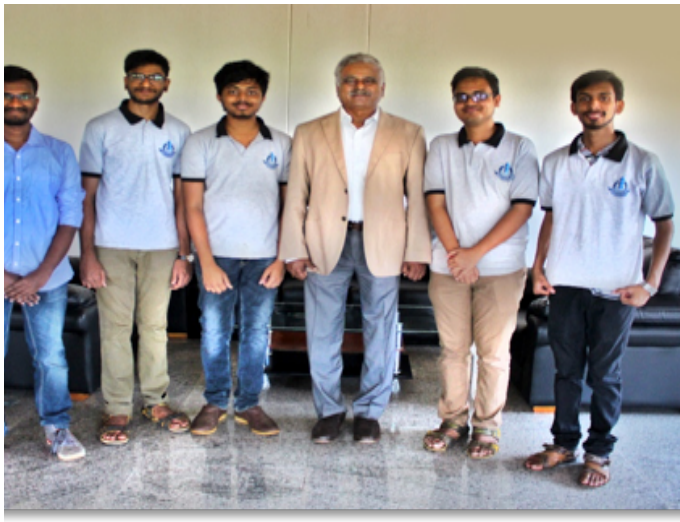
The series of events was inaugurated by honorable Director of IIT Bhubaneswar, Prof. R. V. Raja Kumar, by lighting the traditional lamp at IIT Bhubaneswar campus, Argul, Jatni. Director appreciated this initiative taken by Govt. of India under the leadership of Hon'ble Prime Minister, Shri Narendra Modiji to spread the message of unity between the people of different cultures and bring them together. He reiterated that IIT being a premier institute of the country having students, faculty and staffs from diverse culture and region will be leading to uphold the objective of EBSB by cultural exchange between people in a spirited manner. He himself was present in most of the event to encourage the participants to witness the spectacular and enthusiastic performances by the performers. These events of EBSB were coordinated by Dr. Rajesh Roshan Dash with the help of other faculty members Dr. Manaswini Behera, Dr. Sankarshan Mohapatro, Dr. Ankur Gupta, Dr. Meenu Ramadas, Dr. Sourav Sil, Dr. Yogesh G. Bhumkar and Dr. Tabrez A. Khan.

In these events, informative videos were displayed based on the music, dance, handicrafts, literature, festivals, painting, sports, sculpture, flora, fauna, etc., of the paired states and UTs in order to enable audiences learn about different cultural units across varied geographies and to imbibe the innate chord of binding and brotherhood. Students, staffs, faculty and their family members enthusiastically participated and performed many dance, song, drama, recitations, and traditional attire parades in these cultural events with an integrative content relating to the paired states and UTs. Spot quiz competitions were organized with questions based on the information on the two paired states with active participation of the audience. Photo and poster exhibitions were conducted at the venue, which showcased the culture, customs and traditions, art forms, handicrafts, cuisines of either state to impress upon the discerning audience about the inter-connectedness between the constituents of various cultures and traditions, which is so vital for the spirit of nation building. All these events, A huge audience including students, staffs, faculty members and their families were present in all these events to witness the spectacular performances and to imbibe the spirit of nationalism.

TEAM PRAJJAWALA MAKES IIT BHUBANESWAR PROUD BY WINNING THE PRESTIGIOUS NDRC NATIONAL BUDDING INNOVATORS AWARD – 2018.

27th Feb, 2019

It is indeed a matter of great honor to announce that Team Prajjawala students of IIT Bhubaneswar led by Rahul Kumar (CSE, 3rd Year), Rahul Mahanot (ECE, 3rd Year), Rishwanth K (ME, 3rd Year) and Deepak K (ME, 3rd Year) have won the prestigious NRDC National Budding Innovators Award - 2018 for their invention "Internet of Things and Data Analytics based Price Fragmentation, Pay-As-You-Use and Supply Chain Automation and Optimization in LPG Distribution System". This is the second consecutive time IIT Bhubaneswar has won this National Award under the valuable guidance of Prof. R.V. Raja Kumar, Honorable Director, IIT Bhubaneswar and mentoring by their experienced faculty. The award is likely to be presented on 11th May, 2019 on the occasion of National Technology Day at Vigyan Bhawan, New Delhi by NRDC.



Speaking on the happy occasion, Prof. RV Raja Kumar says, "It's a matter of great pride for all of us at IIT Bhubaneswar to have won the NRDC National Budding Innovators Award second time in a row. I would take this opportunity specially to congratulate these budding technocrats of tomorrow for this incredible feat, I am sure this is just the beginning and there is more to follow."

"Under this project, the students have developed IOT sensory attachment to gas cylinder which can intimate about the gas status in a cylinder online so that the gas filling can be made well organized. So this attachment can help ambitious govt. schemes like Pradhan Mantri Ujjwala Yojana to be very effective especially in rural areas. The impact of this solution on the energy and utilities sector will be significant since this is a new realm of data that gives flexibility and transparency to measure their usage and plan their consumption." Team Prajjawala and the project have already been registered as Project Prajjawala under Design Innovation Centre (DIC), IIT Bhubaneswar and continuously supported with facilities to develop the Proof of Concept (PoC) along with mentoring and guidance as and when required.

Previous year, Nitheesh Kumar P (B.Tech, ME, Final Year) and Vikas Sharma (M. Tech, ME (MSD), and Alumni) had won the prestigious NRDC National Budding Innovators Award - 2017 for their invention "Development of FRP Repair Methodologies for rehabilitation of Corroded and Leaking Oil and Gas Pipelines".

IIT BHUBANESWAR STUDENTS SECURE THE FIRST AND THIRD PRIZE AT SMART HACKATHON 2019

27th Feb, 2019

Smart India Hackathon 2019 is a unique initiative to identify new and disruptive digital technology innovations for solving the challenges faced by our country. It is a part of Shri. Narendra Modi's Digital India initiative and was launched on November 9, 2016. It is a non-stop digital product development competition, where problems are posed to technology students for innovative solutions.

There were in total 22 teams who participated in the initial round, out of which 4 teams got shortlisted for the final round of Hackathon that lasted non-stop development of project for 36 hours.

This is indeed a proud moment for each one at IIT Bhubaneswar. Prof. R V Raja Kumar, Director complemented the teams for the first and third prizes and for reaching finals, and wished that participation and winning becomes a practice at the institute. The Director re-iterates that each faculty member of the institute should strive to foster innovative thinking and creativity amongst students, in class rooms, laboratories and beyond.

The first prize was awarded for a problem statement given by CISCO under Smart Communication theme to Swayam Sevak headed Champions-Sam, IIT Bhubaneswar (Aman Pratap Singh, Aditya Pal, Meghna Saha, Saksham Arneja, Madhav Tummala, Ankur Jaiswal) mentored by Dr. Joy Chandra Mukherjee. The third prize was awarded for problem statement given by AICTE under Smart Communication theme to Team Prajjwala (Rahul Kumar, Rahul Mahanot, Avani Patidar, Mantri Harsh Rakesh, Muthaluru Chaitanya Shiva Kumar Reddy, Mrudhul Guda) mentored by Mohnish Chaterjee. The other two teams Machalli Eleven 360 and Skywalkers from IIT Bhubaneswar made it to the final round of the competition for other problem statements.

The inquiry window at public places (Railway Stations, Hospitals etc.) is usually a victim of bad user experience due to large queues. To counter such issues, Team Champions_Sam developed a solution using technologies like Natural Language Processing and web RTC that can be used to manage public announcements in a physical space and can provide necessary information related to that public place by its easy to use user interface and features.

Under this project, Team Prajjawala have developed IOT sensory attachment to gas cylinder which can intimate about the gas status in a cylinder online so that the gas filling can be made well organized. So this attachment can help ambitious govt. schemes like Pradhan Mantri Ujjwala Yojana to be very effective especially in rural areas. The impact of this solution on the energy and utilities sector will be significant since this is a new realm of data that gives flexibility and transparency to measure their usage and plan their consumption.

NSS ACTIVITIES

The National Service Scheme (NSS) is introduced under the Extra Academic activities (EAA) in the academic year 2017-18. The first-year students of B. Tech and Dual Degree curriculum who opted for NSS under EAA will be given 1-credit semester-wise with the credit structure L-T-P: 0-0-3.

No. of NSS Volunteers: 100 (Male-90, Female-10), {GEN-46, OBC-32, SC-15, ST-7}

Sl. No.	Activities	No. Of Times Conducted
1.	Plantation	01
2.	Shramadaan &	02
3.	Awareness Programme	-
4.	Blood donation camp	07
5	Self-defence training	
6.	Swachha Bharat mission/ Cleaning Campus	01
7.	Health Camp	06
8.	Under privileged child education	01
9.	Rural development programme (General awareness and Sanitation)	02
10.	Program on National Integration	01
	Program on Peace and Harmony	

As per the requirement in different categories, the student volunteers are divided in three different subgroups and each group will be assigned to a faculty coordinator:

Brief report on NSS activities at IIT Bhubaneswar (Autumn Semester, 2018-19):

The NSS activities for current academic semester (Autumn, 2018-19) started with the welcome address by NSS programme officer and NSS team members from the 2nd year students on 12th of August, 2018. The details regarding the plan for the current semester were discussed with the new NSS volunteers. As per the schedule, NSS volunteers participated in plantation program at Kansapada village on 15th of August, 2018, organized by our UBA team member. Approximately, sixty NSS volunteers participated in the plantation program.







NSS unit of IIT Bhubaneswar actively participated on the Swachha Bharat Mission and spread the message of cleanliness from IIT campus to different adopted villages. In the current academic semester, the swachhta program was conducted five times and four times it was conducted in our campus including the entire stretch from School of Mechanical and Infrastructure, near the LBC and SBS building, electrical and the hostels of MHR and SHR.

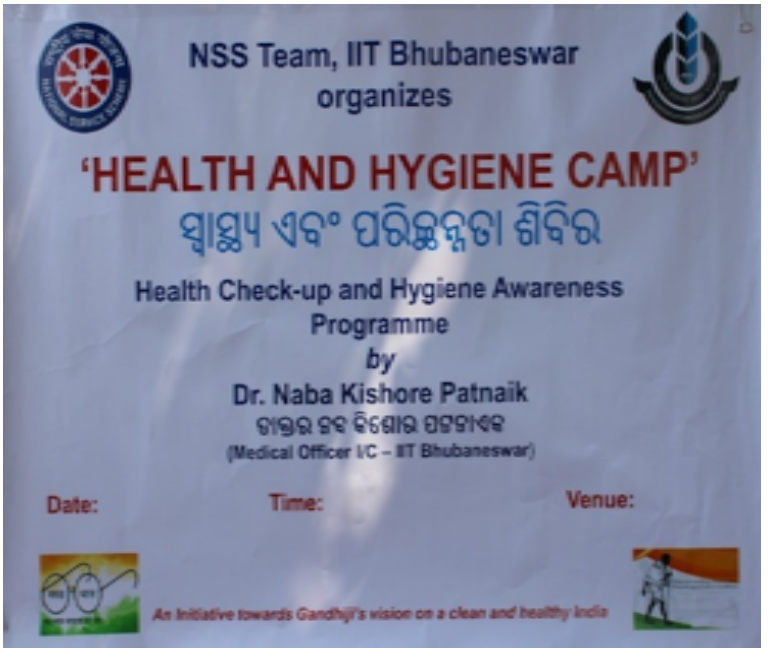
A team of 100 NSS volunteers on 2nd October, participated in Swachhata mission to clean the school campus at Podapada and also some area of the village near to the school ground with the idea to spread this awareness campaign to the villagers. The youth club at Podopada village also participated in this swachhata program.

The self-defence training program was organized four times on 2nd and 9th September and 4th and 11th of November with the help of 'Balaram defence school', Sailashree Vihar, Bhubaneswar. NSS volunteers, including all 1st year girl students (B.Tech), honed their skills under the supervision of the self-defence trainer, Mr. Balaram Naik, during the training session. The volunteers are hopeful to conduct such self-defence training programmes in the schools of our adopted villages.

Beside our regular NSS activities, we have also given emphasis particularly on "Laboratory practices in school of our adopted villages". Total 30 NSS volunteers joined in teaching team under the guidance of Dr. S. Bahinipati and visited regularly all schools in five adopted villages (Arugul, Khudupur, Podupada, Kansapada and Padanpur) with an agenda to impart English communication skills to the school students and help to build science laboratory in these schools.

The NSS teaching team members in association with the Unnat Bharat Abhiyan team members have completed the establishment of the science laboratories in the village schools of Podapada and Padanpur. Besides this, the students have identified topics/subjects where the school children require little extra help and have taught those subjects such as Hindi, Sanskrit, and Science and so on.

In addition, NSS also organised a painting competition amongst the school children of Padanpur Upper Primary school on November 10, 2018. The themes for the competition were "Swachh Bharat: Cleanliness is Godliness", "Unity is strength" and "My village, my home". The kids participated in this event enthusiastically. Prizes were awarded to the winners and consolation prizes were also distributed.



The NSS unit and Souls for Solace (student's social welfare society) of IIT Bhubaneswar organized a Health and Hygiene camp on 2nd October, 2018 at Podupada school ground. The Health check-up camp was organized by the medical team of IIT Bhubaneswar comprising of our senior medical officer Dr. N.K Patnaik and one staff member, Mr. Basant.

In this process our team helped approximately one hundred twenty (120) villagers to discuss their health issues and gave suggestions regarding their needs and share information. Approximately, 130 members from 'NSS Unit and Souls for Solace' of IIT Bhubaneswar enthusiastically participated as volunteers in this event.

The NSS volunteers of IIT Bhubaneswar participated in the Unity run program conducted by Gymkhana IIT Bhubaneswar on 4th of November and also conducted a 'Cycle Rally' on 17th of November, on the National Integration and 'Peace and Harmony' campaign as a mark of their responsibility on the societal issues. After the cycle rally, all the volunteers participated in a group discussion session on the issues of National integration, Peace and harmony and swachhata mission. All the NSS volunteers believed that IIT Bhubaneswar will play a greater role in these issues by organizing general awareness program and performing nukkad acts in different adopted villages and schools.

NSS unit of IIT Bhubaneswar, organized a cultural program at Khudupur Upper Primary school on February 8th, 2019. The cultural program included the events like, drawing & painting, essay writing, debate and 'music, dance and drama'. The themes for the competition were "Swachh Bharat: Cleanliness is Godliness", "Unity is strength" and "My village, my home". The kids participated in this event enthusiastically. Prizes were awarded to the winners and consolation prizes were also distributed to all participants.

Community Service at Jatni Cricket ground on 10th of February: NSS unit of IIT Bhubaneswar conducted the awareness program on Swachha Bharat Mission and spread the message of cleanliness from IIT campus to NISER chak. A team of 84 NSS volunteers participated in Swachhata mission and clean the Jatni cricket ground near NISER Chak, Jatni

Self-defense training program is organized on 3rd and 24th of March, and on 7th of April with the help of Balaram Defense School, Sailashree Vihar, Bhubaneswar. Total 120 students were participated on that program (including 35 girl students).At the end, we, the NSS volunteers, need your support to carry forward these activities.

NSS ACTIVITIES

The National Service Scheme (NSS) is introduced under the Extra Academic activities (EAA) in the academic year 2017-18. The first-year students of B. Tech and Dual Degree curriculum who opted for NSS under EAA will be given 1-credit semester-wise with the credit structure L-T-P: 0-0-3.

No. of NSS Volunteers: 100 (Male-90, Female-10), {GEN-46, OBC-32, SC-15, ST-7}

Sl. No.	**Activities for Autumn Semester, 2018-19**	**Approximately, 60 NSS volunteers participated in plantation program on 15th of August, at Kansapada village.**
1.	Plantation	Approximately, 60 NSS volunteers participated in plantation program on 15th of August, at Kansapada village.
2.	Swachha Bharat mission in	Approximately, 70 NSS volunteers participated in the Cleaning mission as a general awareness program. 18th and 25th August, 16th Sept., 27th October, 2018 20th January, 2019, 17th March, 2019 and 2nd October, 2018 10th February, 2019 (A group of 84 NSS volunteers participated in cleaning mission at Jatni cricket ground))
3.	Campus & Adopted villages, Podupada Community Service at Jatni Cricket ground	Self-defence training program was organized on 2nd and 9th September, 4th and 11th of November, 2018 3rd &24th of March, 2019, 7th April, 2019 With the help of 'Balaram Defence School', Sailashree Vihar, Bhubaneswar.
4.	Self-defense training	30 NSS volunteers under the guidance of Dr. S. Bahinipati visited schools in our adopted villages (Saturday). Conducted cultural events on awareness programme: 10th November, 2018 (Padanpur school) and 8th February of 2019 (Khudupur school)
5.	Laboratory practices and teaching at school in adopted villages (Arugul, Khudupur, Podupada, Kansapada and Padanpur)	NSS volunteers organized Health and hygiene campaign on 2nd of October, 2018 at Podupada school ground
6.	Rural development programme (Socio-economic survey, general awareness and Sanitation)	The NSS unit and student's social welfare society of IIT Bhubaneswar organized Health check-up camp. The medical team of IIT Bhubaneswar comprises Senior medical officer Dr. N.K. Patnaik and medical staff Mr. Basant help to check-up the health of 120 villagers on 2nd of October, 2018.
7.	Health Check-up camp	NSS team, IITBBS organised a painting competition amongst the school children of Padanpur Upper Primary school on November 10, 2018. The themes for the competition were "Swachh Bharat: Cleanliness is Godliness", "Unity is strength" and "My village, my home".
8.	Painting competition amongst the school children	The NSS volunteers of IIT Bhubaneswar participated in the 'Peace and Harmony' program and organized a 'Cycle Rally' on 17th November as a mark of their responsibility on the societal issues.
9.	Program on Peace and Harmony, and National Integration.	Trekking to Barunei Hill, conducted on 27th of January, 2019. Total 92 volunteers participated on that event.

UNNAT BHARAT ABHIYAN REPORT

Brief report on NSS activities at IIT Bhubaneswar (Autumn Semester, 2018-19):

Unnat Bharat Abhiyan (UBA) team organized a visit to the B.Tech Physics and Chemistry laboratories in School of Basic Sciences (SBS) and laboratories in School of Earth, Ocean and Climate Sciences (SEOCS) on December 12, 2018 between 10:30 am to 1:00 p.m. for Class VII, VIII students of Padanpur and Podapoda Upper Primary schools. Padanpur and Podapoda are two of the villages adopted by our institute under UBA, the others being Arugul, Khudupur, Kansapada and Sunduria. The students, accompanied with their teachers visited us. Similar visit was also organised on February 2, 2019 between 10:30 am to 1:00 p.m for Class IX Students of Arugul High School. Around 90 of students visited us accompanied with their teachers.

Dring these visits, physics and chemistry experiments were demonstrated. Students participated in the experiments as well. The SEOCS students demonstrated fossils and discussed their properties, and made poster presentations on topics such as remote sensing, solar system. Maths quiz and interesting physics class were also included for the High School students. Light refreshment was arranged for our young guests and their teachers. The students enjoyed the visits to our campus thoroughly. In future, we plan to conduct similar visits to other laboratories in our institute, including SBS and SEOCS laboratories.

Assessment of requirements in Sunduria village:

One of our core team members visited Sunduria village in February, 2019 to assess the requirements of the village school and the village as well. Our goal was to identify the areas where our team can help improve the quality of teaching and living conditions in the village. A detailed plan is being chalked out for the UBA team to visit the village in association with NSS team in the coming session.

Weekly Programs

Weekly visits were carried out by the UBA core team members to the science laboratories established in Arugul, Khudupur, Podapada and Padanpur villages to ensure participation of the students in the science laboratories. The core team has prepared a roster sheet for the students for conducting the experiments.

In addition, weekly visits are being undertaken by the student members of the group in collaboration with the core team to Khudupur village since January this year. During these visits, we are conducting "Sanskar barg", primarily for school-going children. This is a programme that aims at overall development of children - physical, emotional, social and spiritual. The main ingredients are practice of yoga, innovative games, songs, storytelling and other engaging activities.

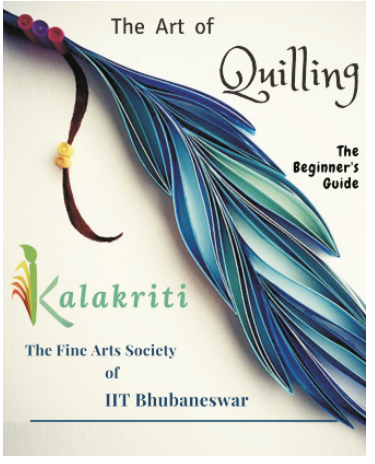
Average attendance in the weekly programs was around 15. This program is being carried out with guidance from Vivekananda Kendra, Kanyakumari (Bhubaneswar branch). The kids are given tasks, which they carried out enthusiastically. Home tasks are also given and done enthusiastically by the children. The participation of the kids has been excellent and it has further encouraged our team to improve these efforts.

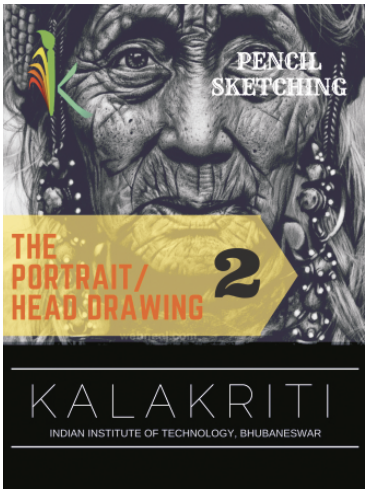
STUDENT'S ACTIVITIES

SOCIO -CULTURAL COUNCIL

Kalakriti: Fine Arts Society

- Kalakriti released its e-magazine "ARTFOLIO" throughout the year, in every issue of ARTFOLIO we introduced to the student community a different form of art.
- Kalakriti organised a texture painting event for its members on September 2nd.
- A workshop on Pencil Sketching was also organised for society members on September 9th.
- Various paintings were done by society members on the occasion of 150th Mahatma Gandhi Anniversary.
- Mahanadi Hall of Residence was decorated for pre-convocation events.
- Kalakriti organised a visit to Sudarshan Art Gallery in Bhubaneswar to introduce to the society members the "Art of Stone Carving".
- Kalakriti participated in EBSB events for various sketching and painting competitions.
- Kalakriti organised competitions on RashtriyaEkta Divas which included sketching competition, painting competition and a face painting event.
- Kalakriti organised the Diwali celebrations in Community Centre on 7th November.
- Various competitions were organised on the occasion of Diwali along with the Children fest for kids of faculty members.
- Kalakriti participated in Inter IIT cultural meet held at IIT Roorkee with contingent size of 6 and ranked 3rd in Charcoal Sketching, 4th in live sketching and 4th in Canvas Painting.
- Kalakriti also actively participated in various fine arts events held during Alma Fiesta and secured good positions in all the events.
- Kalakriti organised a visit to the "Art Fair" in Bhubaneswar to introduce to the society members the various arts that are associated with Odisha state. Society members were introduced to various artnforms like the "Pattachitra", "Clay modelling", "Pottery" etc.
- Kalakriti participated in Poster making competition held on the occasion of Women's Day.





ACHIEVEMENTS:

1. 3RD INTER IIT CULTURAL MEET (DECEMBER 2018)

- Kalakriti won 3rd position in Charcoal Art at 3rd Inter IIT cultural meet.
- Kalakriti won 4th position in Canvas Painting at 3rd Inter IIT cultural meet.
- Kalakriti won 4th position in Sketching at 3rd Inter IIT cultural meet.

2. ALMA FIESTA 2019:

- Kalakriti won 1st position in Shades at Alma Fiesta, annual cultural fest of IIT Bhubaneswar.
- Kalakriti won 2nd position in Face Painting at Alma Fiesta, annual cultural fest of IIT Bhubaneswar.
- Kalakriti won 2nd position in Poster Making Competition held on women's day

FOURTH WALL: THE DRAMATICS SOCIETY

- The society was introduced to freshers by a NukkadNatak on the occasion of Independence Day (15/08/18).
- Inductions for freshers were held on 1st September, 2018.A stage play was performed bysociety members based upon the life of Gandhi Ji on the occasion of his 150thbirth anniversary.
- Some members of the society participated in EBSB events.
- A stage play performance was put up by the society on the occasion of Diwali.
- The society participated in 3rd Inter IIT Cultural Meet from 28th to 31st of December, 2018 achieving 9th position in both Stage Play and Mono act competitions.
- Society members participated in competitions organised by Alma Fiesta securing 3rd position in mono act.
- A stage play was performed by the society members on the occasion of Foundation Day (12/02/19).
- Trailers were launched before some productions.

CINEWAVE: THE CINEMATICS SOCIETY

- We conducted workshops on editing software for the freshers which got an overwhelming response.
- A workshop was also done for the newly inducted cinewave members on cinematography techniques.
- All the event coverage was made by cinewave during ALMA'19, E-SUMMIT'19, and WISSENAIRE'19 and also for institute events like OPEN DAY, EK BHARAT SRESTHA BHARAT and for INDEPENDENCE DAY, REPUBLIC DAY etc.
- We also cooperated for other societies like D-GANG, THE FOURTH WALL, and AAROH for their coverage and gave them the edited videos to post in the social media.
- The required equipment was granted by the Students' Gymkhana, which will surely improve the quality of works to be done in the upcoming years.
- Script Writing and Toast & Roast competitions were organized and conducted by cinewave on the name of cultural week.
- We helped our new team members in all aspects like editing, cinematography to increase the perfection and quality of work.
- Cinewave participated in many other competitions across India and made great achievements which increased fame of the institute in film making.
- We made short films THE DEVIL'S APPRENTICE, CALL @11 PM etc. and got a great response from the viewers. Annual Report 2018-19

ACHIEVEMENTS:

1. **2nd position-51 hours short film making, Inter IIT Cultural Meet 2018.** COLD WAR-The battle between a people's inner-self and cold.
2. **2nd position-TAKE TWO in FMC Weekend, IIT Varanasi.** SCHIZO-A film on a mental disorder, chizophrenia.
3. **6th position-Script Writing competition, Inter IIT Cultural Meet 2018.**
4. **10th position-Online short film making, Inter IIT Cultural Meet 2018.** REVERIE-Story behind a person who wants to invent a machine which reads thoughts and feelings
5. **1st position-Advertorial, E-Summit IIT Bhubaneswar.** HOG RIDER-Advertisement made on use of condoms for safety.
6. **1st position-short film making competition, WGC IIT Bhubaneswar.** VIRGO-Inspiring stories of three women who were looked down.
7. **A short film selected for AAINA film festival national top 20.**

Literary Society

PANACEA

- The introduction of the English Literary Society was the first ever event conducted by the society which included interesting events and competitions. The students participated actively and learnt about the nature of the society.
- The inductions as usual were held in 3 stages, group discussion, article writing and personal interview. Out of 60 students who attended the inductions, 9 of them were inducted.
- The Model United Nations Conference was held on the occasion of Alma Fiesta'19 which around 120 students from various institutes in and around Bhubaneswar participated. All the newly inducted members were also amongst the participants.
- The members of the society hosted various institute events including few of the EK Bharat Shrestha Bharath, Unity Day, and 150th Birth Anniversary of Mahatma Gandhi etc.
- Most of the institute events and other important happenings were covered by the members of the society and were reported including the Open Day, Diwali Celebrations, and 150th Birth Anniversary of Mahatma Gandhi etc.
- In-house literary events on the occasion of Diwali, Education day and Cultural week were held for the various members of the institute.
- A workshop was held on the Rules of Procedures of an MUN.
- An in-house MUN was also held where more than 20 members participated enthusiastically.
- Participated in various competitions outside the institute including AIIMS Chaisma, IIIT BBS Ingenium, SSU MUN, VSSUT MUN, SOA MUN, IIIT BBS MUN and NIST MUN. The members of the society have won awardees in all the competitions they participated.

Achievements

SOA MUN

1. Nawaz won a special mention.

IIIT BBS MUN:

1. Ritik Roy won a verbal mention.

IIT BBS MUN:

1. Dhruv Ray and Ritik Roy won a High Commendation award in UNCSW.
2. Nawaz won a High Commendation award in SOCHUM.
3. Abhishek Mishra won a special mention in DISEC.

INTER IIT CULT MEET:

1. Saurabh, Harsh Mantri, Chinmay, Chirag, Aditya Pal and Pullak secured the 6th place in word games.
2. Vedant Kumar secured the 13th position in English Poetry Slam.
3. ShobhitSahoo, Saurabh, Aditya Pal, Pullak, Chirag secured the 15th position in the Parliamentary Debate.
4. Chinmay won the 20th position in Stand Up comedy.
5. Harsh Mantri won the 11th position in Online English Creative writing.

IIT BBS INGENIUM:

1. Debate Competition: Ritik Roy secured the 1st position and Shobith Sahoo secured the 3rd position.
2. Poetry Slam: Vedanth secured the 1st position.
3. InterTrade: Ritik Roy and his team secured the 2nd position.
4. Ultimate Literati: Ritik Roy secured the 1st position.
5. Aircrash: Ritik Roy secured the 3rd position.

AIIMS CHIASMA:

1. Vedant Kumar secured the first position in English Poetry Slam.

SSU MUN:

1. SaiPrasath and Aditya Nayak won the Best Delegate award in UN ECOSOC.
2. ShobhitSahoo and Abhishek Mishra won the High Commendation award in UN ECOSOC.
3. Ritik Roy and Nawaz won the Merit of the Leadership award in UNHRC.
4. Siddharth and Saurabh won the Honorary Mention in UNODC.

VSSUT MUN:

1. Anish Reddy won a High Commendation at IOM.
2. SaiPrasath and Siddharth won a special mention at IOM.

NITR MUN:
1. Ritik Roy won a High Commendation in UNHRC.
2. Siddharth won a special mention in UNODC.
3. Anish Reddy won an honourable mention in UNODC.

ABHIVYAKTI

- The society introductions were held on 15th August, where the members of the society introduced it to the first years as well small events were organised.
- The annual Hindi pakhwada was organised in the month of September from 1st to 14th. This year was marked by enthusiastic participation and great involvement of the students from our institute as well as students from outside colleges who participated in great numbers. Around 120 students from 10 different colleges participated in the competitions.
- On the occasion of Independence Day, an online writing competition yaadvatanki was organised for the members of the institute.
- During Alma fiesta, a poetry slam competition was organized. More than 30 students participated in the event.
- Participated regularly in the Ek Bharat Shreshta Bharat programmes organised by the institute.
- Two competitions, a Hindi debate and an online creative writing competition were held on the occasion of the cultural week.
- In inter IIT cult meet, secured 11th position in poetry recitation and 7th and 12th in online story writing
- In Chiasma cultural fest of AIIMS, members of our society participated and come up with 1st position in hindi category.
- Organized Kavyanjali, a poetry conclave, for the first time in our institute. It was a great success with over 60 poets gracing the occasion.

Quiz Club

Quiz Sessions:

- Quiz sessions were conducted for the quiz club members, in which one of the members would prepare a question, set and host a quiz for the rest of the members. In the end, scores would be tallied and the winnerwould be declared.
- The inductions for the juniors were also conducted as a session.

Conducting Quizzes:

- The club has conducted quizzes for Ek Bharat Sreshtha Bharat, Wissenaire, ESummit and Republic Day.
- A Biz Quiz was conducted for E-Summit and a Sci-Tech + Biz Quiz was conducted for Wissenaire, in which teams from campuses in Bhubaneswar participated.
- The club also organised Sports and General Quizzes as a part of Amusia '19, the series of cultural events organised by the Socio-Cultural Council of IIT Bhubaneswar, which saw commendable participation from the student community.

Participating in Quiz Competitions:

- The Quiz Club members have participated in quiz competitions conducted in and around Bhubaneswar.
- Pritom Sarma and Sarthak Patnaik won the 3rd prize in Aurobindo Memorial General Quiz at Silicon Institute of Technology.
- Pritom Sarma was a semi-finalist at the SBI Yono Quiz.
- Amal Mathew James and PritomSarma secured 3rd place in the Enigma Quiz conducted by BITS Hyderabad at IIIT Bhubaneswar. SarthakPatnaik secured 5th place in the same.
- Sarthak Patnaik finished 4th in the IIIT Quiz Fest. He also secured a rank of 1422 in the World Quizzing Championship.
- In the Movie Quiz conducted by Film Screening Society of Bhubaneswar, PritomSarma finished 4th and Sarthak Patnaik finished 7th. Participation in Inter-IIT Cult 2018:
- The Quiz Clubrepresented I IT Bhubaneswar in the Inter IIT Cultural Meet 2018 held at IIT Roorkee and was ranked 10th amongst all the IITs. This included 6th place finishes in the Business, MELA and General Quizzes.

D-Gang: Dance Society

- Independence Day/ Dance society introduction (15-08- 2018): Dance Society through variety of collection of songs performed various styles of dance like Indian classical, hip- hop, popping, Bollywood
- Dance Workshop: Dance Society conducted a workshop (25-08- 2018) for the students in order to encourage them to learn and discover their dancing skills.
- Dance Inductions: On 2nd September 2018, Dance Society took auditions for the students who are interested to join the dance society.
- In this year 2018-19, D-Gang has seen active participation from both Under-Graduates as well as Post-Graduates.
- This year we had a choreographer for inter IIT practice and a trolly type speaker was brought with the help of gymkhana so that we never had a problem to practice at any place.
- Diwali productions: The Dance Society gave their Diwali productions (10-11-2018)and gave an a s toni shing 20 minutes performance with many songs that included solos, duets and group dances of hip-hop, top-rock, popping, classical and many different styles.
- Participation In Various Competitions: The Dance Society performed in the ALMA Fiesta (12-01-2019), Spring Fest (Cultural fest of IIT Kharagpur,2019) in group dance competition, at AIIMS college in group dance competition and in Chaisma Fest in IIIT Bhubaneswar
- Participation in Inter IIT Cultural Meet: The Dance Society was participated in Cult Meet held at IIT Roorkee 2018 in Group dance and in Do-It Competitions.
- Foundation Day: On the eve of Institute's Foundation day, 'D-Gang' performed various styles of dance and with many solo performances.
- Spring Productions (07/04/2019): The spring productions of dance society were really the best of this year and it was around 45 minutes of performance in which various styles were included.

Dance Society Achievements:

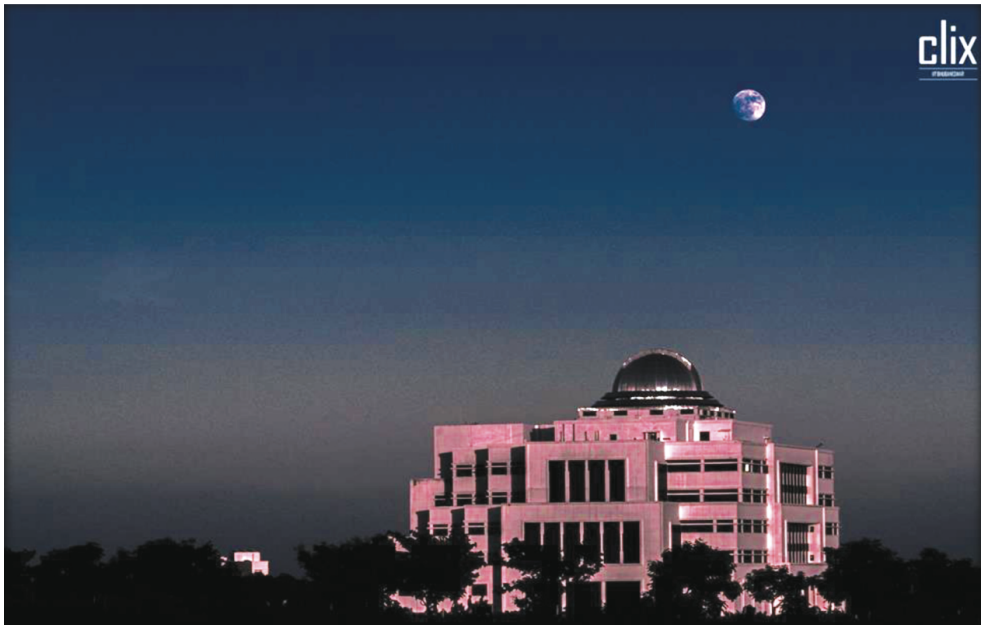
1. Dance society secured 3rd position among 15 participating teams in the group dance competition in Advaita, cultural fest of IIIT Bhubaneswar.
2. Dance society also participated in Chaisma, the cultural fest of AIIMS Bhubaneswar in a group dance event and secured 3rd position.
3. Dance Society secured 5th place in group dance and 8th, 10th position in duet dance among 22 entries in Spring Fest IIT Kharagpur.

Aaroh Music Society

- The Music Society has performed on various occasions like Independence Day and Republic Day presenting the National Anthem, National Song and other patriotic songs.
- The Music Society Introduction on 15.08.18 was as beautiful as a spectacular painting. It was a vocal and instrumental master class and left everyone in the audience shouting "Once More!".
- The Music Society conducted its auditions on (19-08-18) : In this year 2018-19, Aaroh has seen active participation from both Under-Graduates as well as Post- Graduates. 3 new Ph.D. members have been inducted along with 2 M. Tech members and 9 B. Tech members, all of whom have been inducted purely on the basis of their skills and will to learn and work hard. All members have worked actively for the society. Out of the 14 newly inducted members, 4 even had the chance to perform at the Inter IIT Cultural Meet 2018.
- Teachers' Day (05/09/2018): As a token of gratitude to the teachers, Aaroh, the Music Society put up some performances on the occasion of Teachers' Day.
- Autumn Music Productions: On 11th November 2018, Aaroh conducted its Autumn Productions.
- Inter IIT Cultural Meet 2018: This was the second time our college participated at Inter IIT cultural meet held at IIT Roorkee..
- Foundation Day: Foundation Day was the perfect opportunity for all the members to showcase their full potential, and they set the stage on fire with wonderful presentation.
- Spring Productions 2019 (06/04/2019): Beautiful performances were produced by members of Aaroh. On 6th April, the Music Society of IIT Bhubaneswar conducted its Spring Productions. There was a huge turnout of people to cheer for the final year students and it would be an understatement to say that the event was a success.

Achievements

1. Music society secured 2nd position among 16 participating bands in the acoustic band Annual Report 2018-19 IIT Bhubaneswar competition in Advaita, cultural fest of IIIT Bhubaneswar.
2. Music society also participated in Chaisma, the cultural fest of AIIMS Bhubaneswar in Band Competition and secured 5th position.
3. Secured 6th and 9th positions in solo singing and 8th position in Pair on Stage in Inter IIT Cultural meet.



Events Report
Continuous Events:
1) Development of photographic skills: All round the year the photographic skills of the fresher's was aimed to be improved. Continuous practicing was done by fresher's with the help of senior members.

2) Event Coverage:
All round the year, various events were covered by the members of the CLIX society, likeebsb's , seminars , cultural performances, etc.

3)Inter IIT Preparations: Inter IIT preparation was carried out all throughout the year.

4)Participations in Online Photography Competitions:
Participation was done in various photography competitions from different colleges like IIT's, NIT's, BITS, etc.

5)An active closed facebookgroup:
The closed group of Clix on Facebook was very much active and a lot of pictures were posted on the group by both freshers and seniors and post-graduate people.

Date Specific events:
1) Photography Competition An online photography competition was organized on the world photography day, 19th of August. The winners were Addanki Sretej and Varun Chilla.

2) Inductions- Picture Hunt:

An online photography competition was organized for inducting the freshers into the society.

3) Basic Photography Workshop:

A basic photography workshop was organized for the newly inducted members of the society on 15/09/2019.

4) Theme of Fortnight:

Theme of Fortnight competition was organized (September-December) in which freshers have to submit a photograph according to the theme of that particular fortnight. The results were declared after each fortnight.

5) Photowalk-BaruneiHills:

A photowalk was conducted to Barunei Hills on 27/10/2019 to teach freshers different themes in photography

6) Winter Photography Assignment

Freshers were given the winter photography assignment which consisted of 5 themes. They had to submit pictures pertaining to each theme.

7) Fests Coverage

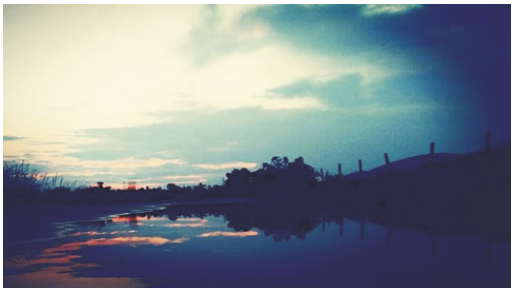
During the month of January-February all the 3 fests (Alma Fiesta, Wissenaire, E- Summit) were covered by CLIX.

8) Light room Workshop:

A workshop on photo editing on light room was conducted on 10/03/2019 to teach freshers advanced photo editing.

9) Pixathon:

An online photography competition was organized during the innovation challenge. The theme was college life.



ACHIEVEMENTS :

1) Springfest IIT KGP 2018- 2nd position-RamitAshutoshMacchan

2) Inter IIT Cult Meet 2017- 3rd position-Clix

3) Meraz IIT Bhillai 2018-2nd position -Nikhil Yerra

4) Fotomela 2019 IIT ISM Dhanbad- Photo featured- Nikhil Yerra, AnirudhManikonda

5) Oasis 2019 BITS Goa- Photograph featured in 2nd Round-Ayush Mani Chaudhary

6) Pixathon IIT BBS 2019- 1st position Rahul Rajeev, 2nd position Shivam Kumar, 3rd position GuntupalliKartheek.

7) NIT Surathkal Expose 2019- 2nd Position-NIkhilYerra

TECHNICAL COUNCIL

Nakshatra - Astronomy Society

- A monthly newsletter was launched in October 2018, and since then, the online version is made available to every student.
- Nakshatra participated in the Case Study event at National Students' Space Challenge, IIT Kharagpur, 2018 and secured 4th position out of total 13 teams.

Qualified as one of the 6 teams in India in the online first round of Quiz 2.0 competition in National Students' Space Challenge and thus participated in the second round of the quiz challenge which took place at IIT Kharagpur.

(Full Moon as seen through Celestron Telescope (owned by Nakshatra) on 28.08.2018)

- Observation of the Moon on the Full Moon day was done and pictures of the Moon were taken using the Telescope.
- Case Study Innovation Challenge, Date: 17.03.2019
- Nakshatra organized two competitions (Case Study and Star Cluster Analysis) as a part of the Innovation Challenge'19.
- Regular posts on social media platforms such as Facebook made the students aware of the latest astronomical news and various facts.
- Two workshops were organized for the first year students covering the practical as well as theoretical aspects of astronomy.
- Regular meetings (among the society members) for discussion over various topics such as Asterisms, Cosmic Microwave Background Radiation, Friedmann equations, etc were conducted.
- Quiz competitions were also organized within the society to enhance knowledge in the domain of cosmology

NEUROMANCERS :

It was a very successful year for the programming society in terms of achievements and accolades. The various activities taken by the society were:

- Necromancers Summer of Code was conducted during the summer break where Students were encouraged to learn and were guided too. This was followed by a Competition where they were pitched against each other to compete against their peers.
- With the starting of the new academic year, the Institute App was launched which was Very well received by the student community.
- Neuromancers also created the Confession's Page which was used during FGT.
- Neuromancers conducted a two-day workshop for the entire student community in association with Coding Blocks.
- This year three teams from Neuromancers participated in the ACM-ICPC regionals. They performed well and had a standing of 53, 56 and 101 respectively. This result was the best result we had till now.
- Neuromancers team also secured the fourth position in the Coding Hackathon held at Inter-IIT Tech Meet.
- Neuromancers also had two successful GSOC applicants this year.
- Apart from these, the performance of Neuromancers members in Advaita was also Exceptional. We got the first and second prize in Switch coding; first and second prize in Swig and Code and second in Principium.
- We also had various events throughout the year. We had various workshops for the first Year students to teach them.
- We conducted a number of competitions throughout the year for the entire student Community.



Glimpses of various workshops

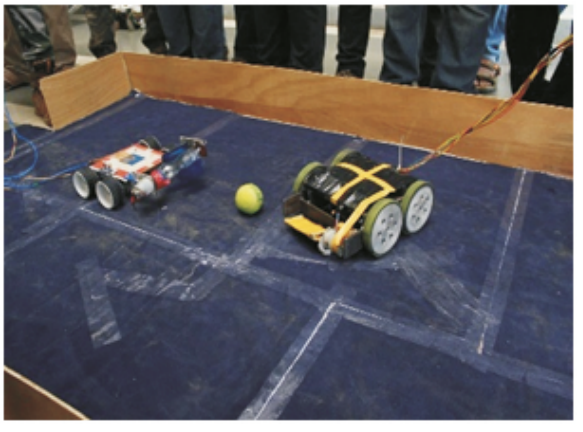
Robotics and Intelligent Systems Club :
This year all the planned activities were organised by the society and was very
productive and was successful in terms of achievements.

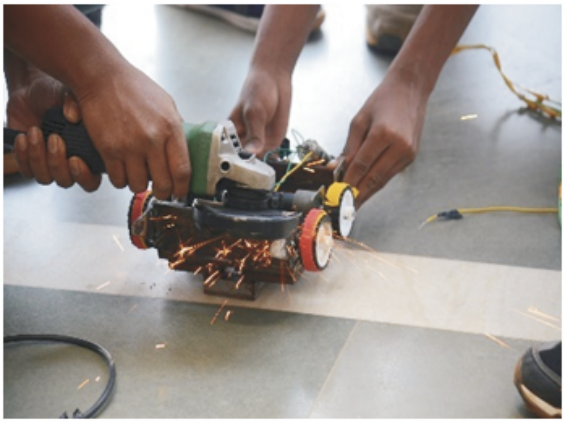
- The first society event this year was a workshop conducted on Image processing with python. Society members got acquainted to python coding and Raspberry

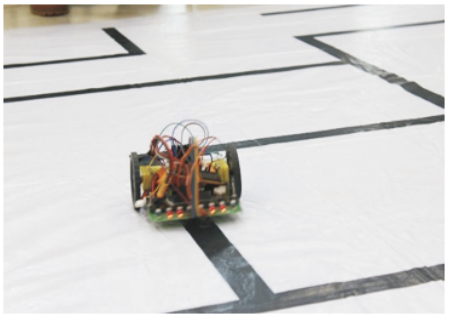
- Society Introductions for first years took place in the month of August. Some mini projects were exhibited at the introductions to give the fresher's an insight into hard robotic activities going on in the society.

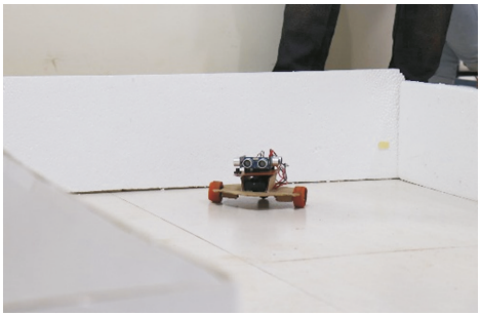
- First workshop on Arduino was conducted for first years and was organised in september. They were also taught to use sensors for different applications which gave them basic robotics knowledge.
- Semester challenge open for students of all branches was organised. The problem statement was to solve a maze using a bot designed out of any sensors of participant's choice. Participants were mostly enthusiastic first years who came up with different approach to solve the PS. They used varied sensors like ultrasonic sensors and IR sensors and combination of both to optimize the system.
- Inductions for 2018 batch were conducted in January in two steps, written and personal interviews. They were questioned on technical knowledge and critical thinking. They gave first phase the written test on 2 days and the papers were evaluated and shortlisted candidates were called upon interviews on another day, they were personally interviewed by our team and evaluated based on few constraints and the inducted students were declared on social media.
- Society members bagged merit places in two INTER IIT Tech meet events namely BETiC and AR Glasses that took place in IIT Bombay. Another idea presentation also did well with their event.
- Yanthrix was organised in collaboration with Wissenaire. Five events were organised with participants from across india. Over 40 teams have participated in different events.

1. Kick off
2. Trekkon
3. Robo wars
4. Maze solver
5. Box maze



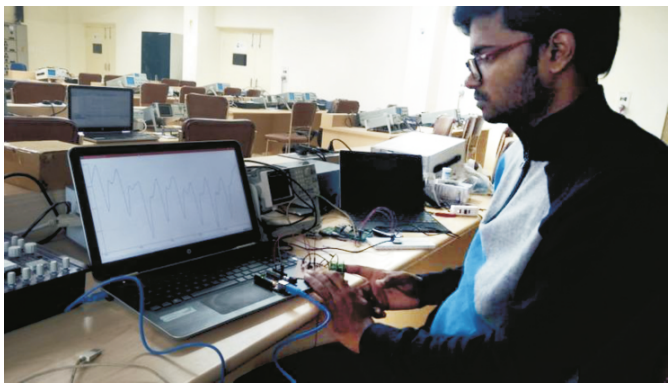


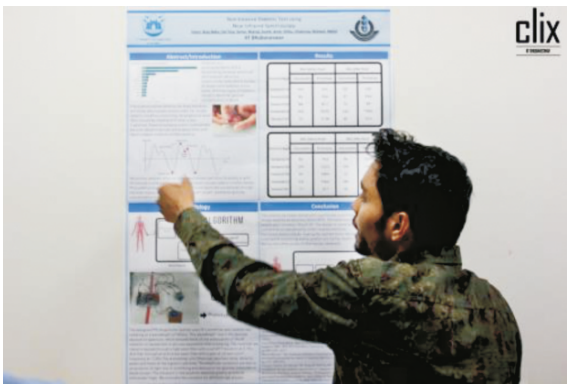




Yearly Expo was organised on Open Day, exhibiting various projects taken up by society members to school children and all students of the institute. Members of the society were all working on various projects or products that they wanted to develop this year. The following projects were exhibited:

1. Music LED's
2. AR Glasses
3. Non invasive glucose test
4. Peizo electric generation

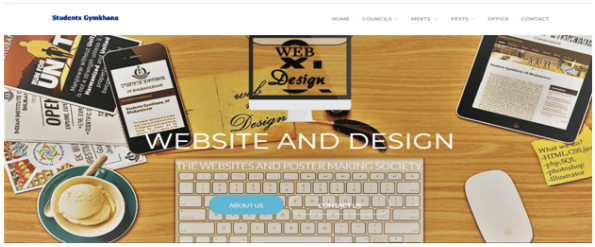




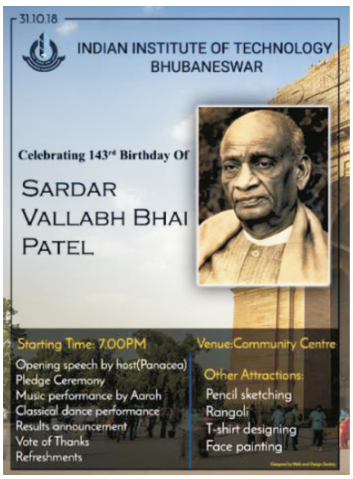
- Participated in NSSC, Organized in IIT Kharagpur in the month of September.
- Three teams from the society were qualified for E-yantra organised by IIT Bombay.
- Participated in Inter IIT Tech meet and bagged 2nd place in BETiC Innovation Challenge.
- Participated in National Welding League of women students 2019, in C.V Raman college of Engineering and one of the student stood 2nd in Objective quiz event.

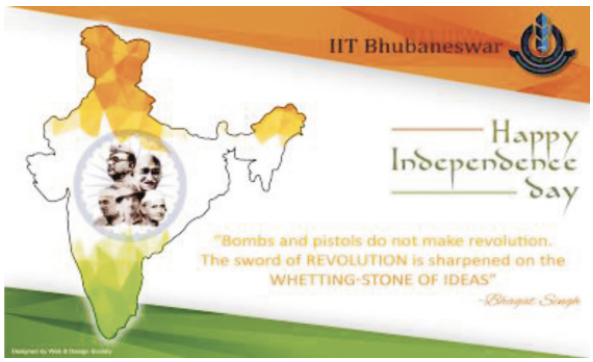
WEB AND DESIGN SOCIETY :

- Posters: Designing of posters and Banners for various events in our campus. Mainly Ek Bharat Shresta Bharat, EkthaDiwas, Independence Day and Republic Day etc.
- Ektha Diwas: We have designed T-shirts and Invitation for the Unity Run Programme.
- Convocation: We have designed Website for convocation.
- Workshops: All round development of students in both Web and Graphic designing is mad possible by taking workshops.
- Inter IIT Cult Meet: Web and Design has secured 6th, 9th and 9th positions in Online Art of Photoshop, Online Graphic Design and Design Marathon respectively.



- Gymkhana Website: Web and Design society has successfully upgraded the Gymkhana Website which includes individual society pages and complete customizability.
- Hard disk: We have bought two, 2tb hard disk in order to store the work we have done and easy sharing of the files among the society members due to data constraints.





7TH INTER IIT TECH MEET REPORT

ACHIEVEMENTS:

?Overall rank: 12th

?Silver medal in BETiC medical innovation challenge

?Bronze medal in The Eye in the Sky

?Total points: 525 Individual event performance:

?Coding hackathon: 4th position given by the organising team of coding hackathon (Jio), 11thposition given by the organising team of Tech Meet (15 points).

?Case Study: 18th position (not qualified, 0 points)

?Star Cluster Identifier: 20th position (not qualified, 0 points)

?The eye in the sky: 4th position (Bronze medal, 100 points)

?Campus sustainability challenge: 9th position (40 points)

?TCTD challenge: 10th position (40 points)

?BETiC medical innovation challenge: 2nd position in our chosen problem statement, 8th position overall (Silver medal, 240 points)

?Engineers conclave: Its a non-competitive event where each project is awarded 30 points, so we bagged 90 points in this event.

OBSERVATIONS AT THE TECH MEET:

Most of the IITs participated in events which are sure to give points like Engineers' Conclave and Student Academic Conference with maximum teams to maximise their points.

?A problem statement needs to be tackled smartly with the resources available in our college with maximum effort to get the best output in order to get good amount of points, else we end up at just qualified which gives only 10 percent of event points.

?The judges at the Meet are professionals in the field of their respective events and were able to judge properly.

In old IITs students take interest in technical events and their interest is not just backed by the institute but also by various sponsors which are companies, alumni, etc.

SUGGESTIONS FOR TECHNICAL COUNCIL OF STUDENTS' GYMKHANA:

?Proper wifi service is required in the workspace for the teams to work.

?No. of screens can be increased for working on raspberry pi projects parallelly.

?Chairs and almirah are required for smooth functioning of technical societies.

?It is important to focus on the problem statements in which our students are experts, the secretaries and the general secretary should be capable of identifying it.

?Secretaries should be actively involved in the selections of Inter IIT Tech Meet and also for getting the required approvals.

POINTS DISCUSSED AT THE TECH BOARD MEET:

?IIT Roorkee proposed to conduct the 8th Inter IIT Tech Meet in the month of December 2019.

?Required amendments regarding the scoring structure will be made in the constitution in the next board meeting to be conducted around august 2019.

?Proper care is needed to be taken by the organising team in conveying the points in constitution and the rulebook to the judges else the judges may change things according to their convenience and this may rise issues.

Appendix (Some details about event and our team):

- Coding hackathon: A 22 hrs hackathon conducted by Jio.
- Case Study: An on-spot event where a problem statement on waste management is given.
- Star Cluster Identifier: An event based on astro-physics and machine learning combined.
- The eye in the sky: An event where satellite images need to be classified and different areas need to be highlighted.
- Campus sustainability challenge: Our students have taken the problem of power generation using pressure in cycle tyres using piezoelectric sensors to charge batteries and then power the street lights.
- TCTD challenge: A drum stick harvester has been developed by a team to showcase in the Meet.
- BETiC medical innovation challenge: A non-invasive glucose device has been developed by the team to check blood glucose levels of humans.
- Engineer's conclave: Projects from different IITs have to be showcased in this event and our college has showcased 3 projects.

SPORTS COUNCIL

INTER YEAR TOURNAMENT
16TH AUG- 8TH SEPT 2018

The Inter Year Tournament was conducted early in the semester to bring active participation of the freshers in sports. Games like Volleyball, Football and Cricket were conducted. 4th years ended up winners in Football and volleyball whereas 3rd years ended up winning Cricket tournament. This tournament provided a lot of boost for the sports enthusiasts in freshers to take part in the Inter IIT team training and improve themselves.

INTER IIT SPORTS BOARD MEETING
16TH AUG - 18TH AUG, 2018

The Inter IIT sports board meeting was held at IIT Guwahati to discuss about the rules and regulations to conduct the tournament and to pick the draws for each sport which were being conducted. The meeting was attended by President Gymkhana, OSD Sports and the Gsec sports. In the meeting we put forward an argument for co-hosting the next Inter IIT sports meet since 3rd generations IITs aren't allowed to bring their whole contingent. After the meeting Ground inspection was done.

INTER IIT SPORTS MEET TRAINING
WE PARTICIPATED IN THE FOLLOWING GAMES IN THE INTER IIT SPORTS MEET 2018 HELD AT IIT GUWAHATI

● Athletics ● Badminton Boys ● Basketball Boys ● Basketball Girls ● Chess ● Cricket ● Football ● Table Tennis Boys ● Table Tennis Girls ● Volleyball

This Inter IIT sports meet we didn't take part in the lawn tennis and Badminton Girls event which we took part in the earlier Inter IIT Tournament. Due to unavailability of proper court for lawn tennis practice and not enough players for Badminton girl's category these decisions were taken by the council. But we would like to participate in these events too hopefully the next Inter IIT sports meet. The training for rest of the teams happened quite productively even though most of the practice sessions were washed out due to rain but students used the Gym facilities and made effective use of those times. New coaches were appointed for cricket and volleyball teams in the autumn semester.

INTER IIT CAMP

The Inter IIT camp started from 4th December. Special mess menu has been arranged for the Inter IIT contingent to see that the players remain fit and in good health. The players from NISER and AN Khosla have been shifted to MHR so that the practice sessions could be effective. Bus facilities have been provided to the teams who are practicing outside the campus.
Two practice sessions happened daily
Morning session- 6 am to 9 am
Evening session- 5.30 pm TO 8.30pm
March past practice was also conducted from 9 to 10pm daily.
A total of 82 students took part in the Inter IIT sports meet camp.

SPORT WISE

- **Athletics - 8**
- **Badminton boys - 5**
- **Basketball boys - 11**
- **Basketball girls - 9**
- **Cricket - 16**
- **Football - 16**
- **TT boys - 4**
- **TT girls - 3**
- **Volleyball - 10**

INTER IIT CHESS MEET 2018

Chess was not included in the main sports meet this academic year but it was conducted as a demo event for the upcoming Inter IIT sports meet. In this meet our chess team has done extremely well and have secured 5th position among 16 other participating IITs.

INTER IIT SPORTS MEET 2018

The Inter IIT sports meet 2018 was held at IIT Guwahati from 13th December to 21st December. Some of our team performances like cricket, football and basketball girls played very good this year and proved that we have the capability to achieve more in the coming years. Badminton and Volleyball teams have to improve in many areas, though they gave a good fight it wasn't good enough and we can do better. Here is what the captains had to say regarding their team's performance in the 53rd Inter IIT sports meet.

Badminton

TEAM OF IITBBS	OPPONENT	SCORE
MEN	IIT Guwahati	21-6, 21-15
		21-6, 21-7
		16-21, 21-17, 21-16
MEN	IIT DHANBAD	21-11, 17-21, 21-7
		21-9, 21-10
		21-15, 21-6

Basketball Girls
Pool Match

TEAM OF IITBBS	OPPONENT	SCORE
Women	IIT Hyderabad	43-13
	IIT Mandi	15-10
	IIT Kanpur	16-33

IITBBS won 2 out of 3 pool matches hence entering the quarter finals.

Quarter Final

TEAM OF IITBBS	OPPONENT	SCORE
Women	IIT Delhi	6-59

Volleyball
League Matches

TEAM OF IITBBS	OPPONENT	SCORE
Men	IIT Mandi	22-25, 19-25,17-25
	IIT BHU	15-25,10-25,25-17,15-25
	IIT Delhi	22-25,15-25,16-25

Cricket
Pool Match

TEAM OF IITBBS	OPPONENT	SCORE
Men	IIT Goa IIT Patna	IIT Goa 110/10 (19) IIT Bhubaneswar 110/9 (20) IIT Patna 105/8 (20) IIT Bhubaneswar 107/4 (14.3)

Pool Match

TEAM OF IITBBS	OPPONENT	SCORE
Men	IIT Delhi	IIT Delhi 143/9 (20) IIT Bhubaneswar 90/10 (17.3)

Football
League Matches

TEAM OF IITBBS	OPPONENT	SCORE
Men	IIT Dharwaad	2-1
	IIT Delhi	0-1

Pre Quarters

TEAM OF IITBBS	OPPONENT	SCORE
Men	IIT Karagpur	1-1

TABLE TENNIS

TEAM AND PLAYERS OF IITBBS		OPPONENT	SCORE
Men	Player 1	IIT Delhi	11/6 , 11/5, 11/8 (0-3)
	Player 2		11/6, 11/9, 11/6 (0-3)
	Player 3		11/7, 11/8, 11/7 (0-3)
	Player 1	IIT Hyderabad	14/12, 6/11, 3/11, 3/11 (1-3)
	Player 2		8/11, 6/11, 10/12 (0-3)
	Player 3		11/5, 6/11, 12/10, 13/11 (3-1)
	Player 2 (IIT BBS) vs Player 1 (IIT HYD)		6/11, 6/11, 8/11 (0-3)
	Player 1	IIT Jodhpur	7/11, 11/3, 5 /11, 6/11 (1-3)
	Player 2		10/12, 11/6, 11/3, 3/11, 11/7 (3-2)
	Player 3		11/6, 8/11, 7/11, 5/11 (1-3)
	Player 1 (IITBBS) vs Player (IIT Jodh)		13/15, 8/11, 13/11, 3/11(1-3)
	Player 1	IIT Khargpur	7/11, 11/8, 7/11, 3/11 (1-3)
	Player 2		4/11, 4/11, 4/11 (0-3)
	Player 3		7/11, 13/15, 12/10, 11/7,5/11 (2-3)
Women Single	Played by Aneri	IIT Ropar	3/11, 5/11, 2/11
	Played by Bhavya Sri	IIT Delhi	11/13,5/11,2/11
Women Double	played by Bhavya Sri and Aneri	IIT Ropar	5/11, 6/11, 3/11
	Played by Bhavya Sri and Aneri	IIT Delhi	2/11, 4/11, 11/13

POOL MATCH

TEAM AND PLAYERS OF IITBBS		OPPONENT	SCORE
Women Single (Match -1)	Played by Bhavya Sri	II T Gandhinagar	11/4, 11/1,11/5
Women Double (Match -2)	Played by Bhavya Sri and Shipra		4/11, 5/11, 4/13
Women Single (Match -3)	Played by Aneri		4/11, 5/11, 4/13

GENERAL CHAMPIONSHIP

The General Championship or the Inter branch competitions were held in the month of January and February. All the branches including post graduate students took active participation in the tournament. 10 different sports were conducted and after some intense battles Electrical branch emerged as the champions.

ACHIEVEMENTS IN NEARBY TOURNAMENTS

- The Girls basketball team secured 2nd place in the BGU Sports Fest.
- The Boys basketball were runners up in the CHIASMA,the sports fest of AIIMS College.
- The Volleyball team finished as runners up in the CHIASMA,the sports fest AIIMS college.
- Indoor secretary Amlan got first place in the chess competitions held at the AIIMS sports fest and also Krida the IIIT Bhubaneswar sports fest.

MISCELLANEOUS

The sports council also actively participated in organising and volunteering institute events like "The Unity Run" and "Open Day". March pasts were also done by the Inter IIT contingent of the sports council on Republic and Independence Day.

FINANCIAL INFORMATION

SN	Receipts	Current Year 2018-19	Previous Year 2018-19
i.	Opening Balance		
	a) Cash in Hand		
	b) Bank Balances		
	i) In Current Accounts		
	ii In deposit accounts		
	iii) In Savings accounts	16,68,56,566.71	25,78,51,875.70
ii,	Grants Received		
	a) From Govt. of India	1,30,97,80,000.00	3,57,35,20,000.00
	c) From Other Sources (Details)		
	(Grants from Capital and Revenue expenses to be Shown Separately)		
iii.	Academic Receipts	19,84,54,825.00	14,70,32,267.00
iv.	Receipts against Earmarked/ Endowment Funds		
	a) Earmarked/ Endowment Fund		
	c)Own Funds (other Investment		
v.	Receipts against Sponsored Projects/ Schemes	28,99,38,786.56	20,36,15,415.11
vi.	Receipts against Sponsored Fellowships and scholarship		

SN	Payments	Current Year 2018-19	Previous Year 2018-19
i.	Expenses		
	a) Establishment Expenses	27,45,24,122.00	27,69,13,439.00
	b) Academic Expenses	13,45,93,175.58	12,80,44,237.42
	c)Administrative Expenses	4,71,86,757.52	5,47,86,257.97
	dTransportation Expenses	61,436.00	12,194.00
	e) Repairs & Maintenance	6,68,407.00	2,53,138.00
	f) Prior Period Expenses	-66,742.52	-81,275.00
	g) Finance Cost	2,21,235.59	68,818.93
	g) Gymkhana Expenses	47,42,127.90	37,25,794.00
ii.	Payment against Earmarked/ Endowment Funds	5,61,918.00	3,09,442.31
iii.	Payment against Sponsored Projects/ Schemes	27,14,92,622.15	16,19,56,298.27
iv.	Payment against Sponsored Fellowships/ Scholarships		
v.	Investments and Deposits made		
vi.	a) Out of Earmarked/ Endowment funds	19,68,00,191.16	7,95,845.57
	b) Out of Own funds (Investments - other)		
	Term Deposits with Scheduled Banks	1,41,28,160,00.	3,27,57,95,325.49

SN	Receipts	Current Year 2018-19	Previous Year 2018-19
vii.	Income/ receipt on Investment		
	a) Earmarked/ Endowment funds	26,91,294.83	32,95,882.00
	b) other Investments		
viii	Interest received on		
	a) Bank Deposits	3,95,60,440.14	1,61,13,900.54
	b) Loans and Advances		
	c) Savings Bank Accounts	56,10,947.91	76,06,645.33
ix	Investments encashed		
x	Term Deposits with Scheduled Banks encashed	1,60,83,45,358.41	1,85,99,72,946.09
xi	Other Income (including Prior Period Income)	1,43,30,667.50	1,99,52,729.79
xii	Deposits and Advances	1,33,19,241.73	3,69,62,005.42
xiii	Miscellaneous Receipts including Statutory Receipts	17,53,10,126.46	18,33,05,248.16
xiv	Any Other Receipts		
	Hostel Income	22,73,810.46	16,22,243.74
	Receipt against Hostel Current Assets	1,92,87,444.60	2,80,45,730.04
v.	Gymkhana Receipt	47,23,991.58	
vi.	CEP Receipt	87,02,887.39	
	TOTAL	3,85,91,86,389.28	6,33,88,96,888.92

SN	Payments	Current Year 2018-19	Previous Year 2018-19
vii.	Expenditure on Fixed Assets and Capital Work-in-Progress		
	a) Fixed Assets	5,13,35,432.78	2,29,05,032.93
	b) Capital Works-in-Progress	62,14,180.00	89,017.00
viii	Other Payments including statutory payments	1,22,97,36,594.25	40,94,28,239.09
ix	Refunds of Grants		
x	Deposits and Advances	3,14,72,796.61	1,82,82,98,071.52
xi	Other Payments		
	Hostel Payment	19,72,550.81	18,68,206.71
	Hostel Payment against Fixed Assets	3,50,955.00	5,36,101.00
	Hostel Payment against Current Liabilities	1,24,92,203.70	63,36,138.00
	CEP Payment	94,41,243.65	
xii.	Closing Balance		
	a) Cash in Hand		
	b) Bank Balances		
	i) In Current accounts		
	ii In deposit accounts		
	iii) In Savings accounts	17,25,69,182.10	16,68,56,566.71
	TOTAL	3,85,91,86,389.28	6,33,88,96,888.92

R&D RECEIPT & PAYMENTS A/C FOR THE FINANCIAL YEAR 2018-19

Receipt		**Amount in Rs.**
Opening Balance		48,35,30,235. 60
Add: Receipt during the year		
Consultancy Project		2,11,26,773.96
Sponsored Research Project	15,27,36,120.00	
Less : Refunded	33,84,324.00	14,93,51,796.00
Seed Grant		
Sponsored Fellowship		47,23,098.00
Institute Overheads		1,60,97,913.00
Tax Deducted at Source (TDS)		31,09,192.00
Service Tax		5,27,137.00
Goods & Service Tax (GST)		75,19,511.00
Labour Cess		288.00
Professional Tax		21,800.00
Earnest Money Deposit (EMD)		32,28,000.00
Performance Bank Guarantee (PBG)		9,93,844.98
GST TDS		98,319.00
Other Current Liability		7,72,000.00
Sundry Creditors		6,32,00,158.26
Liquidated Damages		20,61,032.89
Bank Interest		28,41,759.46
Interest on TDR		2,70,261.00
Stale Cheque		11,872.00
Interest on TDR Accrued		1,36,94,930.01
CEP Grant		2,49,600.00
Tender fee		39,500.00
Total Receipt		**77,34,69,022.16**

Less: Payment During The Year	**In (Rs)**
For Revenue Expenses	
Salary to JRF/SRF and project Assistant	2,69,26,976.00
Consumables	87,98,092.00
Contingencies	43,53,915.00
Recurring Expenses	18,02,943.00
Travel Expenses	27,51,539.00
Consultancy Fees & Honorarium	1,04,70,664.00
Data Collection Expenses	84,434.32
Meeting & Workshop Expenses	26,62,924.00
Institute Corpus Fund	3,06,54,365.00
Machining	1,62,540.00
Payment to Spoke	21,05,000.00
Fellowship	44,32,192.00
Overhead Expenses	9,23,556.00
R&D Recurring Expenses	9,86,577.00
Technical Assistance Expenses	2,80,244.00
Miscellaneous Expenses	1,12,468.0
Operation and Maintenance	3,310.00
Fabrication & Other Cost	35,208.00
Startup & IPR Expenses	1,15,150.00
Training & Development	9,02,543.00
Duty & Taxes	33,59,834.00
Stale Cheque	30,341.00
Sundry Creditors	6,45,28,587.26
Project Liability	5,00,000.00
Faculty Development Fund	1,95,932.00
Bank Interest	57,62,174.00
Research Grant	1,39,960.00
Earnest Money Deposit (EMD)	15,49,050.00
Performance Bank Guarantee (PBG)	36,000.00
Workshop Grant Refund	3,23,228.00
CEP Grant	2,49,600.00
Liquidated Damages	4,97,701.00
Total Payment	**17,57,37,047.58**
Closing Balance	**59,77,31,974.58**

Indian Institute of Technology Bhubaneswar
Argul, Khordha PIN - 752050, ODISHA
INDIA Phone: +91 674 7134560 / 7134561
Email: registrar.office@iitbbs.ac.in

www.iitbbs.ac.in