# **CURRICULUM VITAE**



Name : SARAT CHANDRA TRIPATHY

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#### **ACADEMIC BACKGROUND:**

2011: D.Sc., Earth and Environmental Sciences [Nagoya University, Japan].

2005: Ph.D., Marine Sciences [National Institute of Oceanography (NIO)/Berhampur University].

1998: M.Sc., Marine Biology [Berhampur University, Odisha].

1996: B.Sc., Botany (Honors), Chemistry, Zoology [Utkal University, Odisha].

#### PROFESSIONAL BACKGROUND:

01-2021 : Scientist - F, National Centre for Polar and Ocean Research (NCPOR), MoES, Goa.
01-2016 : Scientist - E, National Centre for Polar and Ocean Research (NCPOR), MoES, Goa.

12-2011 : Scientist - D, National Centre for Antarctic and Ocean Research (NCAOR), MoES, Goa.

04-2011 : Post-Doctoral Fellow, HyARC, Nagoya University, Japan.

04-2008 : Research Student (D.Sc.), Nagoya University, Japan.

04-2005 : Japanese Govt. (Monbukagakusho/MEXT) Scholar, Nagasaki University, Japan.

06-2003 : Senior Research Fellow, CSIR-NIO, Visakhapatnam.

11-2001 : Project Biologist, Wildlife Institute of India (WII), MoEF-CC, Dehradun.

09-1999 : Project Trainee-III, CSIR-NIO, Visakhapatnam.

#### **AWARDS & RECOGNITIONS:**

- INSA grant to participate in the XII<sup>th</sup> SCAR-Biology Symposium in Belgium (2017).
- Nagoya University grant to participate in PICES conference in USA (2009).
- Outstanding poster award in the PORSEC held at Guangzhou, China (2008).
- Japanese Government (MEXT) Fellowship for pursuing D.Sc. in Japan (2005).
- NF-POGO fellowship for visiting professor's training at NIO, Kochi (2004).
- CSIR-Senior Research Fellowship (2003).
- 2<sup>nd</sup> rank in M.Sc from Berhampur University (1998).
- State Scholarship in higher secondary examination (1991).

### **MAJOR AREA OF RESEARCH INTERESTS:**

- Phytoplankton Productivity (Carbon Dynamics) & Bio-optical Oceanography
- Bio-physical Interactions, Marine Ecology & Biogeochemistry

# **SCIENTIFIC EXPEDITIONS PARTICIPATED:**

- 2024: Team leader of the Indian Arctic Expedition (Winter Batch III)
- 2023: Team leader of the Indian Arctic Expedition (Batch I).
- 2019: Team leader of the Indian Arctic Expedition (Batch III).
- 2018: Team leader of the Indian Arctic Expedition (Batch II).
- 2018: Member of the 10<sup>th</sup> Indian Southern Ocean Expedition onboard MV SA-Agulhas.
- 2017: Chief Scientist of the 9th Indian Southern Ocean Expedition onboard MV SA-Agulhas.
- 2016: Team leader of the Indian Arctic Expedition (Batch II).
- 2015: Chief Scientist of the 8th Indian Southern Ocean Expedition onboard ORV-Sagar Nidhi.
- 2014: Deputy Chief Scientist of the Tropical Indian Ocean Expedition onboard ORV-Sagar Nidhi.
- 2013: Deputy Chief Scientist of the 7th Indian Southern Ocean Expedition onboard ORV-Sagar Nidhi.
- 2012: Member of the Indian Arctic Expedition (Batch III).

Over 700 days of cruise experience onboard several Scientific Research Vessels in the Bay of Bengal, Arabian Sea, Indian Ocean, East China Sea, Southern Ocean & coastal Antarctica, and Arctic fjords.

# PEER-REVIEWED PUBLICATIONS: [Total Impact Factor: > 170]

- 61. Halfter, S., Brokensha, L., Cotté, C., Eriksen, R., Friscourt, N., Green, D.B., Heil, P., Hellessey, N., Borreguero, L.H., Hirawake, T., Hobbs, W., Jansen, J., Mahajan, A.S., Makhado, A.B., McMahon, C.R., von der Meden, C.E.O., Raes, E., Stirnimann, L., Subramaniam, R., Sundaram, S., Tagliabue, A., Wynn-Edwards, C., Verhaegen, G., Tripathy, S.C., Shadwick, E.H. (2025): Status of ocean observations in the Indian Sector of the Southern Ocean. *Elementa: Science of the Anthropocene*, Vol. xx(x), pp. xxx-xxx. [In Review]
- 60. Singh, P., Bhaskar, P.V., Sinha, A.K., Barvkar, V.T., **Tripathy, S.C.** (202x): Ferrioxamine X1 mediated iron interaction with FoxA receptor in Marine *Pseudomonas stutzeri*. **Journal of Biomolecular Structure and Dynamics**, Vol. xx(x), pp. xxx-xxx. [In Review]
- 59. Kerkar, A.U., \*Tripathy, S.C., D. Magesh Peter (202x): Comparison of carbon and fluorescence-based phytoplankton productivity: In-situ observations from the Southern Ocean. *Science of the Total Environment*, Vol. xx(x), pp. xxx-xxx. [In Review]
- 58. Pandi, S.R., \*Tripathy, S.C., Mendes, C.R.B., Naik, R.C.S., Padhi, S.K., Lotliker, A.A., Mohan, R. (202x) Three-component models for the detection of phytoplankton size classes in the Indian Sector of the Southern Ocean. *Journal of Marine Systems*, Vol. xx(x), pp. xxx-xxx. [In Review]
- 57. Deng, B., Xu, Y., Hughes, D.J., **Tripathy, S.C.**, Tan, S., Yao, W., Jiang, Z., Zeng, J., Zhu, Y. (202x): Long-term changes in particulate organic carbon, phytoplankton carbon, and net primary productivity in the East China Sea during summer. *Regional Studies in Marine Science*, Vol. xx(x), pp. xxx-xxx. [In Review]

- 56. Duarte, P., de la Guardia, L.C., Assmy, P., Wold, A., Fransson, A., Chierici, M., Bailey, A., Hodson, A., Alexander, A., Magalhães, C., Gabrielsen, G.W., Albretsen, J., Frank, L., Tripathy, S.C., Smerdou, C., Gordillo, F.J.L., Cobos, P., Velázquez, D., Convey, P., Rovere, F.D., Hop, H. (202X): Ecosystem metabolism and nitrogen budget of a glacial fjord in the Arctic. *Scientific Reports*, Vol. xx(x), pp. xxx-xxx. [In Review]
- 55. Tripathy, S.C., Mishra, R.K, Luis, A.J., Jena, B., Parli, B.V., Sabu, P., Tiwari., M., Mohan, R. (2024): Indian Scientific Expeditions to the Southern Ocean: Insights from Physical, Biochemical, and Paleoceanographic Observations. *CLIVAR Exchanges*, ISSN No. 1026-0471, <a href="https://doi.org/10.36071/clivar.83.2024">https://doi.org/10.36071/clivar.83.2024</a>, Vol. 83, pp. 22-29.
- 54. Padhi, S.K., \*Tripathy, S.C., Pandi, S.R. (2024): Cross-frontal variability of phytoplankton productivity in the Indian sector of the Southern Ocean during austral summer of 2010-2018. *Science of the Total Environment*, 176401. <a href="https://doi.org/10.1016/j.scitotenv.2024.176401">https://doi.org/10.1016/j.scitotenv.2024.176401</a>, Vol. 954, pp. 176401.
- 53. Clem, K.R., Raphael, M.N., Adusumilli, S., Amory, C., Baiman, R., Banwell, A.F., Barreira, S., Beadling, R.L., Bozkurt, D., Colwell, S., Coy, L., Datta, R.T., Deb, P., De Laat, J., du Plessis, M., Fernandez, D., Fogt, R.L., Fricker, H.A., Gille, S.T., Johnson, B., Josey, S.A., Keller, L.M., Kramarova, N.A., Kromer, J., Lait, L.R., Lazzara, M.A., Lieser, J.L., MacFerrin, M., MacGilchrist, G.M., MacLennan, M.L., Marouchos, A., Massom, R.A., McMahon, C.R., Mikolajczyk, D.E., Mote, T.L., Newman, P.A., Norton, T., Petropavlovskikh, I., Pezzi, L.P., Pitts, M., Reid, P., Santee, M.L., Scambos, T.A., Schulz, C., Shi, J.-R., Souza, E., Stammerjohn, S., Thomalla, S., Tripathy, S.C., Trusel, L.D., Turner, K. & Yin, Z. (2024): Antarctica and the Southern Ocean; Bulletin of the American Meteorological Society; <a href="https://doi.org/10.1175/BAMS-D-24-0099.1">https://doi.org/10.1175/BAMS-D-24-0099.1</a>, Vol. 105(8), pp. S331-S370.
- 52. Pandi, S.R., Sarma, N.S., Chiranjeevulu, G., Chari, N.V.H.K., Lotliker, A.A., Bajish, C.C., Tripathy, S.C. (2024): Chromophoric dissolved organic matter traces seasonally changing coastal processes in a river-influenced region of the western Bay of Bengal. *Environmental Science and Pollution Research*, https://doi.org/10.1007/s11356-024-34443-y, Vol. 31, pp. 49372-49392.
- Tripathy, S.C., Kerkar, A.U., Sabu, P., Pandi, S.R., Padhi, S.K., Sarkar. A., Mohan, R. (2024): Short-term timeseries observations of phytoplankton light-absorption and productivity in Prydz Bay, coastal Antarctica. Frontiers in Marine Science, <a href="https://doi.org/10.3389/fmars.2024.1420179">https://doi.org/10.3389/fmars.2024.1420179</a>, Vol. 11:1420179.
- Kerkar, A.U., \*Tripathy, S.C., Sabu, P. (2023): Concurrent measurements of phytoplankton productivity and light absorption from a global carbon hotspot: variability, features, and causes. *Global and Planetary Change*, https://doi.org/10.1016/j.gloplacha.2023.104193, Vol. 228, pp. 104193.
- 49. Baishnab, S.S., Shahir, A., Mandal, S., **Tripathy**, **S.C.** (2023): Unveiling the meiobenthic community structure of Prydz Bay, Antarctica during austral summer. *Deep-Sea Research Part I: Oceanographic Research Papers*, https://doi.org/10.1016/j.dsr.2023.104109, Vol. 199, pp. 104109.
- 48. Bhaumik, S., Mandal, S., **Tripathy, S.C.** (2023): Unravelling the functional diversity of macrobenthic community from Prydz Bay, Indian Sector of the Southern Ocean. **Continental Shelf Research**, https://doi.org/10.1016/j.csr.2023.105043, Vol. 263, pp. 105043.
- 47. Pandi, S.R., \*Tripathy, S.C., Shaju, S.S., Minu, P., Kerkar, A.U., Bajish, C.C., Anilkumar, N (2023): Interannual variability of surface bio-optical characteristics in the frontal zones of the Indian sector of the Southern Ocean during austral summer. *Polar Science*, <a href="https://doi.org/10.1016/j.polar.2023.100944">https://doi.org/10.1016/j.polar.2023.100944</a>, Vol. 36, pp. 100944.

- 46. Pandi, S.R., \*Tripathy, S.C., Shaju, S.S., Anilkumar, N. (2023): Cross frontal variability in bio-optical characteristics in the Indian sector of the India sector of the Southern Ocean during an austral summer. *Regional Studies in Marine Science*, https://doi.org/10.1016/j.rsma.2023.102892, Vol. 61, pp. 102892.
- 45. Bhaskar, J.T., Parli, B. V., **Tripathy**, **S.C.**, Jawak, S., Varunan, T. (2023): Does suspended sediment affect the phytoplankton community composition and diversity in the Arctic fjord: A comparative study during summer. *Environmental Monitoring and Assessment*, https://doi.org/10.1007/s10661-022-10734-0. Vol. 195, pp. 168.
- 44. Pandi, S.R., \*Tripathy, S.C., Parida, C., Lotliker, A.A., Naik, R.C.S., Naik, R.K., Mishra, R.K., Anilkumar, N. (2022): Spatiotemporal variability in bio-optical characteristics of the Southwestern Tropical Indian Ocean during Boreal Summer: Biophysical influences. *Progress in Oceanography*, https://doi.org/10.1016/j.pocean.2022.102883, Vol. 208, pp. 102883.
- Kerkar, A.U., \*Tripathy, S.C., Pandi, S.R. (2022): Bio-optical depiction of a polar ocean under a global change: exploring the regional absorption traits. Global and Planetary Change, <a href="https://doi.org/10.1016/j.gloplacha.2022.103818">https://doi.org/10.1016/j.gloplacha.2022.103818</a>, Vol. 213, pp. 103818.
- Tripathy, S.C., Varunan, T., Shanmugam, P., Kerkar, A.U., Sarkar, A., Bhaskar, J.T., Kurian, S., Bhaskar, P.V., Gauns, M. (2021): Summer variability in bio-optical properties and phytoplankton pigment signatures in two adjacent high Arctic fjords, Svalbard. *International Journal of Environmental Science and Technology*, <a href="https://doi.org/10.1007/s13762-021-03767-4">https://doi.org/10.1007/s13762-021-03767-4</a>, Vol. 20, pp. 239–258.
- 41. Acharya, A., Fadnavis, S., Nuncio, M., Müller, R., **Tripathy, S.C.** (2021): The Arctic temperature response to global and regional anthropogenic sulfate aerosols. *Frontiers in Environmental Science*, https://doi.org/10.3389/fenvs.2021.766538, Vol. 9:766538.
- Pandi, S.R., Chari, N.V.H.K., Lotliker, A.A., Sarma, N.S., Murthy, K.N., Tripathy, S.C., Bajish, C.C., (2021): Spatiotemporal variability in the optical characteristics of dissolved organic matter in the coastal Bay of Bengal. *International Journal of Environmental Science and Technology*, doi.org/10.1007/s13762-021-03605-7, Vol. 19, 9393–9408.
- 39. Kerkar, A.U., Venkataramana, V., \*Tripathy, S.C. (2021): Assessing the trophic link between the primary and secondary producers of the Southern Ocean: A carbon biomass-based approach. *Polar Science*, https://doi.org/10.1016/j.polar.2021.100734, Vol. 31, 100734.
- 38. Kerkar, A.U., \*Tripathy, S.C., David, J.H., Pandi S.R., Sabu, P., Tiwari, M. (2021): Characterization of phytoplankton productivity and bio-optical variability of a polar marine ecosystem. *Progress in Oceanography*, <a href="https://doi.org/10.1016/j.pocean.2021.102573">https://doi.org/10.1016/j.pocean.2021.102573</a>, Vol. 195, pp. 102573.
- Pandi, S.R., Chari, N.V.H.K., Sarma, N.S., Chiranjeevulu, G., Kiran, R., Murthy, K.N., Venkatesh, P., Lotlikar, A.A., Tripathy, S.C. (2021): Characteristics of conservative and non-conservative CDOM of a tropical monsoonal estuary in relation to changing biogeochemistry. *Regional Studies in Marine Science*, <a href="https://doi.org/10.1016/j.rsma.2021.101721">https://doi.org/10.1016/j.rsma.2021.101721</a>, Vol. 44, pp.101721.
- Inamdar, S., Tinel, L., Chance, R., Carpenter, L., Sabu, P., Chacko, R., Tripathy, S.C., Kerkar, A.U., Sinha, A.K., Bhaskar, P.V., Sarkar, A., Roy, R., Sherwen, T., Cuevas, C., Saiz-Lopez, A., Ram, K., Mahajan, A.S. (2020): Estimation of reactive inorganic iodine fluxes in the Indian and Southern Ocean marine boundary layer. Atmospheric Chemistry and Physics, <a href="https://doi.org/10.5194/acp-20-12093-2020">https://doi.org/10.5194/acp-20-12093-2020</a>, Vol. 20(20), pp. 12093–12114.

- Pandi, S.R., Baliarsingh, S.K., Lotliker, A.A., Sarma, N.S., Tripathy, S.C. (2020): Empirical relationships for remote sensing reflectance and *Noctiluca scintillans* cell density in the northeastern Arabian Sea. *Marine Pollution Bulletin*, <a href="https://doi.org/10.1016/j.marpolbul.2020.111770">https://doi.org/10.1016/j.marpolbul.2020.111770</a>, Vol. 161(Part B), pp. 111770.
- 34. Kerkar, A.U., \*Tripathy, S.C., Minu, P., Baranval, N., Sabu, P., Patra, S., Mishra, R.K., Sarkar, A. (2020): Variability in primary productivity and bio-optical properties in the Indian sector of the Southern Ocean during an austral summer. *Polar Biology*, https://doi.org/10.1007/s00300-020-02722-2, Vol. 43(10), pp. 1469-1492.
- 33. Singh, A., David, D.T., **Tripathy, S.C.**, Naik, R.K. (2020): Interplay of regional oceanography and biogeochemistry on phytoplankton bloom development in an Arctic fjord. *Estuarine, Coastal and Shelf Science*, https://doi.org/10.1016/j.ecss.2020.106916, Vol. 243, pp. 106916.
- Tripathy, S.C., Sabu, P., Patra, S., Naik, R.K., Sarkar, A., Venkataramana, V., Kerkar, A.U., Sudarsanarao, P. (2020): Biophysical control on variability in phytoplankton production and composition in the South-Western Tropical Indian Ocean during monsoon 2014. *Frontiers in Marine Science*, https://dx.doi.org/10.3389/fmars.2020.00515, Vol. 7:515.
- 31. Bhaskar, J.T., Bhaskar, P.V., **Tripathy, S.C.** (2020): Spatial and seasonal variations of dinoflagellates and ciliates in the Kongsfjorden, Svalbard. *Marine Ecology*, https://doi.org/10.1111/maec.12588, Vol. 41(3), pp. 1-12.
- 30. Venkataramana, V., Anilkumar, N., Swalding, K., Mishra, R.K., **Tripathy, S.C.**, Sarkar, A., Soares, M.A., Sabu, P., Pillai, H.U.K. (2020): Distribution of zooplankton in the Indian Ocean sector of Southern Ocean, *Antarctic Science*, https://doi:10.1017/S0954102019000579, Vol. 32(3), pp. 168-179.
- 29. Kerkar, A.U., Venkataramana, V., \*Tripathy, S.C. (2020): Morphometric estimation of copepod carbon biomass in coastal Antarctica: a case study in Prydz Bay. *Journal of Crustacean Biology*, <a href="https://doi.org/10.1093/jcbiol/ruz077">https://doi.org/10.1093/jcbiol/ruz077</a>, Vol. 40(1), pp. 58-66.
- Tripathy, S.C. and Jena, B. (2019): Iron-stimulated phytoplankton blooms in the Southern Ocean: a brief review.
   Remote Sensing in Earth Systems Sciences, <a href="https://doi.org/10.1007/s41976-019-00012-y">https://doi.org/10.1007/s41976-019-00012-y</a>, Vol. 2(1), pp. 64-77.
- 27. Sinha, A.K., Bhaskar, P.V., **Tripathy, S.C.**, Sarkar, A., Sabu, P. (2019): Effects of growth conditions on siderophore producing bacteria and siderophore production from Indian sector of Southern Ocean. *Journal of Basic Microbiology*, https://doi.org/10.1002/jobm.201800537, Vol. 59(4), pp. 412-424.
- 26. Pillai, H.U.K., Anilkumar, N., Achuthankutty, C.T., Mendes, C.R., Sabu, P., Jayalakshmi, K.V., Asha Devi, C.R, Dessai, D., George, J.V., Pavithran, S., Hari Devi, C.K., Tripathy, S.C., Menon, N.R. (2018): Planktonic food web structure at SSTF and PF in the Indian sector of Southern Ocean during austral summer 2011. *Polar Research*, https://polarresearch.net/index.php/polar/article/view/3398, Vol. 37(1), pp. 1495545.
- George, J.V., Anilkumar, N., Nuncio, M., Soares, M.A., Naik, R.K., Tripathy, S.C. (2018): Upper layer diapycnal mixing and nutrient flux in the subtropical frontal region of the Indian sector of Southern Ocean. *Journal of Marine Systems*, <a href="https://doi.org/10.1016/j.jmarsys.2018.07.007">https://doi.org/10.1016/j.jmarsys.2018.07.007</a>, Vol. 187, pp. 197-205.
- 24. **Tripathy, S.C.**, Patra, S., Vishnu Vardhan, K., Sarkar, A., Mishra, R.K., Anilkumar, N. (2018): Nitrogen uptake by phytoplankton in surface waters of the Indian sector of Southern Ocean during austral summer. *Frontiers of Earth Science*, https://doi.org/10.1007/s11707-017-0649-9, Vol. 12(1), pp. 52-62.

- 23. Sukigara, C., Mino, Y., **Tripathy, S.C.**, Ishizaka, J., Matsuno, T. (2017): Impacts of the Changjiang diluted water on sinking processes of particulate organic matters in the East China Sea. *Continental Shelf Research*, <a href="https://doi.org/10.1016/j.csr.2017.10.012">https://doi.org/10.1016/j.csr.2017.10.012</a>, Vol. 151, pp. 84-93.
- Zhu, Y., Ishizaka, J., Tripathy, S.C., Wang, S., Sukigara, C., Goes, J., Matsuno, T., Suggett, D.J. (2017): Relationship between light, community composition and the electron requirement for carbon fixation in natural phytoplankton. *Marine Ecology Progress Series*, https://doi.org/10.3354/meps12310, Vol. 580, pp. 83-100.
- 21. Venkataramana, V., **Tripathy, S.C.**, Anilkumar, N. (2017): The occurrence of blue-pigmented *Pontella valida* Dana, 1852 (Copepoda: Calanoida: Pontellidae) in the equatorial Indian Ocean. *Journal of Crustacean Biology*, <a href="https://doi.org/10.1093/jcbiol/rux037">https://doi.org/10.1093/jcbiol/rux037</a>, Vol. 37(4), pp. 512-515.
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- 19. Zhu, Y., Ishizaka, J., **Tripathy**, **S.C.**, Wang, S., Mino, Y., Matsuno, T., Suggett, D.J. (2016): Variation of the photosynthetic electron transfer rate and the electron requirement for daily net carbon fixation in Ariake Bay, Japan. *Journal of Oceanography*, https://doi.org/10.1007/s10872-016-0370-4, Vol. 72(5), pp. 761-776.
- Bhaskar, J.T., Tripathy, S.C., Sabu, P., Laluraj, C.M. and Rajan, S. (2016). Variation of phytoplankton assemblages of Kongsfjorden in early autumn 2012: A microscopic and pigment ratio-based assessment. Environmental Monitoring and Assessment, <a href="https://doi.org/10.1007/s10661-016-5220-8">https://doi.org/10.1007/s10661-016-5220-8</a>, Vol. 188(4), pp. 1-13.
- 17. Tripathy, S.C., Pavithran, S., Sabu, P., Pillai, H.U.K., Dessai, D.R.G. and Anilkumar, N. (2015). Deep chlorophyll maximum and primary productivity in the Indian Ocean sector of the Southern Ocean: Case study in the Subtropical and Polar Front during austral summer 2011. *Deep-Sea Research Part II: Topical Studies in Oceanography*, <a href="https://doi.org/10.1016/j.dsr2.2015.01.004">https://doi.org/10.1016/j.dsr2.2015.01.004</a>, Vol. 118, pp. 240-249.
- Sabu, P., Anilkumar, N., George, J.V., Chacko, R., Tripathy, S.C. and Achuthankutty, C.T. (2014). The influence of air-sea-ice interaction on the anomalous phytoplankton bloom in the Indian Ocean sector of Antarctic Zone of the Southern Ocean during austral summer 2011. *Polar Science*, <a href="https://doi.org/10.1016/j.polar.2014.08.001">https://doi.org/10.1016/j.polar.2014.08.001</a>, Vol. 8(4), pp. 370-384.
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- 14. Wang, S., Ishizaka, J., Yamaguchi, H., **Tripathy, S.C.**, Hayashi, M., Xu, Y., Mino, Y., Matsuno, T., Watanabe, Y. and Yoo, S. (2014): Influence of the Changjiang River on the light absorption properties of phytoplankton from the East China Sea. *Biogeosciences*, https://doi.org/10.5194/bg-11-1759-2014, Vol. 11, pp. 1759-1773.
- 13. Siswanto, E., Ishizaka, J., **Tripathy, S.C.** and Miyamura, K. (2013): Detection of harmful algal blooms of *Karenia mikimotoi* using MODIS measurements: a case study of Seto-Inland Sea, Japan. *Remote Sensing of Environment*, https://doi.org/10.1016/j.rse.2012.11.003, Vol. 129, pp. 185-196.
- 12. **Tripathy**, **S.C.**, Ishizaka, J., Shibata, T., Siswanto, E. and Mino, Y. (2012): Modification of the vertically generalized production model for the turbid water of Ariake Bay, southwestern Japan. *Estuarine*, *Coastal and Shelf Science*, https://doi.org/10.1016/j.ecss.2011.11.025, Vol. 97, pp. 66-77.

- 11. Shibata, T., **Tripathy, S.C.**, Ishizaka. J. (2010): Phytoplankton pigment change as a phtoadaptive response to light variation caused by tidal cycle in Ariake Bay, Japan. **Journal of Oceanography**, <a href="https://doi.org/10.1007/s10872-010-0067-z">https://doi.org/10.1007/s10872-010-0067-z</a>, Vol. 66, pp. 831-843.
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- 8. Tan, C.K., Ishizaka, J., Varis, R., Tong, P.H.S., **Tripathy, S.C.** and Siswanto, E. (2006): Oceanographic events at northern Borneo and their relationship to harmful algal blooms. *Proceedings of ISRS-PORSEC* held at Busan (October), South Korea, pp. 491-494.
- 7. Tong P.H.S., Lau V.K., Hoang X.B., Tan C.K., Ishizaka, J., Varis, R. and **Tripathy, S.C.** (2006): A discussion on the main reasons causing the mass mortality of corals and benthos in Condao Island during October 2005. *Proceedings of ISRS-PORSEC* held at Busan (October), South Korea, pp. 463-466.
- 6. Sarma, V.V., Sadhuram, Y., Sravanthi, N.A. and **Tripathy, S.C.** (2006). Role of physical processes in the distribution of chlorophyll *a* in the northwest Bay of Bengal during pre and post monsoon seasons. *Current Science*, Vol. 91(9), pp. 1133-1134.
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### **BOOK CHAPTERS:**

 Pandi, S.R., Sarma, N.S., Tripathy, S.C. (2025): Understanding light absorption properties in the coastal Bay of Bengal: The modulating role of freshwater stratification. Chapter XX in Das, S (Ed): Bio-Optics of Indian Coastal Water, Springer International, Edited Collection [In Review]

- Tripathy, S.C. (2022): Bio-optical characteristics in relation to phytoplankton composition and productivity in a twin Arctic fjord ecosystem during summer. Chapter 13 in N. Khare (Ed): Climate Change in the Arctic: An Indian Perspective, Taylor & Francis, CRC Press, e-ISBN: 9781003265177, pp. 386, https://doi.org/10.1201/9781003265177.
- Bhowmik, M., Mandal, S., Tripathy, S.C. (2022): Benthic biome of Southern Ocean: Present state of knowledge and future perspective. Chapter 10 in A. Majumdar & W. Ghosh (Eds): Systems Biogeochemistry of Major Marine Biomes, AGU Books (Wiley-Blackwell), ISBN: 978-1-119-55438-7, pp. 189-209, https://doi.org/10.1002/9781119554356.ch10.
- Tripathy, S.C., Sabu, P., Patra, S., Naik, R.K., Sarkar, A., Venkataramana, V., Kerkar, A.U., Sudarsanarao, P. (2021): Biophysical control on variability in phytoplankton production and composition in the South-Western Tropical Indian Ocean during monsoon 2014. Chapter in Nayak, A. R., Jiang, H., Karp-Boss, L., Sullivan, J. M., Murphy, D., Byron, M., McFarland, M., (Eds): Small Scale Spatial and Temporal Patterns in Particles, Plankton, & Other Organisms. Lausanne: Frontiers Media SA, ISBN: 978-2-88966-769-7, pp. 113-130, https://dx.doi.org/10.3389/978-2-88966-769-7.
- Pandi, S.R., Chari, N.V.H.K., Sarma, N.S., Tripathy, S.C., Chiranjeevulu, G., Das, S. (2021): A review of estuarine CDOM dynamics of east coast of India influenced by hydrographical forcing. Chapter 14 in S. Das & T. Ghosh (Eds): *Estuarine Biogeochemical Dynamics of the East Coast of India*, Springer Nature Switzerland AG, ISBN: 978-3-030-68979-7, pp. 223-237, <a href="https://dx.doi.org/10.1007/978-3-030-68980-3\_14">https://dx.doi.org/10.1007/978-3-030-68980-3\_14</a>.

# OTHER SCIENTIFIC ARTICLES (IN TECHNICAL REPORTS, MAGAZINES, NEWSLETTERS ETC):

- 7. N. Anlikumar, S.C., Tripathy, R.K., Mishra (2019): Process studies in the Southern Ocean. In *GnY*, (GEOGRAPHY and YOU: special issue on NCPOR), Vol. 19, Issue 16, No. 127 (February), pp. 14-20.
- 6. **S.C. Tripathy**, C.K. Haridevi & R.K. Mishra (2016): Latitudinal distribution of surface PAR and its relation with phytoplankton biomass and productivity. In: Anilkumar, N. and Tripathy, S.C. (Eds.), *Technical publication of the 7<sup>th</sup> Indian Southern Ocean Expedition (2013)*, pp. 27-29, ISBN: 978-93-5267-057-4.
- V. Venkataramana, S.C. Tripathy, H.U.K. Pillai & C. Santhosh Kumar (2016): Distribution of copepod community structure in frontal systems of the Indian Ocean sector of Southern Ocean. In: Anilkumar, N. and Tripathy, S.C. (Eds.), *Technical publication of the 7<sup>th</sup> Indian Southern Ocean Expedition (2013)*, pp. 30-36, ISBN: 978-93-5267-057-4.
- N. Anilkumar, J.V. George, S.C. Tripathy, P. Sabu, R.K. Naik, P.V. Bhaskar & S. Rajan (2015): Hydrodynamics and Biogeochemistry of the South West Tropical Indian Ocean region: A Perspective. The *Indian Ocean Bubble* 2, issue 3 (August), pp. 6-7, newsletter published by ESSO-INCOIS, Hyderabad.
- 3. S. Pavithran, H.U.K. Pillai, M. Nanajkar, S.C. Tripathy and C.T. Achuthankutty (2014): Studies on Biogeochemistry and Hydrodynamics of the Indian sector of the Southern Ocean (Part-III Biological Productivity). *Technical Report on 4<sup>th</sup> Indian Expedition to the Southern Ocean (2010)*, pp. 13-18, ISBN: 978-93-5156-583-3.
- 2. S. Pavithran, C.K. Haridevi, S.C. Tripathy, H.U.K. Pillai and C.T. Achuthankutty (2014): Studies on Biogeochemistry and Hydrodynamics of the Indian sector of the Southern Ocean (Part-III: Biological Productivity

- and Food-web Dynamics (Primary Production)). *Technical Report on 5<sup>th</sup> Indian Expedition to the Southern Ocean during (2011)*, pp. 23-24, ISBN: 978-93-5156-520-8.
- H.U.K. Pillai, S. Pavithran, S.C. Tripathy and C.T. Achuthankutty (2014): Studies on Biogeochemistry and Hydrodynamics of the Indian sector of the Southern Ocean (Part-3: Biological Productivity and Food-web Dynamics (Mesozooplankton)). Technical Report on 5<sup>th</sup> Indian Expedition to the Southern Ocean during (2011), pp. 24-27, ISBN: 978-93-5156-520-8.

#### **BOOKS AND TECHNICAL / SCIENTIFIC REPORTS EDITED:**

- Tripathy, S.C. and Singh, A. (2023): Dynamics of Planktonic Primary Productivity in the Indian Ocean.
   S.C. Tripathy & A. Singh (eds), Springer Nature Switzerland, ISBN: 978-3-031-34466-4 (hardcover). https://link.springer.com/book/10.1007/978-3-031-34467-1, pp: 357.
- Newman Louise et. al., (2022). The Southern Ocean Observing System (SOOS) 2021-2025 Science and Implementation Plan. <a href="https://doi.org/10.5281/zenodo.6324359">https://doi.org/10.5281/zenodo.6324359</a>.
- S.C., Tripathy, N. Anlikumar (2019): CLIVAR/CliC/SCAR Southern Ocean Region Panel (SORP) National activities report. <a href="https://doi.org/10.13140/RG.2.2.10055.55203">https://doi.org/10.13140/RG.2.2.10055.55203</a>.
- N. Anilkumar and S.C. Tripathy (2016): Southern Ocean Expedition (2013-14). Technical/Scientific Report of the 7<sup>th</sup> Indian Scientific Expedition to Southern Ocean. ©NCAOR, ISBN: 978-93-5267-057-4, pp. 131.
- Tripathy, S.C., Mishra, R.K., Mohan, R. and Khare, N. (2013): Studies in Biological Sciences and Human Physiology: Three Decades of Indian Scientific Activities in Antarctica. S.C. Tripathy, R.K. Mishra, R. Mohan & N. Khare (eds). ©NCAOR, ISBN: 978-81-906526-8-1.

# CONFERENCE/ SEMINAR/ WORKSHOP PRESENTATIONS:

- Tripathy, S.C. (2024): Short-term time-series observations of phytoplankton light-absorption & productivity in Prydz Bay, coastal Antarctica. XI<sup>th</sup> Scientific Committee on Antarctic Research (SCAR) Open Science Conference held in Pucon, Chile from August 19-23, 2024. [O]
- Tripathy, S.C. (2024): Southern Ocean Biogeochemistry: Phytoplankton Productivity & Bio-Optical Oceanography. Discussion meeting on "Exploring Emerging Questions in Ocean Biology" organized by the National Centre for Biological Sciences (NCBS)-TIFR, Bengaluru, on 23 & 24 January 2024. [O]
- Tripathy, S.C. (2023): Indian Scientific Expedition to the Southern Ocean: Salient Findings. 11th AWOC/ 20th KJWOC/ 6th ISEE Symposium held in Nagoya University, Japan from 17 19 Dec 2023. [0]
- Duarte, P. et al (2023): Kongsfjorden Ecosystem a Nitrogen Sink during the Arctic Summer. Svalbard Science Conference (SSC)) 2023 held at Scandic Fornebu, Oslo, Norway from 31 October-1 November 2023. [O]
- Tripathy, S.C. et al (2023): Bio-optical variability in the Arctic fjords: Kongsfjorden Flagship Meeting held at Scandic Fornebu, Oslo, Norway during 29-30 October 2023. [O]
- Tripathy, S.C. et al (2023): Short-term time-series observations of phytoplankton light-absorption & productivity in Prydz Bay, coastal Antarctica. OSICON-23, held in the Indian National Centre for Ocean Information Service (INCOIS), Hyderabad, during August 23-25, 2023. [O]
- Tripathy, S.C. et al (2023): Short-term time-series observations of phytoplankton light-absorption & productivity

- in Prydz Bay, coastal Antarctica. 1st Southern Observation Observing System (SOOS) symposium held at Hobart, Australia, during August 14-18, 2023. **[0]**
- Tripathy, S.C. et al (2023): Short-term time-series observations of phytoplankton light-absorption & productivity in Prydz Bay, coastal Antarctica. National Conference on Polar Sciences (NCPS)-2023 held at NCPOR, Goa during May 16-19, 2023. [O]
- Tripathy, S.C. et al (2023): Characterization of phytoplankton productivity and bio-optical variability of a polar marine ecosystem. 2<sup>nd</sup> Frontiers in Geoscience Research Conference (FGRC) held at Physical Research Laboratory, Ahmedabad during February 1-3, 2023. [O]
- Tripathy, S.C. et al (2022): Phytoplankton productivity and bio-optical variability in Kongsfjorden and Krossfjorden twin Arctic fjords. Kongsfjorden Flagship Workshop held in Norwegian Polar Institute (NPI), Tromso, Norway during September 27-28, 2022. [0]
- Tripathy, S.C. et al (2021): Biophysical control on variability in phytoplankton production and composition in the south-western tropical Indian Ocean during monsoon 2014. OSICON-2021 (Webinar) held in NCPOR, Goa during August, 12-14, 2021. [O]
- Tripathy, S.C. et al (2019): Variability of bio-optical properties and phytoplankton community structure in the Arctic fjords during summer 2016. MARICON-2019 held at CUSAT, Kochi during December 16-20, 2019. [O]
- Tripathy, S.C and Jena, B (2019): Iron stimulated phytoplankton blooms in the Southern Ocean: a brief review.
   Presented the paper in the National Polar Science Conference (NCPS-2019) held at NCPOR during August 20-22, 2019. [0]
- Tripathy, S.C. (2018): Primary productivity and Bio-optical studies in the Kongsfjorden and Krossfjorden, Arctic. Information & Preparatory Event-Horizon 2020 call on Arctic, 19-20 November, ESSO-NCPOR. [0]
- Tripathy, S.C. (2018): Nitrogen uptake by phytoplankton in surface waters of the Indian sector of Southern Ocean during austral summer. NOW-2018, 14-16 November, ESSO-INCOIS, Hyderabad. [P]
- Tripathy, S.C. (2018): Salient findings from the Indian Southern Ocean Expeditions. India-USA colloquium: Earth Observations & Sciences for Society and Economy, 11-13 June, CSIR-NIO, Goa. [0]
- Tripathy, S.C., Pavithran, S., Sabu, P., Pillai, H.U.K., Dessai, D.R.G., Anilkumar, N. (2017): Deep chlorophyll maximum and primary productivity in Indian sector of the Southern Ocean: Case study in the Subtropical and Polar Front during austral summer 2011. SCAR Biology symposium, 10-14 July 2017, KU Leuven, Leuven, Belgium. [O]
- Tripathy, S.C., Patra, S., Vishnu Vardhan, K., Sarkar, A., Mishra, R.K., Anilkumar, N. (2017): Nitrogen uptake
  by phytoplankton in surface waters of the Indian sector of Southern Ocean during austral summer. National
  Conference on Polar Sciences, 16-17 May 2017, NCAOR, Goa. [O]
- Tripathy, S.C., Patra, S., Sabu, P., Naik, R.K., Sarkar, A., Venkataramana, V., Anilkumar, N. (2015): Variation of phytoplankton biomass and production in the Southwestern Tropical Indian Ocean during monsoon 2014.
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- V. Venkataramana, Tripathy, S.C., and Anilkumar, N. (2015). Diel variation in surface zooplankton abundance, biomass and community structure in the South Western tropical Indian Ocean during June 2014. IO50

- symposium (*Dynamics of the Indian Ocean: Perspective and Retrospective*), 30 Nov. to 04 Dec. 2015, NIO, Goa. **[P]**
- Tripathy, S.C. and Anilkumar, N. (2015): Deep chlorophyll maximum and primary productivity in Indian Ocean sector of the Southern Ocean: Case study in the Subtropical and Polar Front during austral summer 2011. Surface flux workshop, 21-23 Sept. 2015, ESA, ESRIN, Frascati, Italy. [P]
- Tripathy, S.C. (2014): Southern Ocean Primary Production: Its role in Global Climate Change. National Hindi Scientific seminar, 30-31 July, IITM, Pune. [P]
- Sukigara, C., Mino, Y., Tripathy, S.C., Ishizaka, J. and Matsuno, T. (2012): Sinking processes of the particulate
  matters in the center of the East China Sea. KJWOC workshop, 29-30 November, HyARC, Nagoya University,
  Japan. [O]
- Sukigara, C., Mino, Y., Tripathy, S.C., Ishizaka, Z. and Matsuno, T. (2012): Sinking processes of the particulate
  matters in the center of the East China Sea. JOS meeting, 29 March 03 April, Tsukuba University, Japan. [0]
- Tripathy, S.C., Ishizaka, J., Shibata, T., Siswanto, E. and Mino, Y. (2010): Modification of vertically generalized production model for turbid water of Ariake Bay, southwestern Japan. PICES meeting, 22-31 October, Portland, Oregon, USA. [P]
- Shibata, T., Tripathy, S.C., Ishizaka. J. (2010): Phytoplankton pigment change as a response to light variation caused by tidal cycle in Ariake Bay, Japan. JOS meeting, 25-30 March, Tokyo, Japan. [O]
- Matsuno, T., Endoh, T., Tsutsumi, E., Fukudome, K., Ishizaka, J., Yamaguchi, H., Tripathy, S.C., Han, I. S., Lee, J.H., Jang, S.T., Kim, S.H. (2009): Vertical transport of subsurface nutrients in the East China Sea shelf for the primary production. PICES meeting, 23 October 01 November, Jeju, Republic of Korea. [P]
- Ishizaka, J., Yamaguchi, H., Tripathy, S.C., Makino, T., Matsuno, T., Endoh, T. (2009): Short- term variability of primary production of Changihiang River plumes in the East China Sea observed in summer 2008. PICES meeting, 23 October 01 November, Republic of Korea. [P]
- Ishizaka, J., Yamaguchi, H., Makino, T., Tripathy, S.C., and Matsuno, T. (2009): Time changes of chlorophyll a
  and nutrients on the shelf: preliminary results of KT-08-19. Conference on East China Sea, 22-23 April, Nagoya
  University, Japan. [0]
- Tripathy. S.C., Ishizaka, J., Saino, T., Fujiki, T, Okamura, K., and Shibata, T. (2008): Factors influencing carbon- and fluorescence-based primary production in Ariake Bay, southwestern Japan. PORSEC, 2-6 December, Guanzhou, China. [P]
- Tripathy, S.C., Ishizaka, J., Saino, T., Fujiki, T., Okamura, K., Shibata, T., Hosaka, T. (2008): Factors influencing carbon- and fluorescence-based primary productivity in Ariake Bay. JOS meeting, 24-29 September, Hiroshima, Japan. [O]
- Tripathy. S.C., Ishizaka, J., Saino, T., Fujiki, T, Okamura, K., and Shibata, T. (2008): Assessment of carbonand fluorescence-based primary production in the Ariake Bay, Japan. 3<sup>rd</sup> KJWOC workshop, 22-23 January, Tokyo, Japan. [O]
- Tripathy, S.C., J. Ishizaka and T. Saino (2006): Estimation of daily primary production using profiling buoy system: a case study in Sagami Bay. 2<sup>nd</sup> KJWOC, 19-20 December, Jeju, Republic of Korea. [O]

- Tan, C.K., J. Ishizaka, L.C. Quah, E. Siswanto, and Tripathy, S.C. (2006): Influence of Northeast Monsoon Wind on the Chlorophyll a Variation at Northern Malacca Straits. Symposium on Asian Winter Monsoon (Winter MONEX): A quarter Century and Beyond (WMONEX 25+), 4-7 April, Kuala Lumpur, Malaysia. [P]
- Tan, C.K., J. Ishizaka, Siswanto, E. and **Tripathy, S.C.** (2006): Assessment of Tsunami effects on surface chlorophyll *a* and sedimentation in the eastern Indian Ocean using MODIS satellite. International Workshop: Post-Disaster Assessment and Monitoring of Coastal Ecosystems and Biological and Cultural Diversity in the Indian Ocean and Asian Waters, 20-24 February, Phuket, Thailand. **[0]**
- Tripathy, S. C., J. Ishizaka, T. Saino and K. Okamura (2005). Estimation of primary production and phytoplankton photosynthetic parameters in the case II waters of Ariake bay by Fast Repetition Rate Fluorometer. JOS meeting, 26-30 March, Yokohama, Japan. [P]
- Tripathy, S.C., Choudhury, B.C. and Hussain, S.A. (2001): Inland wetland conservation and management in Uttar Pradesh. Training programme on wetland conservation and management, 19 November - 02 December, WII, Dehradun, India. [O]
- Tripathy et. al. (2000): Measurement of bio-optical parameters and their comparison with SeaWiFs derived products for the waters off Dona Paula, Goa. Remote sensing and its application to ocean studies: training programme on IRS-P4, 21 February - 10 March, NIO, Goa, India. [0]

#### **INVITED TALKS DELIVERED:**

- 2024: Arctic Warming: Its Global Significances. Online-UGC Refresher Course in Life Sciences (Inter-disciplinary), UGC-Malaviya Mission Teacher Training Centre, Goa University on, September 23, 2024.
- 2024: The Southern Ocean in a Changing World: Indian Perspectives. Online-UGC Refresher Course in Life Sciences (Inter-disciplinary), UGC-Malaviya Mission Teacher Training Centre, Goa University on, September 23, 2024.
- 2024: Southern Ocean: Carbon & Climate Insights from Indian Scientific Expedition to the Southern Ocean.
   Webinar on World Ocean Day conducted by the Dept. of Marine Sciences, Berhampur University on June 08, 2024.
- 2023: Arctic Amplification: Consequences. Online-UGC Refresher Course in Life Sciences (Inter-disciplinary),
   Goa University, December 07, 2023.
- 2023: Role of Southern Ocean in Climate Change: Indian Perspectives. Online-UGC Refresher Course in Life Sciences (Inter-disciplinary), Goa University, December 07, 2023.
- 2023: Insights from Indian Scientific Expedition to the Southern Ocean. Webinar conducted by the Southern Ocean Carbon and Climate Observatory (SOCCO), CSIR, South Africa, November 09, 2023.
- 2023: "Significance of Polar Oceans in Climate Change". Webinar conducted by the Mahatma Hansraj Faculty
  Development Centre in association with Miranda House, University Delhi and CAS-IIT Delhi on October 14,
  2023.
- 2023: "Arctic amplification: Implications". Webinar conducted by the Mahatma Hansraj Faculty Development Centre in association with Miranda House, University Delhi and CAS-IIT Delhi on October 12, 2023.

- 2023: "Indian Scientific Expedition to the Southern Ocean: Salient findings". Seminar conducted at the CSIR-National Institute of Oceanography, Regional Centre, Kochi on July 26, 2023.
- 2023: "Southern Ocean: Carbon & Climate: Insights from Indian Scientific Expedition to the Southern Ocean".
   Webinar conducted by the University of Delhi and Ocean Society of India Delhi-NCR Chapter on the occasion of UN World Oceans Day'23 on June 08, 2023.
- 2023: "Phytoplankton Productivity & Bio-Optical Variability in the Southern Ocean". Webinar conducted by the Ocean Society of India Delhi-NCR Chapter as a prelude to the UN World Oceans Day'23 on June 07, 2023.
- 2023: "Summer variability in bio-optical properties and phytoplankton pigment signatures in two adjacent high Arctic fjords, Svalbard". At SaGAA-7, held at IIC, New Delhi during April 27-28, 2023.
- 2023: "Response of polar oceans to climate change: insights from Indian Southern Ocean Expeditions" in the
  national workshop titled "Oceanic processes and geohazards in the Anthropocene: role of industrial and human
  interference" held at NIO-RC, Visakhapatnam during February 27-28, 2023.
- 2023: "Plankton diversity and productivity in the Southern Ocean: implications of climate change" in the
  international conference titled "Technological innovations in animal science research and social transformation"
  held at Dept. of Zoology, Utkal University, Bhubaneswar during February 23-26, 2023.
- 2023: "Phytoplankton Productivity and Bio-Optical Variability in the Southern Ocean". UGC Refresher Course in Life Sciences / Goa University; January 20, 2023.
- 2023: "Significance of Polar Oceans: Insights from Indian Southern Ocean Expeditions". UGC Refresher Course
  in Life Sciences / Goa University; January 10, 2023.
- 2022: "Indian Southern Ocean research activities and prospects in Marine Sciences" in the webinar titled "Recent Trends in Marine Sciences" organised by Dept. of Marine Sciences, Berhampur University on March 26, 2022.
- 2022: "Why study Polar Oceans?" in the online Refresher Course (for College/University teachers) in Life Sciences, conducted by UGC-HRD Centre, Goa University on January 11, 2022.
- 2021: "Oceanography: Opportunities for Interdisciplinary Science" in the webinar on "Science and Education Outreach", conducted by INSA/ INYAS-Mumbai Chapter on June 12, 2021.
- 2021: "SDG-14: Life Below Water: Why Study Polar Oceans?" in the webinar for the immersion course organized by the School of Sustainability, XIM University, Bhubaneswar; July 03, 2021.
- 2021: "Significance of Polar Oceans studies" in the webinar for UGC refresher course in Zoology conducted by SPPU, Pune on December 11, 2021.
- 2020: "Oceans in the wake of climate change: Challenges and solutions" during 26.08.2020 to 28.08.2020 at Fisheries College & Research Institute, Tamilnadu, Dr. J. Jayalalithaa Fisheries University, Thoothukudi.
- 2020: 'Southern Ocean: Carbon & Climate' in the Webinar "Aquatic Ecosystem: Prospect & Future Challenges" organised by the Marine Ecology Laboratory, Presidency University, Kolkata during July 18-19, 2020.
- 2020: "Variability in primary productivity and bio-optical properties in the Indian sector of Southern Ocean during an austral summer" at COAST 2020 held during February 28, to March 01, 2020 at the Department of Marine Sciences, Berhampur University.
- 2020: "Southern Ocean expeditions: salient findings" at KV and Dayanand Vidya Mandir School at Curti, Ponda on the occasion of Science Film Festival (SCI-FFI) during 15-19 January, 2020.

- 2019: Salient findings of Indian Southern Ocean Expeditions: Special emphasis on phytoplankton productivity.
   At SaGHAA-V, held at IIC, New Delhi during February 26-27, 2019.
- 2019: Role of Southern Ocean in global climate change: salient findings from Indian Southern Ocean Expeditions. At KUFOS-INCOIS Centre, KUFOS, Kochi during January 17-18, 2019.
- 2017: Response of Southern Ocean to climate change scenario: perspectives from Indian Southern Ocean Expeditions. At SaGHAA-IV, held at JNU, New Delhi during 30th Nov. 30 to 1st Dec, 2017.
- 2017: 9<sup>th</sup> Indian Southern Ocean Expedition: An Overview. At Mauritius Oceanography Institute (MOI), Mauritius on February 28, 2017.
- 2015: 8<sup>th</sup> Indian Southern Ocean Expedition: An Overview. At Mauritius Oceanography Institute (MOI), Mauritius on February 24, 2015.

# THESIS (Ph.D.) EXAMINER: [Theses Evaluated: 22]

- Indian Institute of Technology (IIT), Madras [2013, 2016, 2017, 2018(2), 2019, 2024].
- Adikavi Nannaya University, Rajahmundry [2015].
- Andhra University, Visakhapatnam [2017].
- Cochin University of Science and Technology (CUSAT), Kochi [2015, 2017, 2023(2), 2024].
- Bharathidasan University, Tiruchirappalli [2019(2), 2020, 2022, 2024].
- Presidency University, Kolkata [2021].
- AcSIR-National Institute of Oceanography, Goa [2022]
- Berhampur University, Odisha [2024]

#### JOURNAL REVIEWER:

- Chem. Ecol., Environ. Int., J Oceanogr., EMAS, Est. Coast. Shelf Sc., Rem. Sen. Env., Limnol. Oceanogr., I J Geo-Mar. Sc., STOTEN, JGR-Biogeosciences, JQSRT, J Coast. Res., GRL, Mar. Pol. Bull., J. Phycol., Front. Mar. Sc., Reg. Stu. Mar. Sc., J. Mar. Sys. etc.
- Review Editor: Frontiers in Marine Science (Specialty: Marine Ecosystem Ecology)
   https://loop.frontiersin.org/people/789704/overview

#### PROFESSIONAL MEMBERSHIPS:

- Member of the Planning Group C-CAGE, a SCAR Life Sciences Scientific Program. [October 2024-Present]
- Member (Observers): PAME Working Group of the Arctic Council. [September 2024-Present]
- Co-Chair: Southern Ocean Indian Sector (SOIS)-Regional Working Group of SOOS. [May 2021-Present]
- Member (ex officio): Scientific Steering Committee (SSC) of SOOS. [May 2021-Present]
- Leadership: Southern Ocean Indian Sector (SOIS)-Working Group. [May 2020-May 2021]
- Member: Advisory Board and Scientific Committee of Amity University. [December 2019-Present]
- National Representative: CLIVAR/CliC/SCAR Southern Ocean Region Panel (SORP). [Dec 2018-Present]
- National Representative: SCAR Life Sciences Group. [Dec 2017-Present]
- Life Member: Ocean Society of India (OSI). [January 2021-Present]
- Life member: NF-POGO Alumni Network for Oceans (NANO). [January 2005-Present]

### **RECOGNIZED GUIDE FOR Ph.D:**

Goa University (Subject: Marine Biology)Mangalore University (Subject: Biosciences)

Savitribai Phule Pune University (Subject: Environmental Science)

#### **RESEARCH CAPACITY BUILDING:**

Dr. Jane T. Bhaskar
Post Doctoral Fellow
[DST Woman Scientist Scheme-A]

Dr. Sudarsana R. Pandi
Post Doctoral Fellow
[MoES Project]

Dr. Anvita U. Kerkar
DST-INDPIRE Ph.D. Scholar [Now Post Doc at FAU, USA]

Mr. Sunil K. Padhi
Ph.D. Scholar
[DST-INSPIRE]

M.Sc. Dissertation Guided: 03

#### SCIENTIFIC PROJECTS/PROGRAMMES INVOLVED:

Hydrodynamics and Biogeochemistry of the Indian sector of Southern Ocean [Co-PI, MoES Funded].

- In situ and satellite-based primary productivity and bio-optical studies for understanding dynamics of Kongsfjorden and Krossfjorden twin ecosystem [PI, MoES Funded].
- Benthic community structure and climate change mediated stresses on their physiological performances from the Prydz Bay, Indian sector of Southern Ocean during austral summer [Co-PI, MoES Funded]

--- Updated on January 01, 2025 ---