SUDEEP DAS

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Ocean Analysis and Modeling Laboratory
School of Earth Ocean and Climate Sciences
Indian Institute of Technology (IIT)
Bhubaneswar Odisha, India, 752050

Research Interest: Biophysical Oceanography, Climate Change

EDUCATION

Aug 2020- Present	Ph.D. in Physical Oceanography School of Earth, Ocean and Climate Sciences Indian Institute of Technology (IIT) Bhubaneswar, India **Supervisor** : Dr. Sourav Sil **Thesis area**: Role of Oceanic Processes on Ecosystem in the Bay of Bengal
June 2015 – July 2020	Integrated BS-MS Dual Degree in Geological (Earth) Sciences Department of Earth Sciences IISER Kolkata, West Bengal, India

RESEARCH EXPERIENCES

Aug 2022 – Present	Senior Research Fellow School of Earth, Ocean and Climate Sciences Indian Institute of Technology Bhubaneswar, India
Aug 2020 – July 2022	Junior Research Fellow School of Earth, Ocean and Climate Sciences Indian Institute of Technology Bhubaneswar, India
Aug 2019 – June 2020	Masters Project Department of Earth Sciences, IISER Kolkata, West Bengal, India "Atmospheric aerosol variability over Pune and its comparison with other urban regions in India: Sources and effects"
May 2019 – July 2019	Summer Project IITM (Indian Institute of Tropical Meteorology) Pune "Variability of trends observed in Atmospheric Aerosol optical properties over Pune"
May 2016 – June 2016	Summer Project ESSO-INCOIS-Indian National Centre for Ocean Information Services, Hyderabad "Assessment of MetOcean conditions and Shoreline Change of Lehar Cyclone"

AWARDS, SCORES AND POSITIONS

- CSIR Senior Research Fellow (2022-25)
- CSIR Junior Research Fellow (2020-22)
- INSPIRE SHE Fellow (2015-20)
- "Dr. M. Baba Award" for best oral presentation in Physical Oceanography at OSICON 25.
- Qualified CSIR NET JRF (All India Rank 57, Dec 2018) & Lectureship (All India Rank 11, Jun 2019) in Earth, Atmospheric, Oceanic and Planetary Sciences
- TOEFL iBT Score – 104/120 (Reading – 28/30, Listening – 27/30, Speaking – 25/30, Writing – 24/30) in 2019
- Second prize at Hackathon in OCEANS 2022 (organized by IEEE & MTS)
- General Secretary (Hostel & Transport) at Indian Institute of Science, Education and Research, Kolkata (2016-17) and Dramatic Secretary at BJB Junior College, Bhubaneswar (2013-14)

SKILLS

- Programming Languages – MATLAB (skilled), Python (Intermediate), JAVA (Beginner)
- ROMS/CROCO-AGRIF (Regional Ocean Circulation Models) with biology (Intermediate)
- GIS software – Ferret (Intermediate), ARCGIS (Intermediate) and ERDAS (Beginner)
- Shell Scripting (Beginner)
- HYSPLIT model, Using large data arrays (NetCDF & HDF), OriginLab for statistics
- MS Office and Latex
- Basic photo, audio, video, and website editing using Adobe softwares (Photoshop, Illustrator, Indesign, Audition, Premier Pro, After Effects, Lightroom Classic etc)
- Ocean field experience (seaworthiness) and using instruments like CTD, Niskin sampler, Radiometer, Grab sampler, etc, across estuaries, lakes, and coastal marine environments.
- Geology field experience in using compass and clinometer, identifying rocks and minerals
- Basic use of techniques involving Spectroscopy, X-ray Crystallography, and wet chemistry analysis

TRAININGS/WORKSHOPS

- "National Workshop on Recent Research Trends in Ocean Engineering, Science and Technology" at IIT Bombay (Funded by IIT Bombay and MoES)
- "Ocean Observations to Societal Applications" at Andhra University, Visakhapatnam and INCOIS, Hyderabad (Funded by POGO and INCOIS)
- "Satellite-based tools for investigating aquatic ecosystems" at Plymouth Marine Laboratory, Plymouth, UK (Funded by ESA-PML)

REFEREES

- Dr Sourav Sil, Associate Professor
  Indian Institute of Technology Bhubaneswar
- Dr Govindan Pandithurai, Scientist F
  Indian Institute of Tropical Meteorology Pune
- Dr Prakash Chandra Mohanty

Indian National Centre for Ocean Information Services, Hyderabad

- Dr Sayantan Sarkar
  Indian Institute of Technology Mandi

PUBLICATIONS

1. **Das, S.**, Deogharia, R., & Sil, S. (2024). Classification of eco-zones from the factors and processes controlling phytoplankton biomass. *Marine Environmental Research*, 198, 106528. http://doi.org/10.1016/j.marenvres.2024.106528
2. **Das, S.**, & Sil, S. (2024). Diel Variations in the Upper Layer Biophysical Processes using a BGC-Argo in the Bay of Bengal. *Deep Sea Research Part II: Topical Studies in Oceanography*, 105392. http://doi.org/10.1016/j.dsr2.2024.105392
3. **Das, S.**, Sil, S. & Boopathi, V. (2025) Cluster-based analysis of biophysical controls on spatiotemporal variability of productivity in the Bay of Bengal. *CSIT*. http://doi.org/10.1007/s40012-025-00412-0
4. Ray, A., **Das, S.**, & Sil, S. (2024). Role of anomalous ocean warming on the intensification of pre-monsoon tropical cyclones over the northern Bay of Bengal. *Journal of Geophysical Research: Oceans*, 129(4), e2023JC020527. http://doi.org/10.1029/2023JC020527

CONFERENCES PRESENTED

1. Das, S., Sil, S., & Ray, A. (2025). Sources and Fate of Deep DO in the Bay of Bengal. *AOGS 2025*, Singapore.
2. Das, S., Deogharia, R., & Sil, S. (2025). Classifying Global Oceans by the Impact of Oceanic Parameters and Processes on Marine Productivity. *OSICON 25*, CSIR-NIO Goa.
3. Das, S., Deogharia, R., & Sil, S. (2023). Classification of global oceans based on the impact of factors affecting primary productivity. *Trevor Platt Science Foundation Symposium 2023*, PML UK.
4. Das, S., & Sil, S. (2021). Distribution and Trends of Coccolithophore Concentration in the Oceans using Satellite-derived Particulate Inorganic Carbon. *AGU Fall Meeting 2021* (online) https://doi.org/10.1002/essoar.10510301.1
5. Das, S., & Pandithurai, G. (2020). Variability of trends observed in Atmospheric Aerosol optical properties over Pune, India. *EGU General Assembly Conference* (p. 21180) (online) https://doi.org/10.5194/egusphere-egu2020-21180

TEACHING EXPERIENCE (AS ASSISTANT)

1. Numerical Simulation Laboratory – Oceanic Processes (NSLO): 2025, 2024, 2022
2. Introduction to Ocean Dynamics (IOD): 2024
3. Simulations of Atmospheric and Oceanic Processes (SAOP): 2023, 2021
4. Ocean State Forecasting (OSF): 2022
5. Modelling of Dynamical Processes of Ocean and Atmosphere (MDPOA): 2023

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