

INDIA

Dr Alok K. Sinha

Doctorate in Microbiology



Experience

2014–2018

Junior research fellow • National Centre for Polar and Ocean Research

2018–2020

Senior research fellow • National Centre for Polar and Ocean Research

2022 – Present

Project Scientist Hydrothermal Vent- O-Smart project

150 days on board sampling, sediment mooring deployment and recovery experience with Indian Southern Ocean team and National Oceanic and Atmospheric administration, USA (NOAA) team in **Indian Sector of Southern Ocean**.

Association of Polar Early Career Scientists (**APECS**) council member 2020-2021

Indian Polar Research network (**IPRN**) active member

Education

- Doctorate in Microbiology, Mangalore University, Karnataka, India .
- Master In Marine Biotechnology, Goa University, Goa, India
- Master In Environmental Science, IGNOU, INDIA
- Batchelor in Biotechnology, Ranchi University, Jharkhand, India

Laboratory Skills

- Microbiological technique, DNA extraction and quantification, Polymerase chain reaction (PCR), Real Time PCR, Denaturing Gradient Gel Electrophoresis (DGGE), Gene cloning, SDS PAGE & Native PAGE analysis of Proteins, Preparation of Radioactive probe.
- Sea water chemistry (nutrients (autoanalyzer), organic carbon (TOC), siderophores chemistry (Q-Tof), onboard microbiological, chemistry and molecular biology sampling.
- Skilled and experience in sediment trap mooring deployment and recovery
- Skilled and experience in sequencing, handling sequence data in QIIME, and mother. PAUP, RaxML, Mrbayes, Arlequin, DnaSP, Network 4, Codon code, Sequencing analysis 5.2 (ABI), MS Office, Inkscape, QGIS, ArcGIS, R statistical software program, MaxEnt.


Contact

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 <https://scholar.google.com/citations?user=V9Qzj-YAAAAJ&hl=en>

Publication

1. **Sinha, A.K.** and Bhaskar, P.V., 2020. Siderophore production by bacteria isolated from mangrove sediments : A microcosm study. **J. Exp. Mar. Bio. Ecol.** 524, 1–9. <https://doi.org/10.1016/j.jembe.2019.151290>
2. **Sinha, A.K.**, Bhaskar, P.V., Tripathy, S.C., Sarkar, A., Prabhakaran, S., 2019. Effects of growth conditions on siderophore producing bacteria and siderophore production from Indian Ocean sector of Southern Ocean. **J. Basic Microbiol.** 1–13. <https://doi.org/10.1002/jobm.201800537>
3. Chance, R.J., Tinel, L., Sherwen, T., Baker, A.R., Bell, T., Brindle, J., Campos, M.L.A.M., Croot, P., Ducklow, H., Peng, H., Hopkins, F., Hoogakker, B., Hughes, C., Jickells, T.D., Loades, D., Macaya, D.A.R., Mahajan, A.S., Malin, G., Phillips, D., Roberts, I., Roy, R., Sarkar, A., **Sinha, A.K.**, Song, X., Winkelbauer, H., Wuttig, K., Yang, M., Peng, Z., Carpenter, L.J., 2019. Global sea-surface iodide observations, 1967–2018. **Sci. Data** 6, 286. <https://doi.org/10.1038/s41597-019-0288-y>
4. Swaleha Inamdar., Liselotte Tinel., Rosie Chance., Lucy J. Carpenter., Prabhakaran Sabu., Racheal Chacko., Sarat C. Tripathy., Anvita U. Kerkar., **Sinha, A.K.**, Parli Venkateswaran Bhaskar., Amit Sarkar., Rajdeep Roy., Tomas Sherwen., Carlos Cuevas., Alfonso SaizLopez., Kirpa Ram and Anoop S. Mahajan., 2020. Estimation of Reactive Inorganic Iodine Fluxes in the Indian and Southern Ocean Marine Boundary Layer. **Atmospheric Chemistry and Physics.** <https://doi.org/10.5194/acp-2019-1052>
5. Chance, R., Liselotte, T., Sarkar, **A.K.**, **Sinha, A.**, Mahajan, A., Chacko, R., Sabu, P., Roy, R., Jickells, T., Stevens, D., Wadley, M., Carpenter, L., 2020. Surface Inorganic Iodine Speciation in the Indian and Southern Oceans from 12° N to 70° S. **Front. In marine science.** 1–24. <https://doi.org/10.1002/essoar.10502894.1>

Poster and presentation

- 1) **Sinha, A.K.***, and Bhaskar, P.V, “Siderophore and siderophore producing bacterial importance in marine system” flash presentation, 2019, NCPOR, awarded first prize for flash presentation. (Awarded with 1st prize)
- 2) **Sinha, A.K.***, and Bhaskar, P.V, “Siderophore producing bacteria from Indian Equatorial Ocean (EIO) and Indian Sector of Southern Ocean (ISO)” poster, 2019, NCPS-2019.
- 3) **Sinha, A.K.***, Bhaskar, P.V, Jane T. Bhaskar, Jeff S. Bowman “Spatial distribution of bacterial diversity and organic carbon in photic zone of equatorial Indian ocean during South west Monsoon, 2016” ICMR 2018 Pune, India’
- 4) **Sinha, A.K.**, Bhaskar, P.V*, Jane T. Bhaskar, Jeff S. Bowman “Spatial distribution of bacterial diversity and organic carbon in photic zone of Indian equatorial ocean (RAMA site)” Marine biogeochemistry and ecosystem modelling in NOW 2018, INCOIS, India
- 5) **Sinha, A.K.*** and Bhaskar, P.V., “Distribution of dissolved monosaccharide and protein in the Indian sector of Southern Ocean during austral summer 2012” presented in NCPS-2017 (NCAOR, Vasco da Gama, Goa). (Awarded with first prize).
- 6) **Sinha, A.K.***, and Bhaskar, P.V., “Marine microbial siderophores: Types, sources and role in biogeochemistry of carbon” poster presented in OSICON-17,2017, NCESS, Thiruvananthapuram, Kerala.
- 7) **Sinha, A.K.*** and Bhaskar, P.V., “Marine microbial siderophores: Types, sources and role in carbon biogeochemistry” poster in XIIth SCAR biology symposium, 2017, Leuven, Belgium.
- 8) **Sinha et al.** Diversity of total and cultivable siderophore producing marine bacteria: influence on phytoplankton growth in Indian sector of Southern Ocean. SCAR-2020, Hobart, Australia

- 9) **Sinha *et al.*** Cultivable siderophore producing bacteria and its relation to phytoplankton in Equatorial Indian Ocean (EIO). **IIOSC2020**, (Postpone till next update, Reason COVID-19) NIO, Goa.

Academic Book Published (Social Work)

- **LIGHT: Reflection and Refraction** Kindle Edition, by Dr. ALOK KUMAR SINHA (Author), RAJ ANAND (Author), AKSHAY ARYAN (Author) Format: Kindle (<https://www.amazon.in/dp/B09JNH95WD>)
- **Sinha Biology Class 11: MCQ biology for class 11** Kindle Edition, by Dr Alok K Sinha (Author) Format: Kindle Edition (<https://www.amazon.in/dp/B09HQ236JW>)
- नागपुरी व्याकरण डॉ आलोक कुमार सिन्हा in Format: Kindle Edition

Reference

- **Dr. Rahul Mohan (Scientist F), International Cooperation and Outreach**, National Centre for Polar and Ocean research, Sada headland, Vasco, Goa, 403804, Phone no- +91-832-2525531, E.mail ID - rahulmohan@ncpor.res.in
 - **Dr Parli. V. Bhaskar (Ph.D Research Guide)**, Scientist D, National Centre for Polar and Ocean research, Sada headland, Vasco, Goa, 403804, Phone no- 0832-2525676, E.mail ID - bhaskar@ncpor.res.in
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