

CURRICULUM VITAE

Dr. MANOJ M.C.

Scientist

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Date of Birth: 01-02-1984

<https://scholar.google.com/citations?user=HYWggpUAAAAJ&hl=en>

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Research Interests

- Multiproxy studies (Organic and Inorganic geochemistry, sortable silt, ice rafted debris, environmental magnetic parameters, stable oxygen and carbon isotopic studies from foraminifera, radiogenic isotopes of Neodymium & Strontium) from sediment samples.
- Palaeoceanography and palaeoclimatology of Southern Ocean, Bay of Bengal (IODP Bengal Fan Expedition – 354), Arabian Sea and Kerala-Konkan coast. Palaeoclimatic and palaeomonsoon reconstruction from estuaries and lakes of Kerala, India.

Thesis

Title - “**Geochemical studies on late Quaternary sediments from the Indian Sector of the Southern Ocean and its Paleoenvironmental implications**”.

Supervisors - Dr. Thamban Meloth , National Centre for Antarctic & Ocean Research, India
Dr. Kotha Mahender, Goa University, India

Professional Experience

Institute	Designation	Duration
National Centre for Antarctic & Ocean Research (NCAOR), Goa	Junior Research Fellow	18-01-2008 to 17-01-2010
National Centre for Antarctic & Ocean Research (NCAOR), Goa	Senior Research Fellow	18-01-2010 to 01-11-2013
Birbal Sahni Institute of Palaeosciences, Lucknow	Scientist B	04-11-2013 to 31-12-2017
Birbal Sahni Institute of Palaeosciences, Lucknow	Scientist C	01-01-2018 to 31-12-2021
Birbal Sahni Institute of Palaeosciences, Lucknow	Scientist D	01-01-2022 till date

Awards & Recognitions

- ❖ **Scientific Committee on Antarctic Research (SCAR) fellowship** award 2014 to carry out research work in Kochi University, Japan - on organic geochemistry studies in Southern Ocean sediment cores to study the paleoclimatic variation during the Quaternary.
- ❖ Selected as a onboard scientist for the **Japanese Scientific expedition to the Southern Ocean** in cruise KH-16-1 by R/V Hakuho-Maru during January-February, 2016.
- ❖ Selected to participate as a sedimentologist in the International Ocean Discovery Program (IODP) **expedition- 355 (Bengal Fan)** in *JOIDES Resolution* from Singapore to Colombo to carry out research in the Bay of Bengal during January-March, 2015.
- ❖ **PAGES Poster Award** and certificate of merit at the XVIII International Union for Quaternary Research (INQUA) Congress held in Bern, Switzerland. July 2011.
- ❖ **Best paper award** at the National seminar on Emerging trends in Environment and Development with a theme on Climate change and water resources, by KUNSED 2009 at University of Kerala, Trivandrum. October, 2009.
- ❖ Selected for the 2nd PAGES Young Scientists Meeting (YSM) to present a paper on PAGES (Past Global Changes) 2nd Young Scientists Meeting (YSM) and 4th Open Science Meeting (OSM). February 2013.
- ❖ Selected for the Argentine fellowship program by Argentine Antarctic Institute, Argentina and partial travel grant by Scientific Committee on Antarctic Research (SCAR) U.K. and INSA, India to attend the SCAR-OSC 2010.
- ❖ Selected for travel grant to attend the INQUA congress, 2011, Switzerland by Ministry of Earth Sciences (MoES)/INSA.
- ❖ Selected for travel grant to attend the SCAR–OSC -2014, Auckland by Science and Engineering Research Board (SERB), Department of Science and Technology, India.

Fields of Experience & Research Accomplishments

- Instrumental in establishing different labs and instruments of the organic and inorganic Geochemistry Laboratory facility at BSIP.
- Participated as scientific staff onboard R/V Hakuho-Maru in the Japanese Expedition to Southern Ocean on research cruise KH-16-1 from Mauritius to Perth.
- Participated in the International Discovery Program (IODP) Bengal Fan Cruise – 354 on the IODP project “Long-term variations in the Neogene and pre-Neogene sedimentary record from the Bay of Bengal” from Singapore to Colombo.
- Participated in IVth Southern Ocean Expedition (SOE - IV) on board ORV Sagar Nidhi on projects entitled ‘Southern Ocean Paleoceanography during the late Quaternary from the Indian sector: a biogeochemical approach’. Latitudinal extend was between 10°N to 66°S.
- Participated in oceanographic cruise on board ORV Sagar Kanya as part of the project ‘Biogeochemistry of the Tropical Indian Ocean’, SK-244 - (27th January to 18th February, 2008). Latitudinal extend was between 10°N to 6°S.
- Well trained with sophisticated analytical equipments like GC-MS, ICP-MS, TOC Analyser, LPSA, Coulter Counter, ASE, Spectrophotometer and AGICO KLY-4S Kappabridge.

Membership of Societies

- Association of Quaternary Researchers (AOQR)
- Geochemical Society
- Indian Association of Sedimentologist (IAS)
- Paleontological Society of India
- Paleobotanical Society of India
- Vinjana Bharati (VIBHA)

Projects & Research Grants

Project Title	Whether Completed or not	Duration	Sponsoring	Co-Investigator if any
Provenance and environmental records of lake sediments from Kerala, South India - using a suite of geochemical proxies	Completed	2015-2019	SERB-DST	No
Palaeoclimate and palaeoceanography of the lower Bengal Fan from the late Paleogene to present – IODP Expedition 354.	Completed	2016-2021	IODP India, NCAOR, Ministry of Earth Sciences	No
Paleoceanographic and biogeochemical response of the northern Indian Ocean to the Himalayan uplift and denudation	Completed	2016-2018	DST-Indo-Japanese Joint research	Dr. Kohki Yoshida (Japan) & Dr. Supriyo Das (India)

Thesis supervised

Name of student	Name of University	Title of Thesis	Year completed
Ph.D.			
Masud Kawsar	AcSIR - Academy of Scientific & Innovative Research	Assessing paleomonsoon and climate shift over Miocene to Pleistocene from Bengal Fan – IODP Expedition 354	Submitted
Sneha Mary Mathew	AcSIR - Academy of Scientific & Innovative Research	Paleocene–Eocene records of palaeohydrological and palaeoenvironmental changes from the lignite fields of Rajasthan, India	Ongoing
M. Sc.			
Mr. Alok Ranjan	Indian Institute of Technology (IIT), Bhubaneswar, India	Preliminary study on foraminifera and palynological analysis of a sediment core from the Arabian Sea	2015

Mr. Vivekanand	Gujarat University, Ahmadabad, Gujarat.	Distribution of n-alkanes in the surface sediments from the core monsoon zone of India	2021
Mr. Ajay Krishna K.	Christ College (Autonomous), Irinjalakuda, Kerala	Pleistocene ice-rafted debris deposition and its provenance in the Indian sector of the Southern Ocean	2022
Mr. Anandu Krishnan	Christ College (Autonomous), Irinjalakuda, Kerala	Reconstructing sedimentation history and hydrodynamic conditions in the Vembanad Lake using grain size analysis and end member decomposition	2022
Ms. Devika Nair M	Central University of Kerala, Periya, Kasaragod	Mid to Late Miocene characterization of Lower Bengal Fan sediments: Assessments on fan development, monsoonal shifts and palaeoceanographic variations	2023
Ms. Aiswarya P. S.	Central University of Kerala, Periya, Kasaragod	Mid to late Pleistocene ice-rafted debris and bottom water dynamic history from the Indian sector of the Southern Ocean	2023
Mr. Abhishek Mishra	University of Lucknow, Lucknow	Geochemical and Mechanical Analysis of Coal	2023

Peer-Reviewed Publications

1. Kawsar, M., **Manoj, M.C.***, Weber, M.E. 2023. Depositional dynamics of the Bengal Fan since the Late Miocene: Discrimination of skinfriction shear stresses of hemipelagic vs. turbiditic deposition. *Geo-Marine Letters*. <https://doi.org/10.1007/s00367-023-00759-w> (IF- 2.1)
2. Pradhan, S., Goswami, S., Aggarwal, N., Mathews, R. P., **Manoj M. C.**, Pillai, S. S. K., Shekhar Pradhan, S. 2023. Integrative Study of Permian Coal-Bearing Horizons: Biostratigraphy, Palaeovegetation, and Palaeoclimate in the South Karanpura Basin. *Environmental Geochemistry and Health*. <https://doi.org/10.1007/s10653-023-01701-w>. (IF- 4.2)
3. Uddandam, P.R., Kapur, V.V., Parmar, S., **Manoj, M.C.**, Sharma, A., Prasad, V. 2023. Danian-Ypresian dinocyst biostratigraphy, fish fauna and depositional environment of the Akli Formation, Barmer Basin, western India. *Historical Biology*. <https://doi.org/10.1080/08912963.2023.2214585>. (IF- 1.4)
4. Samal, P., Singarasubramanian, S.R., Srivastava, J., Kawsar, M., **Manoj, M.C.**, Gurumurthy, G.P., Chauhan, Md M., Ali, S., Alam, M., Sharma, A. 2023. A 2600 year -multi-proxy record for climate and vegetation reconstruction along the Mahanadi River delta, East coast of India. *The Holocene*. <https://doi.org/10.1177/09596836231163492> (IF- 2.4)
5. Pillai, S.S.K., **Manoj, M.C.**, Mathews, R.P., Murthy, S., Sahoo, M., Saxena, A., Sharma, A., Pradhan, S., Kumar, S. 2023. Lower Permian Gondwana sequence of Rajhara (Daltonganj Coalfield), Damodar Basin, India: Floristic and geochemical records and their implications on marine ingressions and depositional environment. *Environmental Geochemistry and Health*. <https://doi.org/10.1007/s10653-023-01517-8> (IF- 4.2)

6. Tripathi, S., Thakur, B., Sharma, A., Phartiyal, B., Basumatary, S.K., Ghosh, R., Kumar, K., **Manoj M.C.**, Agrawal, S., Farooqui, A., Tiwari, P., Saikia, K., Tiwari, A., Pandey, A., Ali, N., Agnihotri, R., Prasanna K., Morthekai, P., Ranhotra, P.S., Pandey, S., Bose, T. 2023. Modern biotic and abiotic analogues from the surface soil of Ganga-Ghaghara-Gandak interfluvies of the Central Ganga Plain (CGP), India: Implications for the palaeoecological reconstructions *Catena* 224, 106975. <https://doi.org/10.1016/j.catena.2023.106975> (IF- 6.2)
7. **Manoj, M.C.***, Thakur, B., P.R. Uddandam. 2023. Controls on rare earth elements distribution over the past 2000 years from Kerala coast, southwest India. *Environmental Forensics* 24:1-2, 28-43, <http://dx.doi.org/10.1080/15275922.2021.1940383>. (IF: 1.8)
8. Samal, P., Singarasubramanian, S.R., **Manoj, M.C.**, Srivastava, J., D'Souza, N., Balakrishna, K., Chauhan, Md M., Ali, S. 2022. Heavy metal contamination assessment and its associated human health risk evaluation in the Mahanadi River sediments, India. *International Journal of Environmental Science and Technology*. <https://doi.org/10.1007/s13762-022-04630-w>. (IF- 3.1)
9. Kawsar, M., **Manoj, M.C.***, Weber, M.E. 2022. Reconstructing dynamics of Northern and Southern sourced bottom waters sortable silt records in the lower Bengal Fan during last 200 ka. *Zeitschrift der Deutschen Gesellschaft für Geowissenschaften (ZDGG) (Journal of Applied and Regional Geology)*. <https://DOI:10.1127/zdgg/2022/0318> (IF- 1.167)
10. Morthekai, P., Thakur, B., Murari, M.K., **Manoj, M.C.**, Singh, P., Singh, V.K., Kumar, K., Ali, S.N., Rai, J., Dubey, P. 2022. Further investigations towards luminescence dating of diatoms. *Radiation Measurements*. <https://doi.org/10.1016/j.radmeas.2022.106803>. (IF: 2)
11. Srivastava, J., **Manoj, M.C.**, Manjunatha, B.R., Yoganandan, V., Jose, J., Balakrishna, K., Kumar, A.N., Ahmed, A. 2022. Delineation of terrestrial and marine productivity in the Southwestern Continental margin of India. *Journal of Asian Earth System Science* 230,105203. <https://doi.org/10.1016/j.jseaes.2022.105203>. (IF: 3)
12. Anoop S., **Manoj, M.C.***, Kawsar, M., Sivadas S.K., Beevi M.R. 2022. Spatio-temporal distribution of heavy metals in sediments of Biyyam Backwater, Kerala, Southwest India; its environmental implications. *Environmental Nanotechnology, Monitoring & Management*. <https://doi.org/10.1016/j.enmm.2022.100662>. (Cite score - 9.3)
13. Chaddha, A.S., Mathews, R.P., Kumar, K., Ali, S.N., Phartiyal, B., **Manoj, M.C.**, Sharma.2021. Caves as interim-refugia- Chemical signatures of human habitation under extreme environments of Ladakh, NW India. *Journal of Archaeological Science: Reports* 36, 102799. <https://doi.org/10.1016/j.jasrep.2021.102799>. (IF: 1.6)
14. **Manoj, M.C.***, Kawsar, M. 2020. Metal contamination assessment in a sediment core from Vagamon Lake, southwest India: natural/anthropogenic impact. *Environmental Nanotechnology, Monitoring & Management* 14, 100362. <https://doi.org/10.1016/j.enmm.2020.100362>. (Cite score - 9.3)
15. **Manoj, M.C.***, Srivastava, J., Uddandam, P.R., Thakur, B. 2020. A 2000 year record of palaeoclimatic variability from Kerala coast, southwest India. *Journal of Earth Science* 31, 1029–1044. <https://doi.org/10.1007/s12583-020-1336-4>. (IF: 3.3)
16. Ghadi, P., Nair, A., Mohan, R., Crosta, X., **Manoj, M.C.**, Thamban, M. 2020. Antarctic sea-ice

and paleoproductivity variation over the last 156 000 years in the Indian sector of Southern Ocean. *Marine Micropaleontology*, 101894. <https://doi.org/10.1016/j.marmicro.2020.101894>. (IF: 1.9)

17. Uddandam, P.R., Prasad, V., **Manoj, M.C.** 2020. New modern dinoflagellate cysts from the recent sediments of Northern Indian Ocean. *Journal of Paleontological Society of India* 65(1): 15-26 (IF: 0.705)
18. Mathews, R.P., Pillai, S.S.K., **Manoj, M.C.**, Agrawal, S. 2020. Palaeoenvironmental reconstruction and evidence of marine incursion in Permian coal-bearing sequence from Lalmatia coal mine (Rajmahal Basin), Jharkhand, India - A multi-proxy approach. *International Journal of Coal Geology* 103485. <https://doi.org/10.1016/j.coal.2020.103485>. (IF: 5.6)
19. Nair, A., Ghadi, P., Mohan, R., **Manoj, M.C.**, Crosta, X., Shukla S. K., Thamban, M. 2020. Glacial-interglacial size variability of *Fragilariopsis kerguelensis* and *Thalassiosira lentiginosa* from the Indian sector of the Southern Ocean. *Deep Sea Research II*. 104746. <https://doi.org/10.1016/j.dsr2.2020.104746>. (Cite score - 3)
20. Nair, A., Mohan, R., Crosta, X., **Manoj, M.C.**, Marieu, V., Thamban, M. 2019. Southern Ocean sea ice and frontal changes during the late Quaternary and their linkages to Indo-Asian summer monsoon. *Quaternary Science Reviews* 213: 93–104. <https://doi.org/10.1016/j.quascirev.2019.04.007>. (IF- 4)
21. Kawsar, M., **Manoj, M.C.***, Yoshida, K., Baxter, A.T., Reilly, B.T. 2018. Morphological and chemical properties of microtektite grains from Bay of Bengal (IODP Expedition 354). AGU Fall Meeting 2018, Washington DC. ESSOAr. <https://doi.org/10.1002/essoar.10500240.1>.
22. **Manoj, M.C.***, Thakur, B., Prasad, V., Uddandam, P.R. 2018. Assessment of metal contamination in the sediments of Vembanad wetland system, from the urban city of southwest India. *Environmental Nanotechnology, Monitoring & Management* 10: 238–252. <https://doi.org/10.1016/j.enmm.2018.07.004> (Cite score - 9.3)
23. Uddandam, P.R., Prasad, V., Thakur, B., **Manoj, M.C.** 2018. *Cristadinium striaospinosa*, a dinoflagellate cyst from the tropical region. *Journal of Paleontological Society of India* 63(1): 73–80. (IF: 0.705)
24. Pillai, A.A.S., Anoop, A., Prasad, V., Ratnam, J., **Manoj, M.C.**, Varghese, S., Sankaran, M. 2018. Multi-proxy evidence for an arid shift in the climate and vegetation of the Banni grasslands of western India during the mid- to late-Holocene. *The Holocene* 28 (7): 1057–1070. <https://doi.org/10.1177/0959683618761540>. (IF- 2.4)
25. **Manoj, M.C.***, Thakur, B., Prasad, V. 2016. Rare earth element distribution in tropical coastal wetland sediments: a case study from Vembanad estuary, southwest India. *Arabian Journal of Geosciences* 9(3). <https://doi.org/10.1007/s12517-015-2246-0>.
26. Thakur, B., Srivastava, J., Uddandam, P.R., **Manoj, M.C.**, Prasad, V. 2015. Role of sedimentary processes and environmental factors in determining the distribution pattern of marine and terrestrial palynomorphs and diatoms in a tropical coastal wetland. *Journal of Paleontological Society of India* 60(2): 71–84. (IF: 0.705)
27. France-Lanord, C., Spiess, V., Klaus, A., and the Expedition 354 Scientists, 2015. Bengal Fan: Neogene and late Paleogene record of Himalayan orogeny and climate: a transect across the

Middle Bengal Fan. *International Ocean Discovery Program Preliminary Report* 354. <http://dx.doi.org/10.14379/iodp.pr.354.2015>.

28. Nair, A., Mohan, R., **Manoj, M.C.**, Thamban, M. 2015. Glacial-interglacial variability in diatom abundance and valve size: implications for Southern Ocean paleoceanography. *Paleoceanography* 30: 1245–1260. <https://doi.org/10.1002/2014PA002680>. (IF- 3.992)
29. **Manoj, M.C.***, Thamban, M. 2015. Shifting frontal regimes and its influence on bioproductivity variations during the late Quaternary in the Indian sector of Southern Ocean. *Deep Sea Research II* 118: 261–274. <http://doi:10.1016/j.dsr2.2015.03.011>. (IF - 3)
30. **Manoj, M.C.***, Thamban, M., Sahana, A., Mohan, R., Mahender, K. 2013. Provenance and variability of ice rafted debris from the Indian sector of the Southern Ocean during the last 22000 years. *Journal of Earth System Science* 122, (2): 491–501. <https://doi.org/10.1007/s12040-013-0271-5> (IF- 1.9)
31. Sruthi, K.V., Thamban, M., **Manoj, M.C.**, Laluraj, C.M. 2012. Association of trace elements with various geochemical phases in the Indian sector of Southern Ocean during past 22,000 years and its palaeoceanographic implications. *Current Science* 103 (7): 803–809. (IF- 1.169)
32. **Manoj, M.C.***, Thamban, M., Basavaiah, N., Mohan, R. 2012. Evidence for climatic and oceanographic controls on terrigenous sediment supply to the Indian Ocean sector of the Southern Ocean over the past 63,000 years. *Geo-Marine Letters* 32(3): 251. <https://doi:10.1007/s00367-011-0267-6>. (IF- 2.1)

Book Chapter

33. Kawsar, M., **Manoj, M.C.***, Yoshida, K., Baxter, A.T., Reilly, B.T. 2020. Morphological and Chemical Properties of Microtektite Grains from Bay of Bengal (IODP Expedition 354). In: Pandey, D., Ravichandran, M., Nair, N. (eds) *Dynamics of the Earth System: Evolution, Processes and Interactions. Society of Earth Scientists Series. Springer, Cham.* 27–53. https://doi.org/10.1007/978-3-030-40659-2_2.
34. Shah, S.K., Kapur, V.V., **Manoj, M.C.**, Srivastava, J., Prasad, V. 2020. Recent Advancement(s) at the Birbal Sahni Institute of Palaeosciences, Lucknow: An Overview. *Proceedings of the Indian National Science Academy* 86(1); 675–688. <https://doi:10.16943/ptinsa/2020/49826>.
35. **Manoj, M.C.***, Singh, A., Verma, P., Govil, P., Kawsar, M., Uddandam, P.R., Prasad, V. 2020. Marine Micropalaeontology: An Overview of Indian Contributions during 2016-2019. *Proceedings of the Indian National Science Academy* 86 (1); 419–444. <https://doi:10.16943/ptinsa/2020/49818>.

Datasets Published

36. Weber, M.E., Kawsar, M., **Manoj, M.C.** 2022. Sortable silt Endmember model results for IODP Hole 354-U1452C. PANAGEA. Data Publisher for Earth & Environmental Science. <https://doi.pangaea.de/10.1594/PANGAEA.949246>.
37. Weber, M.E., Kawsar, M., **Manoj, M.C.** 2022. Sortable silt of IODP Hole 354-U1452C. PANAGEA. Data Publisher for Earth & Environmental Science. <https://doi.pangaea.de/10.1594/PANGAEA.949247>.

Proceedings in International Ocean Discovery Program:

- France-Lanord, C., Spiess, V., Klaus, A., Schwenk, T., and the Expedition Scientists, 2016. *Bengal Fan*. Proceedings of the International Ocean Discovery Program, 354: College Station, TX (International Ocean Discovery Program). <http://dx.doi.org/10.14379/iodp.proc.354.2016>. (10 chapters)
- France-Lanord, C., Spiess, V., Klaus, A., Schwenk, T., and the Expedition 354 Scientists, 2016. Supplementary material, <http://dx.doi.org/10.14379/iodp.proc.354supp.2016>. *Supplement to France-Lanord, C., Spiess, V., Klaus, A., Schwenk, T., and the Expedition 354 Scientists, Bengal Fan*. Proceedings of the International Ocean Discovery Program, 354: College Station, TX (International Ocean Discovery Program). <http://dx.doi.org/10.14379/iodp.proc.354.2016>

Reports and abstracts in Journals:

- I. **Manoj, M. C.*** 2023. Indian Participation in XXI INQUA Congress 2023, Rome, Italy. *Quaternary Chronicle* 5(2), pp-8.
- II. **Manoj, M. C.*** 2015. SCAR Fellowship Report - 2014/2015 - Biomarker based reconstruction of late Quaternary Palaeoceanographic conditions in the Indian sector of the Southern Ocean. Scientific Committee for Antarctic Research.
- III. Veeru Kant Singh, Anju Saxena, Poonam Verma, Parminder Singh Ranhotra, Deepa Agnihotri, Jyoti Srivastava, **M. C. Manoj**, Md. Firoze Quamar. 2015. India International Science Festival (IISF) 2015. *Current Science*. 110(5):756-757.
- IV. Shridhar D. Jawak, **M.C. Manoj**, Abhilash Nair, Mahesh B.S. 2014. Indian Participation in the 33rd Scientific Committee on Antarctic Research (SCAR - 2014). *Geol. Soc. India*, Vol. 84, pp-620.
- V. **M. C. Manoj***, M. Thamban, R. Mohan. 2012. Paleooceanographic Changes during the Past 95000 Years from the Indian Sector of the Southern Ocean. AGU Fall Meeting Abstracts 1, 2080.
- VI. **M.C. Manoj***, "Palaeoclimatic and palaeoenvironmental history of the late Quaternary sediments in a core from the Indian sector of the Southern Ocean: rock magnetic and geochemical signals". 2012, *Quaternary International*, 279-280, 2012; 304. ISSN 1040-6182, <http://DOI:10.1016/j.quaint.2012.08.833>.
- VII. **M.C. Manoj***, Ashok Singhvi, Alpa Sridhar. 2012. Indian Participation in XVIII International Union for Quaternary Research (INQUA) Congress, 2011. *J. Geol. Soc. India*, Vol. 79, No.2. <http://DOI:10.1007/s12594-012-0036-9>.
- VIII. Pant, N.C., **M.C. Manoj***. 2010. Indian Participation in SCAR (Scientific Committee on Antarctic Research): Open Science Conference (OSC) 2010. *J. Geol. Soc. India*, Vol.76, No.4. pp- 427.

Conference/Seminar/Workshop Presentations

- ❖ **Manoj, M.C.***, Krishna, K.A., Crosta, X., Shukla, S.K., Kawsar, M. Glacial-interglacial ice-rafted debris variability in the western Indian sector of the Southern Ocean: Palaeoceanographic implications. XXI INQUA Congress 2023. Rome, Italy. July 2023.
- ❖ **Manoj, M.C.***, Crosta, X., Shukla, S.K., Kawsar, M. Krishna, K.A. Ice-rafted debris variability from the western Indian sector of the Southern Ocean over the past 650 ka. National Conference on Polar Sciences (NCPS - 2023), Goa, India. May 2023.
- ❖ Samal, P., Singarasubramanian, S.R., **Manoj, M.C.**, Srivastava, J., D'Souza, N., Balakrishna, K., Chauhan, Md M., Ali, S. Assessment of heavy metal pollution and human risk in the Mahanadi River sediments, India. Goldschmidt 2023 Conference. July 2023.
- ❖ Kumar, S., Singh, V.P., Mathews, R.P., Murthy, S., Pillai, S.S.K., **Manoj, M.C.** Organic petrographic and palaeofloristic composition: Implications on environment and depositional settings from Ashoka Mine, North Karanpura, Damodar Basin, India. 73rd Annual Meeting and Symposium of the International Committee for Coal & Organic Petrology (ICCP-2022) at New Delhi, India, September, 2022.

- ❖ Kumar, S., Singh, V.P., Mathews, R.P., Murthy, S., Pillai, S.S.K., **Manoj, M.C.** Paleofloristic and petrographic characteristics of the Ashoka coal-bearing succession of North Karanpura Basin, India. GEOYOUTH 11th All India Students Symposium on Geology by Department of Geology Mohanlal Sukhadia University, Udaipur, February 2022.
- ❖ **Manoj M.C.***, Kawsar, M. Decoding the dynamics of soil erosion and hydroclimatic signals using End Member Modelling Analysis on southwest Indian lakes. IQC-2022: An International Conference, January 2022. (Online)
- ❖ Kawsar, M., **Manoj M.C.**, M.E. Weber, Reconstructing dynamics of Northern and Southern sourced bottom waters using sortable silt records in the lower Bengal Fan during last 200 ka. IQC-2022: An International Conference, January 2022. (Online)
- ❖ Samal, P., Singarasubramanian, S.R., Srivastava, J., Kawsar, M., **Manoj, M.C.**, Gurumurthy, G.P., Chauhan, Md.M., Ali, S., Alam, M., Sharma, A. A multi-proxy sedimentary record of last 2.6ka climate and vegetation from the Mahanadi River Delta, East coast of India. IQC-2022: An International Conference, January 2022. (Online)
- ❖ **Manoj M.C.** Paleoceanography- Lessons for a future world. St.Paul's College, Kalamassery. July 2021.
- ❖ **Manoj M.C.** An introduction to Gas Chromatography-Mass Spectrometry (GC-MS). Hindi fortnight lecture at Birbal Sahni Institute of Palaeosciences. September, 2020.
- ❖ Kawsar M., **Manoj M.C.** Reconstructing skinfriction shear stress and sedimentation dynamics in the Bengal Fan during the last 8 million years using Sortable Silt. International Conference on Paleoclimate Changes (ICPC-2020). Vellore Institute of Technology, Chennai. July 9-10, 2020. Presentation/ICPC-20/17.
- ❖ Tiwari P., Thakur B., **Manoj M.C.**, Mazumder A., Srivastava P., Agnihotri, R., Agarwal S. Multi-proxy study of surface sediments from southwest coastal Kerala, India and its tropic status. International Conference on Paleoclimate Changes (ICPC-2020). Vellore Institute of Technology, Chennai. July 9-10, 2020. Presentation/ICPC-20/30
- ❖ Yoshida K., Rai L.K., **Manoj M.C.** Heavy mineral assemblage in the Himalayan river tributaries and correlation to Bengal Fan deposits. AGU Fall Meeting. San Francisco, CA, USA. December 2019.
- ❖ Kawsar M., **Manoj M.C.**, Weber M.E., Lantzsich H. Reconstructing boundary layer flows in the Bay of Bengal during last 200 ka. XXVII Indian Colloquium on Microplaeontology and Stratigraphy. Varanasi, India. November, 2019.
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- ❖ Attended International workshop on Scientific Drilling in the Indian Ocean. Goa, India. October 2011.
 - ❖ Training Workshop on “**Wetlands; Functions, Significance and Problems**”, organized by Dept. of Geology, University of Kerala, on February 2007.
 - ❖ Participated in the “**International Conference on b-GIS @INDIA**”, organized by Dept. of Geology, University of Kerala, on December 2006.
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