

RAJ KUMAR SINGH

Educational Qualification

Degree	Discipline	Year	University/Institute
Ph.D.	Geology and Geophysics	2009	Indian Institute of Technology Kharagpur
M.Sc.	Geology	2001	Banaras Hindu University, Varanasi
B.Sc.	Phy, Maths, Geology (Hons)	1999	North Eastern Hill University, Shillong

Awards/Honours

Executive Council Member The Paleontological Society of India 2018-20
Executive Council Member Paleontological Society of India 2016-18
Selected for INSA, New Delhi, International Collaborative/Exchange Program-2015
Mani Shanker Shukla Gold Medal of The Palaeontological Society of India - 2013
Qualified GATE, 2002.
Qualified CSIR-JRF, December 2001.
Qualified CSIR (NET) - LS, July 2001.
La-Touche Medal in Geology, for 2000 – 2001 from MGML.
B.H.U. medal for securing highest marks in M.Sc. (Geology) Examination 2001
Late Prof. Rajnath Medal for securing highest marks in Paleontology in M.Sc. (Geology) Examination 2001
Second Rank in B.Sc. (Geology) Examination of N.E.H.U., Shillong, 1999

Research/Career profile

- **Shipboard Scientist**, International Ocean Discovery Program (IODP) expedition - 383 (Dynamics of Antarctic Pacific Circumpolar Current; May – July 2019)
- **Guest Scientist**, Institute of Geosciences, Christian Albrechts University Kiel, Germany (May – July 2015)
- **Shipboard Scientist**, Integrated Ocean Drilling Program (IODP) expedition – 346 (Asian Monsoon; July – September 2013)
- **Assistant Professor**, School of Earth, Ocean and Climate Science, IIT Bhubaneswar (May 2013 onwards)
- **Scientist ‘B’**, Wadia Institute of Himalayan Geology, Dehradun (September 2011 to May 2013)
- **Assistant Hydrogeologist**, Central Ground Water Board, Ministry of Water Resources, Govt. of India (From January 2004 to September 2011)
- **Junior Research Fellow (CSIR)**, Department of Geology and Geophysics, Indian Institute of Technology, Kharagpur (March 2002 to January 2004)

Current Research Interest

Paleoclimatology, Paleoceanography, Marine Micropaleontology, Sedimentology, Hydrogeology

Ongoing/Completed Sponsored Research Projects

- (a) Paleoclimatology and Paleoceanography of the Japan Sea
SRIC, Indian Institute of Technology Bhubaneswar
- (b) Millennial to centennial scale variability in the Asian summer monsoon: Foraminiferal perspective from the East China Sea
NCAOR, Goa, MoES, Govt. of India
- (c) Assessing Holocene climate variability and coastal environment in the Bay of Bengal using geochemical and biological proxies, (Part of BoBCO project) MoES, Govt. of India

Research Supervision/Co-Supervision

Ph.D.

Continuing

1. Manisha Das (INSPIRE-SRF)
2. S. Sova Barik (Institute –SRF)
3. Nishant Vats (CSIR – SRF)
4. Sunil Kumar Das (INSPIRE-JRF)

Master Dissertation

Completed : 21

Abhijith U.V. (Ph.D., Antarctic Research Centre, Victoria University Wellington), Avirup Kanjilal (Private Job), S. Sova Barik (Ph.D. SEOCS, IIT Bhubaneswar), Alok Ranjan (Ph.D. IIT Kharagpur- left), B. Bhabesh Bal (Ph.D., JNU), Dipak Mahto (Geologist, Coal India Limited), Puja Dey (M.Tech, IIT Kanpur), Abhas Pran Gogoi, Archan Ganguly (JRF, ISI Kolkata), Jyoti Chattopadhyay (JRF, ISI Kolkata), Partha Sarthi Jena (Ph.D. PRL, Ahemdabad), Ratikant Khuntia (Geologist, ONGC), Sreya Sengupta (Ph.D., IIT Kharagpur), Ankita Nandi (Ph.D., IIT Kharagpur), Asmita Singha Roy (Asst. Manager, Geology, Vedanta), Divya, R.V., Kriti Sharma (Asst. Manager, Geology, Vedanta), Sangeeta Mistry (Geologist, ONGC), Subha Kundu, Pratik Upadhyaya, Lisant Biswal

Continuing : 2

Soumen Roy, Neha Chauhan

Other Alumni : Cima, J. Tirkey, Prabhakar Nayak, Sibasish Mishra, Saurabh Sinha

Publications

1. Vats, N., Mishra, S., **Singh, R.K.**, Gupta, A.K., Pandey, D.K., 2019. Paleoceanographic changes in the East China Sea during the last ~400 kyr reconstructed using planktic foraminifera. Global Planetary Change. Global Planetary Change (Under review).
2. Barik, S.S., Prusty, P., **Singh, R.K.**, Tripathy, S., Farooq, S.H., Sharma, K., 2019. Spatia and seasonal variations in elemental distributions in surface sediments of Chilika Lake with change in Salinity. Environmental Earth Science (Under review).

3. Gupta, A.K., Dutt, S., Cheng, H., **Singh, R.K.**, 2019. Abrupt changes in Indian summer monsoon strength during the last ~900 years and linkages to socio-economic conditions in the Indian subcontinent. *Palaeogeography, Palaeoclimatology, Palaeoecology*. doi.org/10.1016/j.palaeo.2019.109347
4. Barik, S.S., **Singh, R.K.**, Jena, P.S., Tripathy, S., Sharma, K., Prusty, P., 2019. Spatio-temporal variations in ecology and CO₂ sequestration in coastal lagoon: A foraminiferal perspective. *Marine Micropaleontology*, 147, 43-56. doi.org/10.1016/j.marmicro.2019.02.003
5. Das, M., Vats, N., **Singh, R.K.**, Mishra, S., Barik, S.S., Divya, R.V., Sengupta, S., Kumar, A. and Pandey, D.K. 2019. Assessing Mid-Pleistocene to Holocene Sea-ice Extent and Carbonate Compensation Depth fluctuations in the Japan Sea: a multiproxy approach. Special volume of IODP-India in Springer Society of Earth Scientists Series (Springer SES) (In press).
6. Farooq, S.H., Prusty, P., **Singh, R.K.**, Sen, S. and Charasekharam, D. 2018. Fluoride contamination of groundwater and its seasonal variability in parts of Purulia districts, West Bengal India. *Arabian Journal of Geosciences*, 11(22), 709.
7. Das, M., **Singh, R.K.**, Vats, N., Holbourn, A., Mishra, S., Farooq, S.H. and Pandey, D.K. 2018. Changes in the distribution of Uvigerinidae species over the past 775 kyr: Implication for the paleoceanographic evolution of the Japan Sea. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 507, 201-213.
8. Tada, R., et al., (including **Singh, R.K.**) 2018. High-resolution and high-precision correlation of dark and light layers in the Quaternary hemipelagic sediments of the Japan Sea recovered during IODP Expedition 346. *Progress in Earth and Planetary Sciences*. DOI: 10.1186/s40645-018-0167-8
9. **Singh R.K.**, Das M. 2018. Mahanadi: The Great River. In: Singh D. (eds) *The Indian Rivers*. Springer Hydrogeology. Springer, Singapore. doi.org/10.1007/978-981-10-2984-4_25
10. Das, M., **Singh, R.K.**, Gupta, A.K., Bhaumik, A.K., 2017. Holocene strengthening of the oxygen minimum zone in the northwestern Arabian Sea linked to changes in intermediate water circulation or Indian monsoon intensity? *Palaeogeography, Palaeoclimatology, Palaeoecology* Doi:http://dx.doi.org/10.1016/j.palaeo.2016.10.035
11. Dutt, S., Gupta, A.K., Clemens, S., Cheng, H., **Singh, R.K.**, Kathayat, G., Edwards, R.L., 2015. Abrupt changes in Indian Summer Monsoon strength during 33,800 to 5,500 yr BP. *Geophysical Research Letters*, DOI: 10.1002/2015GL064015.
12. Dwivedi, S.N. and **Singh, R.K.**, 2015. Inter-aquifer water transfer through combination well for artificial recharging of the deeper aquifer system in Patna urban area. *Current Science*, 108(7), 1219-1221.
13. Expedition 346 Scientists, 2015. Proceedings of the Integrated Ocean Drilling Program Volume 346 Expedition Reports. Doi:10.2204/iodp.proc.346.2015
14. Tiwari, S.K., **Singh, R.K.**, Singh, J., Gupta, A.K., Bartarya, S.K. and Rai S.K., 2015. Impact of limestone mining activities on major ion geochemistry of Krem Markhyrdop water, Meghalaya, India. *Himalayan Geology*, 36(1), 74 – 80.

15. **Singh, R.K.** and Gupta, A.K., 2014. Miocene history of Indian Monsoon: a review of marine records. Special publication of the palaeontological society of India, 5, 101-109.
16. Expedition 346 Scientists, 2014. Asian Monsoon: onset and evolution of millennial-scale variability of Asian monsoon and its possible relation with Himalaya and Tibetan Plateau uplift. IODP Preliminary Report, 346. doi:10.2204/iodp.pr.346.2014
17. Saha, D., Dwivedi, S.N. and **Singh, R.K.**, 2014. Aquifer System Response to Intensive Pumping in Urban Areas of the Gangetic Plains, India- the case-study of Patna. Environmental Earth Sciences, 71,1721-1735
18. Gupta A.K., Mohan, K., Das M., and **Singh, R.K.**, 2013. Solar forcing of the Indian Summer monsoon variability during ÅlleØd period, Nature Scientific Reports, 3:2753 DOI:10.1038/srep02753
19. Verma, S., Gupta, A.K. and **Singh, R.K.**, 2013. Variations in deep-sea benthic foraminifera at ODP Hole 756B, southeastern Indian Ocean: Evidence for changes in deep ocean circulation. Palaeogeography, Palaeoclimatology, Palaeoecology, 376, 172-183
20. Gupta A.K., **Singh, R.K.** and Verma, S., 2013. Deep-sea paleoceanographic evolution of the eastern Indian Ocean during the late Oligocene-Pleistocene: Species Diversity trends in benthic foraminifera. Current Science, 104(7), pp. 1-7
21. **Singh, R.K.**, 2013. Arsenic pollution in Ground Water (in Hindi). Asmika, vol. 19, of Wadia Institute of Himalayan Geology.
22. **Singh, R.K.**, Gupta A.K. and Das M., 2012. Paleocceanographic significance of deep-sea benthic foraminiferal species diversity at southeastern Indian Ocean Hole 752A. Palaeogeography, Palaeoclimatology, Palaeoecology, 361, pp. 94-103
23. Dwivedi S.N., **Singh R.K.** and Saha, D., 2011. Patna Urban, Bihar. In Ground Water Scenario in major cities of India. Central Ground Water Board, Government of India, Released May 2011 (Available at <http://cgwb.gov.in/documents/GW-Senarioin%20cities-May2011.pdf>),
24. Chandra P.C., Agrawal A.K., Saha D., **Singh R.K.** and Singh S.K., 2010. Groundwater Management Options in Bihar Under Possible Impact of Climate Change. In National Seminar on “Climate Change and its impact on Water Resources” organized by Indian Water Resources Society, Patna Centre on 23rd April 2010 at Patna, Bihar
25. **Singh, R.K.** and Gupta A.K., 2010. Deep-sea benthic foraminiferal changes in the eastern Indian Ocean (ODP Hole 757B): their links to deep Indonesian (Pacific) flow and high latitude glaciation during the Neogene. Episodes, 33(2), pp. 74-82
26. Dwivedi S.N., **Singh R.K.** and Chandra P.C., 2010. Recharging the depleting deeper aquifers of Patna. In Proceedings of IVth World Aqua Congress organized at India Habitat Centre New Delhi, during 8 – 10th December 2010.
27. Bhaumik, A.K., Gupta, A.K., Mohan, K. and **Singh R.K.**, 2008. Disappearance of *Stilostomella lepidula* (Schwager) across the mid-Pleistocene Transition and its palaeoceanographic implication. Current Science, 94(6), 758-764

28. **Singh R.K.** and Gupta A.K., 2005. Abrupt changes in Benthic Foraminiferal species diversity and their link to the high latitude Glaciations during the Neogene. *Journal of Foraminiferal Research*, 35(3), pp. 219–227
29. **Singh, R.K.** and Gupta A.K., 2004. Late Oligocene-Miocene paleoceanographic evolution of the southeastern Indian Ocean: Evidence from deep-sea Benthic foraminifera (ODP Site 757). *Marine Micropaleontology*, 51, pp.153-170
30. Gupta A.K., **Singh, R.K.**, Joseph, S. and Thomas, E., 2004. Linked to global cooling or to the initiation of the Indian monsoons? *Geology*, 32 (9), pp.753-756
31. **Singh, R.K.**, Gupta, A.K. and Das, M., 2004. Monsoon and its effect on Indian subcontinent (in Hindi). *Samudrika*, Vol.11 of Geological Survey of India.
32. Das, M., Gupta, A.K., **Singh, R.K.** and Bhaumik, A.K., 2002. Significance of Stable isotopes in Paleoclimatology and Paleoceanography - A Review. *Indian Journal of Geochemistry*, 17, pp.13-23

Others

Authored/Co-authored various technical reports in Central Ground Water Board, Ministry of Water Resources, Govt. of India between 2004 and 2011.

Abstract in Seminar/Conferences/Workshop

1. **Singh, R.K.**, Gupta A.K. and Flower, B.P., 2003. Paleoceanographic changes at ODP site 757B, eastern Indian Ocean during Plio-Pleistocene. EILQUEC and POLTRAIN – 2003. Late Quaternary Environmental Change – Emerging Issues. An International PAGES Workshop cum Training Programme on Global Change held during 10th-15th February 2003 at Pondicherry.
2. **Singh, R.K.** and Gupta, A.K., 2003. Late Oligocene-Miocene paleoceanographic evolution of the southeastern Indian Ocean: Evidence from deep-sea Benthic foraminifera (ODP Site 757). XIX Indian colloquium on Micropaleontology and Stratigraphy and Symposium on recent developments in Indian Ocean Paleoceanography and Paleoclimate held during 9th– 11th October, 2003 at Varanasi.
3. Gupta A.K., Mohan, K. and **Singh, R.K.**, 2006. Abrupt increase in the mixed-layer thickness driven by the constriction of Indonesian Seaway during 3.2-2.75Ma: A precursor to North Atlantic glaciations. In *Influence of Indonesian Throughflow Variability on Tropical Indian Ocean during 19th -23rd July 2006 at Institute of Geosciences, Kiel, Germany.*
4. Dwivedi S.N., **Singh R.K.** and Ganguly S.S., 2009. Hydrogeological Evaluation of Patna Urban Area. In *Regional Workshop on Geogenic contamination of Groundwater organized by Central Ground Water Board, Patna during 21st-22nd March, 2009 at IGSC, Patna.*
5. Saha D., Sahu S., Shukla R.R., **Singh R.K.**, Verma V.S., Upadhyay S., Singh T.B.N., Dwivedi S.N., Sonkusare M.M. and Shreehari S.M.S., 2009. Arsenic free deeper aquifers in Middle Ganga Plain-Sustainable source for potabale drinking water supply. In *Regional Workshop on Geogenic contamination of Groundwater organized by Central Ground Water Board, Patna during 21st-22nd March, 2009 at IGSC, Patna.*

6. Dwivedi S.N., **Singh R.K.** and Ganguly S.S., 2010. Quantifying depletion from aquifer storage in response to heavy pumping in Patna Urban area. In UGC-sponsored national seminar on “Sustainable Development of Water Resources in Indo-Gangetic plain: Challenges and Constraints during 12th -13th March, 2010 at Department of Geology, Patna University, Patna.
7. Agrawal A.K., Mandal M.K. and **Singh R.K.**, 2010. Targeting fluoride free aquifer in the northernmost fringe area of Chotanagpur plateau. In Regional Workshop on “Exploration, Development and Management of Ground Water In Hard Rocks with special reference to Jharkhand State” organized by Central Ground Water Board, Patna during 25th-26th March 2010 at SKIPA auditorium Ranchi.
8. Dwivedi S.N., Shukla, R.R., **Singh R.K.** and Upadhyay, S., 2010. A rapid alternative approach for estimating transmissivity of high potential aquifers in Mid Ganga Plain. In International Conference on Geophysical Science – Energy, Climate Change and Evolution of Human Society during 21-23rd December, 2010 at Department of Geophysics, Banaras Hindu University, Varanasi.
9. Dwivedi S.N., **Singh R.K.** and Chandra P.C., 2011. Sustainability of Deeper High Yielding Aquifer in Urban Areas in Middle Ganga Basin, Bihar India. In Singapore International Water Week during 4-8th July 2011 at Singapore.
10. Dwivedi S.N., **Singh R.K.**, and Saha, D., 2011. Sustaining the aquifer based water supply in Patna urban area - a fast growing million plus city in eastern India. In Stockholm International Water Week during 4-7th August 2011 at Stockholm.
11. **Singh R.K.**, Singh, J., Tiwari, S., Gupta, A.K., Bartarya, S.K. and Rai S.K., 2012. Impact of Limestone mining and Cement factory on the water quality of Cave-A case study from Meghalaya, India. In National Conference on Green Earth with focus on Himalaya during 18th & 19th October, 2012 at Wadia Institute of Himalayan Geology, Dehradun.
12. **Singh R.K.**, 2013. Integrated Ocean Drilling Program Expedition – 346 (Asian Monsoon): Onset and evolution of millennial-scale variability of Asian monsoon and its possible relation with Himalaya and Tibetan Plateau uplift. In Indian IODP participants meet during 14-15th January, 2013 at National Centre for Antarctic and Ocean Research, GOA
13. **Singh, R.K.** and Gupta A.K., (2013) Paleoceanographic changes in the eastern Indian Ocean during the Plio-Pleistocene . In XXIV Colloquium of Micropaleontology and Stratigraphy at Wadia Institute of Himalayan Geology, Dehradun, from 18 – 20th November, 2013.
14. **Singh, R.K.**, Das, M., Abhijeet, Barik, S.S. and Kanjilal, A., (2014) Pleistocene Planktic Foraminifera proxy – a tool to understand Asian monsoon variations. In: Climate Change and Environmental Sustainability: Geological Records from Poles to Tropics at Lucknow University Lucknow on 9-10th September 2014.
15. Abhijith, U.V. and **Singh R.K.**, 2015. Assessment of Late Quaternary variation in Asian Monsoon using foraminifera from the sediments of the IODP site U1429A. National Climate Science Conference, during 2-3rd July 2015 at IISc, Bangalore.
16. Barik, S.S., **Singh, R.K.** and Tripathy, S. 2015. Assessment of chilika lake sediments as paleo-proxy for climate reconstruction. National Climate Science Conference, during 2-3rd July 2015 at IISc, Bangalore.
17. Gupta, A.K., Prakasam M., Yuvaraja, A., Som Dutt, Das, M., **Singh, R.K.**, and Velu A. 2015. Inception of the Indian monsoon and its abrupt behaviour since the latest

Pleistocene. 30th Himalayan-Karakoram Thrust (HKT) conference, during 6-8th October 2015 at WIHG Dehradun. Pp. 170

18. Som Dutt, Gupta A.K., Cheng H., Rai S.K., **Singh, R.K.**, 2015. Variability in Indian monsoon over past 5000 years: Impacts on South Asian societies. 30th Himalayan-Karakoram Thrust (HKT) conference, during 6-8th October 2015 at WIHG Dehradun. Pp.292
19. **Singh, R.K.**, Das, M., Holbourn A., Kanjilal, A., Ranjan, A., Gallagher S., Kuhnt W., 2015. Paleoceanographic significance of late Quaternary deep sea benthic foraminifers of the Japan Sea - a preliminary result. 25th Indian Colloquium of Micropaleontology and Stratigraphy, during 18 – 20th December 2015 at Institute of Science Aurangabad, Maharashtra.
20. Gupta A.K., **Singh R.K.**, Das M., Prakasam M., and Som Dutt 2016. Abrupt changes in the Indian summer monsoon since MIS 3. 103 Indian Science Congress, during 6 – 8th January 2016 at University of Mysore.
21. **Singh, R.K.**, Holbourn A., Kuhnt, W., Das, M., 2016. Assessing deep sea temperature variability in East China Sea using population abundance and Mg/Ca ratio of benthic foraminifera. In 2nd IODP Expedition 346 post cruise meeting, 22-24 January 2016. University of Melbourne, Australia.
22. **Singh, R.K.**, Holbourn A., Kuhnt, W., Das, M., Pandey, D.K., 2016. Assessing deep sea water mass variability in East China Sea using population abundance and Mg/Ca ratio of benthic foraminifera. In Quaternary Climate: Recent Findings and Future Challenges, 28-30 April 2016. National Institute of Oceanography Goa.
23. Das, M., **Singh, R.K.**, Holbourn A., Farooq, S.H., Kanjilal, A., Expedition 346 Scientist, 2016. Variations in East Asian Winter Monsoon and its impact on the paleoceanography of Japan Sea over 400ka. In Quaternary Climate: Recent Findings and Future Challenges, 28-30 April 2016. National Institute of Oceanography Goa.
24. Barik, S.S., **Singh, R.K.**, Tripathy, S., Prusty, P., 2016. Foraminifera in the Chilika Lake sediments: Marine and Fluvial Interaction. In Quaternary Climate: Recent Findings and Future Challenges, 28-30 April 2016. National Institute of Oceanography Goa.
25. Nayak, P. Rai, A.K., **Singh, R.K.** Tripathy,S., 2016. Sea water intrusion, interface structure, and groundwatercondition around paradeep coast, Odisha. In Developments in Geosciences in the Past Decade -Emerging Trends for the Future and Impact on Society during 21-23rd October 2016 at Department of Geology and Geophysics, IIT Kharagpur.
26. Vats, N., **Singh, R.K.**, Das, M., Pandey, D.K., 2016. Variability in the East Asian summer monsoon during late Pleistocene in East China Sea. 1st CVAS Workshop during 28-30 November 2016 at Hamburg University, Germany.
27. Das, M., **Singh, R.K.**, Farooq, S.H., Vats, N., 2016. Variability of Asian monsoon and its linkage with deep-sea water and ecological system of benthic foraminifera assemblages over 700 Ka. 1st CVAS Workshop during 28-30 November 2016 at Hamburg University, Germany.
28. Barik, S.S., Mahto, D., **Singh, R.K.**, Tripathy, S., Prusty, P., 2017. Assessing salinity variations in brackish Chilika Lake – a multiproxy approach, 5th Open Science Meeting, Zaragoza, Spain, 9-13 May 2017 pp 174 (ID:01978, 18).
29. **Singh, R.K.**, Jena, P.S., Barik, S.S., Chattaraj, J., Prusty, P., 2017. Assessment of seasonal variations in a lagoonal lake of East Coast of India, using micro-organism population and

sediment depositional pattern. In 26th Indian Colloquium of Micropaleontology and Stratigraphy, during 17 – 19th August 2017 at Department of Geology, University of Madras, Guindy Campus, Chennai, pp. 54.

30. **Singh, R.K.**, Das, M., Divya, R.V., Mishra, S., Vats, N., Sengupta, S. and Ranjan, A., 2018. Middle Pleistocene to Holocene Paleoclimatic record from Japan and East China Sea and its possible linkage with uplift of Himalaya Tibetan Plateau and Glacio-eustati Sea level changes. In National Conference on Earth System Science with special reference to Himalaya: advancement and challenges, during 16 – 18th May 2018 at Wadia Institute of Himalayan Geology, Dehradun, pp. 71.
31. Dutt, S., Gupta, A.K., **Singh, R.K.**, Clemens, S., Cheng, H., 2018. Solar influence on Indian summer monsoon variability during the last two millennia. In National Conference on Earth System Science with special reference to Himalaya: advancement and challenges, during 16 – 18th May 2018 at Wadia Institute of Himalayan Geology, Dehradun, pp. 75.
32. Barik, S.S., **Singh, R.K.**, Sharma, K., 2018. Assessing seasonal and spatial ecological variations in coastal Chilika Lake in East coast of India using Foraminifera and grain size distribution. In ECSA 57: Changing estuaries, coasts and shelf systems - Diverse threats and opportunities, 3-6 September 2018 | Pan Pacific Perth, Perth, WA, Australia.
33. Das, M., **Singh, R.K.**, Vats, N., Holbourn, A., Mishra, S., Farooq, S.H., Pandey, D.K., 2019. Middle Pleistocene to Holocene bottom water oxygenation variability in the Japan Sea : A foraminiferal perspective. In International Conference ‘Climate Change Impacts, Vulnerabilities and Adaptation: Emphasis on India and Neighborhood, 26 February - 2 March 2019 at CORAL, IIT Kharagpur. A13, D04, pp 30,73
34. Dutt, S., Gupta, A.K., Cheng, H., Clemens, S., **Singh, R.K.**, Jaglan, S., 2019. Indian summer monsoon variability and its driving factors during past two millennia. In International Conference ‘Climate Change Impacts, Vulnerabilities and Adaptation: Emphasis on India and Neighborhood, 26 February - 2 March 2019 at CORAL, IIT Kharagpur. F15, pp. 118
35. Barik, S.S., **Singh, R.K.**, Tripathy, S., Prusty, P., Jena, P.S., and Sharma, K. 2019. Effect of spatio-temporal variations of ecosystem on CO2 sequestration in coastal region. In International Conference ‘Climate Change Impacts, Vulnerabilities and Adaptation: Emphasis on India and Neighborhood, 26 February - 2nd March 2019 at CORAL, IIT Kharagpur. H28, pp 168
36. Das, M., Vats, N., **Singh, R.K.**, Mishra, S., Barik, S.S., Divya, R.V., Sengupta, S., Ranjan, A., Pandey, D.K., 2019. Reconstruction of upper Calabrian to Holocene sea ice extent in the Japan Sea – A multiproxy approach. In 3rd National Geo-Research Scholar Meet, during 16 – 18th May 2019 at Wadia Institute of Himalayan Geology, Dehradun, pp. .
37. Barik, S.S., **Singh, R.K.**, Tripathy, S., 2019. Assessing spatio-temporal variations in benthic foraminifera abundance and diversity in coastal lagoon and their implications. In 3rd National Geo-Research Scholar Meet, during 16 – 18th May 2019 at Wadia Institute of Himalayan Geology, Dehradun, pp. .
38. Barik, S.S., **Singh, R.K.**, Tripathy, S., 2019. Relationship of metal distribution with salinity gradient in brackish water lagoon Goldschmidt Conference, 2019, Barcelona, Spain, 18th – 23th August, 2019.
39. Vats, N., Mishra, S., **Singh, R.K.** 2019. Paleoceanographic changes in East China Sea over last 400 kyr. International Conference on Paleoceanography, 2-7th September 2019, Sydney, Australia.

40. **Singh, R.K.**, Saavedra-Pellitero, M., Brombacher, A., Lembke-Jene, L., Venancio, I.M., Risselman, C., Malinverno, M., Esper, O., de Souza, A.L., Lamy, F., Winckler, G., Zarikian, C.A., Expedition 383 Scientists, 2019. Deep Sea agglutinated benthic foraminifera of Central South Pacific – variability and adaptation. In 27th Indian Colloquium of Micropaleontology and Stratigraphy, during 4 – 6th November 2019 at Department of Geology, Banaras Hindu University, Varanasi, pp. 166.
41. Barik, S.S., **Singh, R.K.**, Hussain, S.M., Tripathy, S., 2019. Assessing Benthic Micro-fauna morphological variability under seasonal and spatial variable stress conditions. In 27th Indian Colloquium of Micropaleontology and Stratigraphy, during 4 – 6th November 2019 at Department of Geology, Banaras Hindu University, Varanasi, pp. 204.
42. Lamy, F., Winckler, G. and Zarikian, C.A.A., Expedition 383 Scientists, 2019, December. Investigating the Dynamics of the Pacific Antarctic Circumpolar Current–Initial Results from International Ocean Discovery Program Expedition 383 (DYNAPACC). In AGU Fall Meeting 2019. AGU.
43. Riesselman, C.R., Brombacher, A., Esper, O., de Souza, A., Malinverno, E., Middleton, J.L., Ravelo, A.C., Saavedra, M., **Singh, R.K.**, Venancio, I. and Stoner, J.S., Expedition 383 Scientists 2019, December. Magneto-biostratigraphic integration of Neogene sequences from the subantarctic Pacific Ocean: Initial results from IODP Exp. 383. In AGU Fall Meeting 2019. AGU.
44. Moy, C.M., Arz, H.W., Farmer, J.R., Gottschalk, J., Iwasaki, S., Lawson, V., Lembke-Jene, L., Lo, L., Michel, E., Inah, S.E.O. and Wan, S., Expedition 383 Scientists 2019, December. Sedimentary perspectives of Pleistocene ocean circulation and climate change from the southernmost Chilean continental margin. In AGU Fall Meeting 2019. AGU.