

## CURRICULUM VITAE

### **Dr. REMYA NEELANCHERRY**

Assistant Professor, School of Infrastructure

Indian Institute of Technology Bhubaneswar

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### **RESEARCH INTEREST**

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- Advanced oxidation process for water and wastewater treatment
- Microwave for solid waste management
- Development of novel catalyst and its characterization of catalyst for bio-refractory pollutant removal
- Agricultural and Industrial wastewater treatment.

### **WORK EXPERIENCE**

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- **April 2016 – Till date** – Assistant Professor, School of Infrastructure, Indian Institute of Technology Bhubaneswar, Odisha, India
- **July 2011 – Dec 2015** – Adhoc Lecturer, Civil Engineering Department, National Institute of Technology Calicut (NIT Calicut), India
- **August 2007 – December 2010** - Research Associate and research scholar, National Chiao Tung University, Hsinchu, Taiwan.
- **July 2006 - June 2007** – Consultant, i2 Technologies, Bangalore
- **August 2004 - July 2005** - Teaching Assistant, IIT Madras, Chennai
- **May 2005 – July 2005** - Industrial Project work in Shah Technical Consultants, Chennai

### **TEACHING EXPERIENCE**

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- ❖ **July 2011 – May 2014** – Adhoc Lecturer, Civil Engineering Department, NIT Calicut.
  - **Course Handled**
    - Bioremediation Technology
    - Environmental Pollution Control Engineering
    - Environmental Engineering I (Water supply engineering)
    - Environmental Engineering (Water and Wastewater Engineering)
    - Environmental studies
    - Environmental Studies in Civil Engineering
    - Environmental Engineering Laboratory
    - Civil Engineering Workshop
    - Surveying
- ❖ **August 2007 – December 2010** - Research Associate, NCTU Taiwan.
  - **Course Assisted**
    - Sludge Treatment and Disposal

## EDUCATIONAL QUALIFICATIONS

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| <b>PhD</b>             | Environmental Engg. (2010)<br>National Chiao Tung University, Taiwan                 |
| <b>M Tech</b>          | Civil (Environmental) Engg. (2006)<br>Indian Institute of Technology Madras, Chennai |
| <b>B Tech</b>          | Agricultural Engg. (2004)<br>K C A E T, Tavanur, Kerala Agricultural University      |
| <b>Plus two (CBSE)</b> | 1999, Jawahar Navodaya Vidyalaya, Kannur   |
| <b>X (CBSE)</b>        | 1997, Jawahar Navodaya Vidyalaya, Kannur   |

## AWARDS AND HONORS

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- **Editorial Board Member**, International Journal of Green Technology
- **Top Cited Papers Award** for 2011 and 2012 from Chemical Engineering Journal
- **Golden Bamboo Scholarship** to pursue doctoral program in Environmental Engineering, National Chiao Tung University with full tuition waiver (2007 - 2010).
- **CIGR award for the best E-journal**, CIGR International conference, 30<sup>th</sup> August – 3<sup>rd</sup> September 2008, Iguassu Falls City, Brazil.
- **Gold medal** and **Valli Anantharamakrishnan Merit Prize** for the best performance in Civil Engineering Department, IIT Madras, Chennai (Batch 2004 – 06).
- **DAAD (German Academic Exchange Program) fellowship** to carry out M Tech project in RWTH- Aachen, Germany (2005-06).
- **MHRD (Govt of India) Scholarship** (2004 – 06).
- Cleared Graduate Aptitude Test in Engineering (**GATE**) 2004, All India **Rank 65**.
- **Kerala Agricultural University Topper** in B.Tech, Agricultural Engineering (2004)
- Biography included for publication in the 30<sup>th</sup> Edition (2013) of **Marquis Who's Who in the World (VIP No: 36539139)**.
- Nominee for the membership in **American Chemical Society**
- **Reviewer** for the following Journals:
  - Chemosphere
  - Journal of Hazardous Materials
  - Chemical Engineering Journal
  - Desalination and Water Treatment
  - Journal of Environmental Chemical Engineering

## MEMBERSHIP IN PROFESSIONAL BODIES

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- Senior Member: Asia- Pacific Chemical, Biological & Environmental Engineering Society (APCBEEES).

## BOOK CHAPTER PUBLISHED

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- **Neelancherry Remya**, Jih-Gaw Lin (2013) “Exploration of carbofuran removal mechanism in a microwave-zerovalent iron (MW-ZVI) system”, Chapter 2, Solutions to Environmental Challenges through Innovations in Research, Asiatech Publishers Inc., New Delhi.

## PAPERS PUBLISHED IN INTERNATIONAL JOURNALS

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- **Neelancherry Remya**, Jih-Gaw Lin (2015) “Microwave-Granular Activated Carbon (MW-GAC) system for carbofuran degradation – Analysis of characteristics and recyclability of the spent GAC”, Desalination and water treatment 53, 1621-1631.
- M A Vishnuganth, S Rangabhashiyam, **Neelancherry Remya**, Mathava Kumar, N. Selvaraju (2015) Optimization of GAC supported TiO<sub>2</sub> photocatalytic process for competent carbofuran removal from an aqueous system, Journal of scientific and industrial research, 74, 225-231.
- Raju C Asha, M. A. Vishnuganth, **Neelancherry Remya**, N. Selvaraju, Mathava kumar, (2015) “Livestock wastewater treatment in batch and continuous photocatalytic systems: performance and economic analyses”, Water, air and soil pollution 5, 226
- Akhinesh K, Jithu G Francis, Junaid K T, Jishnulal K, Jeril Netto Joseph, **Remya Neelancherry** (2015) “Study of the compressive strength of concrete with various proportions of steel mill scale as fine aggregate”, IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE), e-ISSN : 2278-1684, p-ISSN : 2320–334X, 104-109
- **Neelancherry Remya**, Jih-Gaw Lin (2011) “Microwave-assisted carbofuran degradation in the presence of GAC, ZVI, H<sub>2</sub>O<sub>2</sub>: Influence of reaction temperature and pH”, Separation and purification Technology 76, 244-252.
- **Neelancherry Remya**, Jih-Gaw Lin (2011) “Current Status of Microwave Application in Wastewater Treatment - A Review”, Chemical Engineering journal 166, 797–813.
- **Neelancherry Remya**, Jih-Gaw Lin (2011) “Carbofuran removal by the application of MW-assisted H<sub>2</sub>O<sub>2</sub> process”, Journal of Environmental Science and Health Part-B 46, 350 - 359.
- **Remya, N**, Mathava Kumar, Mohan, S, Rafiq Azzam (2011) “Influence of Organic Matter and Solute Concentration in Nitrate Sorption”, Bioresource Technology 102, 5283-5289.
- Remesan Renji, M. Syamaladevi Roopesh, **Neelancherry Remya**, P.S Preman (2007). “Wet Land Paddy Weeding- A Comprehensive Comparative Study from South India”. Agricultural Engineering International: the CIGR E-journal. Vol. IX., Manuscript PM 07 011.
- Remesan Renji, M. Syamaladevi Roopesh, **Neelancherry Remya**, P.S Preman (2007). “Performance Analysis of wetland paddy weeders”. India Agricultural Science Abstracts.

- **Neelancherry Remya**, Jih-Gaw Lin (2014) “Application of Central Composite Design and Response Surface Methodology for Carbofuran Degradation in Microwave-Granular activated carbon System”, Journal of Hazardous materials (Communicated)

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#### PAPERS PUBLISHED IN INTERNATIONAL CONFERENCES

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- **N Remya**, S Mathava Kumar, S Mohan, R Azzam “Influences of organic matter and solute concentration in the nitrate sorption potential of three German soils: comparison of batch and diffusion-cell experiments” Challenges in Environmental Science and Engineering, CESE-2010, 26 September -1 October 2010 at the SEBEL, Cairns, Australia.
- **Neelancherry Remya**, Jih-Gaw Lin. “Carbofuran Degradation in the Microwave-Granular Activated Carbon (MW-GAC) system” IWA International conference 15-19 September 2011, Xi’an, China.
- **Neelancherry Remya**, Jih-Gaw Lin. “Analysis of microwave-zerovalent iron system for aqueous phase carbofuran removal” International Conference on Challenges in Environmental Science and Engineering, CESE-2011, 25 - 30 September 2011 at Tainan City, Taiwan.
- **Neelancherry Remya**, Mathava Kumar S, Jih-Gaw Lin. “Performance evaluation of microwave assisted system for degradation of carbofuran” International Symposium on Integrated Water Resources Management (IWRM-2014), CWRDM, Calicut India, 19 - 21 February 2014.
- Asha C Raju, B Sarat Chandra, Adarsh Shukla, Varun Kumar Reja, Krishna Anish Adusumilli, **Remya Neelancherry**, Mathava Kumar “Photocatalytic Treatment of Poultry Wastewater by hectorite- TiO<sub>2</sub> aqueous suspensions” International Conference on Chemical and Environmental Research (ICCER-2014), JMC College Trichy, Tamilnadu India, 11-12 March, 2014.
- B Sarat Chandra, **Remya Neelancherry**, Mathava Kumar “Treatment of highly organic waste water by supported and immobilized TiO<sub>2</sub>” International conference on waste management for sustainable development (ICWMSD-2014), NSS Palakkad, Kerala.
- Ankit Singh, **Remya Neelancherry** “Solid Waste Management A case study of ultimate analysis and landfill design for NIT Calicut” International Conference on Materials Mechanics and Management (IMMM 2014), CET Trivandrum, India.

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#### PAPERS PUBLISHED IN NATIONAL CONFERENCES

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- Akhinesh K, Jithu G Francis, Junaid K T, Jishnulal K, Jeril Netto Joseph, **Remya Neelancherry** “Study of the Compressive Strength of Concrete with various proportions of Steel Mill Scale as Fine Aggregate” National Conference on Innovation in Engineering Science and Technology (NCIEST-2015), Pune, Maharashtra, India.

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### **M TECH PROJECT GUIDED**

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- Effect of sugarcane bagasse biochar amendment on geotechnical properties of landfill cover soil and landfill gas emission (2015)
- Breakthrough and stability based analysis of a composite material for landfill liner (2015)

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### **B TECH PROJECT GUIDED**

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- Treatment of poultry wastewater in a cyclic photo reactor (2012)
- Photocatalytic treatment of municipal landfill leachate (2014)
- Assessment of antibiotics leaching behavior in selected Indian soils (2015)

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### **INVITED TALKS/SPECIAL LECTURES DELIVERED**

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- Microwaves for complex wastewater treatment, Civil Engineering Department, IIT Delhi.
- Application of surface analysis techniques in water treatment, Centre for Environmental Science and Engineering (CESE), IIT Bombay.
- Microwave application for solid waste management, Government Engineering College, Calicut, Kerala.
- Microwave – An effective method for energy production and energy minimization, K.S.R. College of Engineering, Tiruchengode, Tamilnadu.
- Theory and Concept of Microwaves for Water and Wastewater Treatment, National Institute of Technology Calicut.
- Application of Microwave for Carbofuran Bearing Wastewater Treatment, National Institute of Technology Calicut.
- Design of Experiments by Central Composite Design in Environmental Systems, National Institute of Technology Calicut.
- New trends in Advanced Oxidation Processes, College of Engineering Trivandrum, Kerala.
- Design of Physico-chemical pretreatments for recalcitrant removal in biosystems, Government College of Technology, Coimbatore.
- Water quality testing by sampling and analysis, National Institute of Technology Calicut.
- High Performance Liquid chromatography (HPLC) in Environmental Forensics, National Institute of Technology Calicut
- Introduction to Instrumental Methods in Environmental Engineering, National Institute of Technology Calicut
- Chromatographic methods - High Performance Liquid chromatography (HPLC), National Institute of Technology Calicut

## **PROFESSIONAL COURSES ORGANIZED**

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- National Workshop on Water, Air and Soil: Sampling and Analysis under TEQIP – II at National Institute of Technology Calicut, 11<sup>th</sup> -12<sup>th</sup> March, 2014.
- Training Programme on Instruments for Environmental Quality Assessment under TEQIP – II at National Institute of Technology Calicut, 19<sup>th</sup> -21<sup>st</sup> November, 2015.

## **PROFESSIONAL TRAINING ATTENDED**

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- Land Use Based Estimation of Solid Waste Generation, National Institute of Technology Calicut, 12<sup>th</sup> September, 2015.
- National seminar on thermal and other techniques for waste management under TEQIP – II at National Institute of Technology Calicut, 7<sup>th</sup> - 9<sup>th</sup> March, 2014.
- Workshop on Spectroscopy: Instrumentations and Applications conducted by department of physics, National Institute of Technology Calicut, 11<sup>th</sup> January, 2014.
- Workshop on Pedagogical aspects in Engineering Education under TEQIP – II at National Institute of Technology Calicut, 2<sup>nd</sup>– 5<sup>th</sup> January, 2014.
- Training Programme on 3D Ground water flow and contaminant transport modeling conducted by department of Civil Engineering, National Institute of Technology Calicut, 8<sup>th</sup> – 10<sup>th</sup> May, 2014.
- Faculty Development Programme on Modelling techniques in environmental and hydrological systems conducted by department of Civil Engineering, National Institute of Technology Calicut, 8<sup>th</sup> – 14<sup>th</sup> December, 2013.
- Faculty Development Programme on Biomechanics for Engineers conducted by department of Civil Engineering, National Institute of Technology Calicut, 15<sup>th</sup> – 21<sup>st</sup> December, 2013.
- Training Programme on Ground water flow and contaminant transport modeling conducted by department of Civil Engineering, National Institute of Technology Calicut, 27<sup>th</sup> – 28<sup>th</sup> December, 2013.
- Workshop on Intellectual Property Right Awareness conducted by Technology Business Incubator (TBI) of NIT Calicut, 5<sup>th</sup> October 2013.
- Two days Training Programme by Agency for Non-conventional Energy and Rural Technology (ANERT) – Energy Conservation and Use of Renewable Energy in Agricultural and Domestic Sectors, K.C.A.E.T, Tavanur, 11<sup>th</sup> – 12<sup>th</sup> May, 2002.
- Ten day NSS Camp organized by K.C.A.E .T, Tavanur, Theodolite surveying and watershed delineation at Attapady Hills Area Development Society, Palakkad, 10<sup>th</sup> - 19<sup>th</sup> August, 2002.