

NATIONAL CONFERENCE ON POLAR SCIENCES NCPS-2023

May 16-19, 2023
NCPOR, Goa

<https://ncps.ncpor.res.in> | #NCPS2023 |

Organised by:

National Centre for Polar and Ocean Research
Ministry of Earth Sciences, Government of India
Headland Sada, Vasco-da-Gama, Goa 403 804, India



NCPS-Open Science Conference (OSC)

Date: 19th May 2023 (Friday)

08:30 - 09:15	Registration			
09:15 - 10:00	Auditorium PLENARY TALK Ambassador Pankaj Saran Convenor, NatStrat and Member, National Security Advisory Board and former Deputy NSA Talk Title: "Strategic dimensions of polar studies - an Indian perspective"			
10:00 - 10:20	Tea Break			
	PARALLEL SESSION 1 (Auditorium)			
	7. Environment and Ecology Chairperson: Prof. A. A. Mohamed Hatha Cochin University of Science and Technology, Kochi			
10:20 - 10:50	Keynote Speaker: Prof. C.T. Aravindakumar Pro Vice-Chancellor, Mahatma Gandhi University, Kottayam Talk Title: Monitoring of toxic chemicals in the polar region: Challenges and outlook			
Time	Session	Speaker	Reg. No	Title of Presentation
10:50 - 11:00	7d	L. K. Sahu	NCPS2023/175	Transport and local sources of atmospheric non-methane hydrocarbons in the sub-Himalayan region of India during winter
11:00 - 11:10	7d	Sanjeev Kumar	NCPS2023/204	Nitrogen transformation potential of Himalayan soils at different temperature and elevation conditions
11:10 - 11:20	7d	Punarbasa Chaudhuri	NCPS2023/378	Characterisation of plastic wastes collected from a clean-up drive of Antarctic lakes of Larsemann Hills around Bharati research station: Proposing management plan for eliminating plastic accumulation from Antarctic inland

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7. Environment and Ecology

Chairperson: Prof. A. A. Mohamed Hatha

Cochin University of Science and Technology, Kochi

Time	Session	Speaker	Reg. No	Title of Presentation
11:20 - 11:30	7d	Laxmi Kant Bhardwaj	NCPS2023/407	Presence of Microplastics in Antarctica and Its Surrounding Environment
11:30 - 11:40	7d	Anu Gopinath	NCPS2023/339	Microplastics as trace metal scavengers in the Southern Ocean sediments
11:40 - 11:50	7c	Siddarthan Venkatachalam	NCPS2023/208	Microbiomes of Arctic glacier foreland ecosystems and their metabolic potentials
11:50 - 12:00	7c	Tanu Jindal	NCPS2023/250	Exploration of Extremophilic Microorganisms from the Indian Region of the Southern Ocean for the Biodegradation of Anionic Surfactants
12:00 - 12:10	7c	Anand Jain	NCPS2023/288	Dynamics of particle-attached and free-living microbial communities: studies from a high Arctic fjord
12:10 - 12:20	7c	P V Vipindas	NCPS2023/294	Vertical segregation and phylogenetic characterization of archaea and archaeal ammonia monooxygenase gene in the water column of the western Arctic Ocean
12:20 - 12:30	7b	V. Venkata-ramana	NCPS2023/258	Hydrodynamics and vertical distribution of zooplankton community structure in coastal Antarctica during the austral summer
12:30 - 12:40	7b	Anant Pande	NCPS2023/368	Conservation planning for seabirds in Antarctica
12:40-12:50	7b	Sukumar Bhakta	NCPS2023/381	Cyanobacteria and microalgae in terrestrial habitats of Larsemann Hills, Antarctica with special reference to new taxa
12:50 - 13:00	Discussion			
13:00 - 14:00	Lunch Break			
14:00- 15:00	Poster session [Theme No. 1, 4, 7 & 8]			

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Time	Session	Speaker	Reg. No	Title of Presentation
15:00 – 15:10	7b	Sivakumar Kannan	NCPS2023/385	The polar derived Actinomycetes: The way forward
15:10 – 15:20	7b	Sumit Mandal	NCPS2023/386	The blue carbon potential of meiobenthic nematodes in the Prydz Bay, Antarctica- A pilot study
15:20 – 15:30	7b	R Kannan	NCPS2023/444	An hour-long passive environmental observation of bearded seal (Erignathus barbatus) at Nansen Basin, Arctic
15:30 – 15:40	7d	Jane T Bhaskar	NCPS2023/182	Does suspended sediment affect the phytoplankton community composition and diversity in the Arctic fjord: A comparative study during summer
15:40 – 15:50	7a	Azizuddin Khan	NCPS2023/66	Effect of Extreme Environment and Isolation on Subjective Time Estimation in Antarctica During Summer: A Cross Sectional Investigation
15:50 – 16:10	Tea Break			
16:10 – 16:20	7a	Tushar Kaushik	NCPS2023/172	The single-cell metagenomic approach reveals biotic interactions of Antarctic N. pachyderma with the ambient pelagic eukaryotic community
16:20 – 16:30	7a	Ravidas Krishna Naik	NCPS2023/192	Status of blue carbon, and its link with environmental settings in Prydz Bay, east coastal Antarctica
16:30- 16:50	Flash Presentation by young polar researchers (4 selected participants)			
16:50 – 17:00	Discussion			
17:00 – 18:30	Valedictory Function and YPSM Award Ceremony			
18:30	High Tea			

Theme 7. Environment and Ecology

Session 7a. Planktons: Climatological and ecological perspectives

Coordinator: **Dr. Chandrashekhar U Rivonker**, Senior Professor & Dean Goa University

Session 7b. Diversity and ecology of flora and fauna

Coordinator: **Dr. Chandrakasan Sivaperuman**, Regional Director, ZSI, A&N

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Session 7c. Microbial diversity: Their role in the environment and industry

Coordinator: **Dr. Sajeevan T.P.**, CUSAT, Kochi

Session 7d. Environmental monitoring and assessment

Coordinator: **Dr. Anish Kumar Warriar**, MIT, Udupi

Rapporteur: Dr. Ravidas Naik, Dr. Anand Jain, Dr. Jabir T, and Dr. Venkatachalam S, NCPOR

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NCPS-Open Science Conference (OSC)

Date: 19th May 2023 (Friday)

PARALLEL SESSION 2 (Seminar Hall)

4. Climate Change and Variability

Chairperson: Dr. Vandana Prasad,
Director, Birbal Sahni Institute of Palaeosciences, Lucknow

10:20 - 10:50

Keynote Speaker: Dr. Satheesh C. Shenoi
MoES Chair Professor/ Scientist Former Director, INCOIS
Talk Title: *Impacts of Climate Change on Society*

Time	Session	Speaker	Reg. No	Title of Presentation
10:50 - 11:00	4a	Vinu Valsala	NCPS2023/60	Is Amundsen-Bellingshausen Seas-Low affecting trace gas air-sea fluxes in the Antarctic Ocean?
11:00 - 11:10	4b	Ravi Bhushan	NCPS2023/60	Beryllium isotopic distribution in the Indian Ocean: Implications to spatial heterogeneity, sedimentation rates, depositional flux and production rate variation
11:10 - 11:20	4b	Vikash Kumar	NCPS2023/165	Arctic-Indian Monsoon Teleconnections: Insights from a Multi-proxy Geochemical Record from Kongsfjorden
11:20 - 11:30	4b	Vikram Pratap Singh	NCPS2023/212	Variations in the Agulhas Current during Quaternary: Planktic Foraminiferal Evidences from IODP-U1474A
11:30 - 11:40	4c	Ramesh Kumar Yadav	NCPS2023/131	Influence of Azores High on Indian summer monsoon in the current climate change regime

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Time	Session	Speaker	Reg. No	Title of Presentation
11:40 - 11:50	4c	Vidya P. J	NCPS2023/151	Intensification of Arabian Sea Cyclone Genesis potential and its association with Arctic Warming
11:50 - 12:00	4c	Dhananjay Kumar	NCPS2023/201	Secondary Organic Aerosol Formation over the Eastern Himalayas: Implications from Atmospheric Water-Soluble Low-Molecular-Weight Organic Compounds
12:00 - 12:10	4c	Divya David T	NCPS2023/215	Role of regional climate modes in Kongsfjorden over the last decade
12:10 - 12:20	4c	Laluraj C M	NCPS2023/245	Recent ice sheet surface warming over Dronning Maud land, East Antarctica
12:20 - 12:30	Discussion			
13:00-14:00	Lunch Break			
14:00- 15:00	Poster session [Theme No. 1, 4, 7 & 8]			
PARALLEL SESSION 2 (Seminar Hall) 4. Climate Change and Variability Chairperson: Prof. R. Shankar Adviser, International Geoscience Education Organisation				
15:00 – 15:10	4c	Anish Kumar Warriar	NCPS2023/329	Response of an east Antarctic Lake to the glacial-interglacial variations in climate: Preliminary results
15:10 – 15:20	4c	Mahesh Badnal	NCPS2023/336	Evolution of Mochou Lake ecosystem in Larsemann Hills, East Antarctica over the last c.30,000 years
15:20 – 15:30	4c	Pranab Deb	NCPS2023/345	'Hotspots' of summer melting over coastal Dronning Maud Land
15:30 – 15:50	Tea Break			

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Time	Session	Speaker	Reg. No	Title of Presentation
16:00 – 16:10	4c	Jayanarayanan Kuttippurath	NCPS2023/408	Hydrological Response to Climate change in Third Pole: implications for water security of South Asia
16:10 – 16:25	Flash Presentation by young polar researchers (3 selected participants)			
16:25- 16:35	Discussion			
17:00 – 18:30	Valedictory Function and YPSM Award Ceremony			
18:30	High Tea			

Theme 4. Climate Change and Variability

Session 4a. Physical forcings, biogeochemical feedbacks and variability

Coordinator: **Prof. Lokesh Kumar Sahu**, PRL, Ahmedabad

Session 4b. Past climate variability and global linkages

Coordinator: **Dr. Waliur Rahaman**, NCPOR, Goa

Session 4c. Climate change and impact in polar regions

Coordinator: **Dr. Manish Tiwari**, NCPOR, Goa

Rapporteur: Dr. Vikash Kumar, Dr. Shramik Patil and Rahul Dey, NCPOR

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PARALLEL SESSION 3 (Auditorium Conference Room)

10:20 - 10:50	8. Polar Operations Chairperson: Dr. S. Rajan Former Director, NCPOR, Goa Keynote Speaker: Dr. Rasik Ravindra, Former Director, NCPOR, Goa Talk Title: Polar Operations under the regime of new Antarctic Legislation			
10:50 - 11:05	Invited Speaker: Dr. Sulagna Chattopadhyay Editor-in-Chief, Geography and You Talk Title: Efficient Science Communication for Good Policy			
Time	Session	Speaker	Reg. No	Title of Presentation
11:05 - 11:15	8e	Rakesh Rao	NCPS2023/292	Science Photography and Filmmaking an Effective tool for Polar Science Communication and Education
11:15 - 11:25	8e	Swati Nagar	NCPS2023/122	Enhancing Public Outreach Initiatives: A Multi-Lingual Approach for Increased Effectiveness
11:35 - 11:45	8a	Rahul Kumar	NCPS2023/287	Performance monitoring of Wastewater system at Bharati Research Base, East Antarctica
11:45 - 11:55	8a	Ariz Ahmad	NCPS2023/298	About 1000 Mt/year CO ₂ emission is curtailed by using Combined Heat and Power (CHP) at Indian Research Station-Bharati in Antarctica
11:55 - 12:10	Flash Presentation by young polar researchers (3 selected participants)			
12:10 - 12:25	Discussion			
13:00 - 14:00	Lunch Break			
14:00- 15:00	Poster session [Theme No. 1, 4, 7 & 8]			

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PARALLEL SESSION 2 (Auditorium Conference Room)

1. Crustal Evolution and Reconstruction

Chairperson: Prof. Naresh Chandra Pant, Chair, SCAR India

14:45 – 15:15	Keynote Speaker: Prof. Saibal Gupta, IIT Kharagpur Talk Title: Re-strategizing investigations into the paleo- India-East Antarctica connection: looking at and beneath the rocks			
Time	Session	Speaker	Reg. No	Title of Presentation
15:15 – 15:25	1a	Padma Rao B	NCPS2023/163	Broadband Seismological Observatory – Analysis of noise characteristics and crustal structure beneath the Larsemann Hills, Antarctica
15:25 – 15:35	1a	Mohammad Sadiq	NCPS2023/450	Metamorphic evolution of Easter Peninsula Gneiss, Larsemann Hills, East Antarctica: insights from phase equilibria modelling and monazite-zircon geochronology
15:35 – 15:45	1a	Sandip Kumar Roy	NCPS2023/454	Geology of cDML through two orogenies-A review.
15:45 – 15:55	1b	K S Misra	NCPS2023/99	Synthetic Aperture Radar Data in Mapping the Major Basement Tectonic Features and Their Relationship with the Distribution of Volcanoes and Volcanic Fields in Antarctica
15:55 – 16:05	1b	Giri Yellacheruvu	NCPS2023/166	A geophysically constrained crustal element map of East Antarctica between Enderby Land and Princess Elizabeth Land: Implications towards Proterozoic supercontinent amalgamations

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Time	Session	Speaker	Reg. No	Title of Presentation
16:05 – 16:15	1b	Devsamridhi Arora	NCPS2023/440	Elucidating sub-ice geology of Princess Elizabeth Land-Amery Ice Shelf, East Antarctica by connecting geology and geophysics
16:15 – 16:25	1b	Mayuri Pandey	NCPS2023/453	Presence of complex metamorphic terrain in the interior of Princess Elizabeth Land: evidence from englacial moraines
16:25 – 16:35	1c	Ravi kumar Muppidi	NCPS2023/238	Solid Earth Interactions in Antarctica: Insights from Geophysical and Geodetic Measurements
16:35 – 16:50	Flash Presentation by young polar researchers (3 selected participants)			
16:50 – 17:00	Discussion			
17:00 – 18:30	Valedictory Function and YPSM Award Ceremony			
18:30	High Tea			

Theme 1. Crustal Evolution and Reconstruction

Session 1a. Geochronology, geochemistry and petrology

Coordinator: **Dr. Amit Dharwadkar**, GSI, Faridabad

Session 1b. Crustal evolution: Insight from Recent Geophysical and Geological Investigations

Coordinator: **Dr. Sandip Roy**, GSI, Nagpur

Session 1c. Geodesy and geodynamics

Coordinator: **Dr. Sunil P.S.**, CUSAT

Rapporteur: *Dr. Sunil V., Dr. Nisha Nair, Mohammad Nuruzzama, NCPOR*

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POSTER SESSIONS

Date: 19th May 2023 (Friday) Time: 14:00 - 15:00 Hrs

Venue: Auditorium Basement

1. Crustal Evolution and Reconstruction

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 1	1a	NCPS2023/173	Akash Kumar Pandey	Collisional setting signatures through Geochemical Characterization of offshore sediments from Prydz Bay, East Antarctica
P.B. 2	1a	NCPS2023/140	Raghuram	Petrogenetic evolution of the alkaline intrusions from Schirmacher Oasis, central Dronning Maud Land, East Antarctica.
P.B. 3	1a	NCPS2023/267	Aditya Das	Meteorite found in Antarctica - Unlock the aqueous history of Mars
P.B. 4	1b	NCPS2023/315	Sandro Chatterjee	Reworking of the Prydz Bay UHT granulites: a microstructural perspective
P.B. 5	1b	NCPS2023/320	Aishi Debnath	Reconstruction between India-Antarctica-Australia from Archean to Pan-African age: insights into the Indo-Antarctic and Indo-Australo suture position and their inter-relation
P.B. 6	1b	NCPS2023/190	Arka Roy	Gravity Inversion with Seismic Constraints to map the crustal thickness beneath Antarctica
P.B. 7	1b	NCPS2023/232	Rosan Kumar Mallik	Shear Zone related high grade metamorphism in the Schirmacher Oasis and its implications on the East African Orogeny geodynamics-An overview
P.B. 8	1b	NCPS2023/437	Siddharth Dey	3D lithospheric velocity structure of India, Himalaya and Tibet using Rayleigh wave dispersion data

1a Geochronology, Geochemistry and Petrology

1b Crustal Evolution: Insight from Recent Geophysical and Geological Investigations

1c Geodesy and geodynamics (Nil)

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Venue: Auditorium Basement

4. Climate Change and Variability

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 9	4a	NCPS2023/38	Supratim Guha	Status of Glaciers in the Suru Basin and Chandra Basin in the Twenty-First Century using Non-Parametric Statistical Methods
P.B. 10	4a	NCPS2023/136	Monica S Shamurailatpam	Biological Darkening of the Glacial Surface: A Study at Chhota Shigri Glacier in the Western Himalaya
P.B. 11	4a	NCPS2023/139	Shubham Tripathi	Productivity and Denitrification during Mid-Pleistocene Transition: Implications to South Asian Monsoon variability
P.B. 12	4a	NCPS2023/161	Cheryl A. Noronha-D Mello	Environmental magnetism from lake sediment reveals late glacial – Holocene paleoenvironmental conditions and ice sheet changes in the Larsemann Hills
P.B. 13	4a	NCPS2023/266	Teesha Mathew	Implementation and evaluation of a high-resolution ecosystem model for the Kongsfjorden-Krossfjorden system
P.B. 14	4a	NCPS2023/421	Chandan Sarangi	Discernable role of dust in snowmelt over Himalayas, an anomaly from polar snowmelt
P.B. 15	4b	NCPS2023/137	Arnab Sen	The dynamics of Indian Ocean Dipole - Antarctic teleconnection in CMIP6: characteristics and biases
P.B. 16	4b	NCPS2023/146	Ajay	The Imprint of Southern Ocean Stratification on the Isotopic Composition of Antarctic Precipitation
P.B. 17	4b	NCPS2023/221	Uday Sharma	Palaeo-glaciation extents in the Trans-Himalayan region of Lahaul and Spiti, Himachal Pradesh, India.
P.B. 18	4b	NCPS2023/224	Sunil K. Das	Late Miocene to Holocene Paleoceanographic variability near the Subantarctic Front in Central South Pacific (Southern Ocean) and its impact on deep sea biota
P.B. 19	4b	NCPS2023/228	Rahul Dey	Sea ice influenced climate variability in coastal Antarctica

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Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 20	4b	NCPS2023/262	Shardool Kokare	Paleoclimatic study of lake L2 in Schirmacher Oasis: Magnetic Susceptibility as a proxy
P.B. 21	4b	NCPS2023/279	Suman Datta	Energy Modelling and Cyclic variability in Sedimentation Pattern near the Chilean Margin during the middle to late Pleistocene (South East Pacific)
P.B. 22	4b	NCPS2023/323	Gayathri E M	Anthropogenic trace element (Cu, Pb) records in a coastal East Antarctic ice core for the past 200 years
P.B. 23	4b	NCPS2023/333	Jojugeorge Sebastian	High-Resolution Record of Paleoenvironmental Variations from An East Antarctic Lake
P.B. 24	4b	NCPS2023/384	Masud Kawsar	Tectonic and astronomical controls on deep ocean circulation intensities in the northern Indian Ocean since the late Miocene: Inferences from sortable silt size records in the lower Bengal Fan
P.B. 25	4b	NCPS2023/107	Sarathchandraprasad T	Last Glacial to interglacial productivity pattern and dissolved iron utilization of the Prydz bay, Antarctica; Implications to meltwater plugs
P.B. 26	4b	NCPS2023/291	Harikrishnan Guruvayoorappan	Comparison of Ocean Surface Conditions in Kongsfjorden, Svalbard, during the Holocene Thermal Maximum and Contemporary Warming Periods
P.B. 27	4b	NCPS2023/307	Abhilash Nair	Variations in the Southern Ocean carbonate production, preservation, and hydrography for the past 41, 500 years: Evidence from coccolith and CaCO ₃ records
P.B. 28	4b	NCPS2023/360	Abhilash Nair	Paleoceanographic Changes in the Indian Sector of the Southern Ocean- Radiolarian Based Sub-Surface Temperature Reconstruction
P.B. 29	4b	NCPS2023/371	Sunil Kumar Shukla	High-resolution record of Sea Surface Temperatures in the Indian sector of the Southern Ocean since ~26 kyr

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Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 30	4b	NCPS2023/383	Syed Mohammad Saalim	Competing effects of Atlantification and meltwater discharge on productivity and preservation of organic carbon off Kongsfjorden, Svalbard during the Holocene
P.B. 31	4b	NCPS2023/388	Manoj M C	Ice-rafted debris variability from the western Indian sector of the Southern Ocean over the past 650 ka
P.B. 32	4b	NCPS2023/393	Om Kumar	Mid-latitude westerlies matter for the Third pole
P.B. 33	4b	NCPS2023/465	Sahina Gazi	The organic scales of Haptophytes from the Southern Indian Ocean An application study using FE-SEM technique
P.B. 34	4b	NCPS2023/494	Sharat Dutta	Late Quaternary glacial advance and retreat in Larsemann Hills, East Antarctica: Application of OSL surface exposure dating technique
P.B. 35	4c	NCPS2023/98	Athulya R	Does the Clausius-Clapeyron scaling exist in Ny Alesund, Svalbard?
P.B. 36	4c	NCPS2023/257	Tariq Ejaz	Response of East Antarctic temperature and sea ice variability over the Indian Ocean to climatic modes during the past two centuries
P.B. 37	4c	NCPS2023/283	Shaikh Atiba Anis Ahmead	Spatiotemporal Variability in Aerosol Distribution Over the Indian Sector of Southern Ocean And Coastal Antarctica During The Austral Summer
P.B. 38	4c	NCPS2023/330	Adith V B	Application Of Euclidean Distance in Identifying a Relationship Between Coronal Mass Ejection And Outgoing Longwave Radiation In Antarctic Region
P.B. 39	4c	NCPS2023/395	Rahul Dev	Role of SST around Svalbard and its importance on precipitation at Ny-Alesund
P.B. 40	4c	NCPS2023/451	Shivang Alok	Examining Climate change over Alaknanda sub-basin from 1981-2020
P.B. 41	4c	NCPS2023/26	Shailesh Pednekar	Spatial distribution of modified Circumpolar Deep Water based on Instrumental Seal data in the Prydz Bay for Climate Change

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Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 42	4c	NCPS2023/85	Vineet Jain	Atlantic water influence in Hornsund fjord, Svalbard
P.B. 43	4c	NCPS2023/138	Abhishek Verma	Deglaciation ensued throughout the last glacial maxima in Ny-Ålesund region of Svalbard, Arctic
P.B. 44	4c	NCPS2023/169	Gopikrishnan G S	Increase in tropospheric ozone in the Arctic as analysed using the ozone sonde and reanalysis data
P.B. 45	4c	NCPS2023/234	Anjali Sathyanath	Ozone trends in the Antarctic and Arctic stratosphere for the period 1985-2020: Assessment of ozone recovery
P.B. 46	4c	NCPS2023/295	Suresh Kumar Reddy B	Sources and formation processes of secondary organic aerosols in coastal Antarctic during summer
P.B. 47	4c	NCPS2023/309	Shramik Patil	Coccolithophores calcification response to environmental changes and its implications on carbonate burial in the Southern Indian Ocean
P.B. 48	4c	NCPS2023/341	Sunny Chug	Thirty-year Surface Climatology of Maitri, East Antarctic Station of India

4a Physical forcings, biogeochemical feedbacks and variability

4b Past climate variability and global linkages

4c Climate change and impact in polar regions

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POSTER SESSIONS

Date: 19th May 2023 (Friday) Time: 14:00 - 15:00 Hrs

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7. Environment and Ecology

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 49	7a	NCPS2023/251	Pratiksha D. Deshmukh	Variability of phytoplankton community structure during the melting phase of the land-fast ice in Prydz Bay, East Antarctica
P.B. 50	7b	NCPS2023/39	Sreebin. P	A brief study on monitoring and recording of the habitat quality and fishery of Mahseer fishes in Himalayan and western Ghats rivers.
P.B. 51	7b	NCPS2023/76	Santoshkumar Potadar	"Climate change and Arctic ecosystems: impacts on biodiversity".
P.B. 52	7b	NCPS2023/184	Snigdha Bhaumik	Unveiling the structural and functional diversity of marine macrobenthic community from Prydz Bay, East Antarctica
P.B. 53	7b	NCPS2023/188	Soumya Subhra Baishnab	The meiobenthic community structure of Prydz Bay, Antarctica during austral summer: Unraveling through Biological Trait Analysis
P.B. 54	7b	NCPS2023/213	Jabir T	Diversity and distribution of diazotrophs in the Central Arctic Ocean
P.B. 55	7b	NCPS2023/259	Praveen Raj C	Environmental influence on the mesozooplankton community structure from Krossfjorden, Svalbard archipelago.
P.B. 56	7b	NCPS2023/265	Disha Sachan	Climatic and Anthropogenic Vulnerabilities for the Himalayan Ecosystem
P.B. 57	7b	NCPS2023/282	Shekar Babu Kumbha	Bioprospecting of Antarctic benthic fauna in search of bioactive Marine Natural Products (MNPs).
P.B. 58	7b	NCPS2023/354	Haritha Prasad	Mesozooplankton community structure in Kongsfjorden: Investigating the environmental influence and depth-wise variations
P.B. 59	7b	NCPS2023/394	Ahmed Shahir	Unravelling the state of the art of polar benthic research through computational research synthesis and weaving techniques.
P.B. 60	7c	NCPS2023/118	Aritri Sanyal	Do Antarctic cryoconite hole bacterial communities respond to seasonal melting?

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Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 61	7c	NCPS2023/159	Rantim Bhattacharjee	Marine Siderophores: its ecological role and applications
P.B. 62	7c	NCPS2023/249	Shahana Kabeer. S	Enzymatic mitigation of acrylamide in potato chips using L- asparaginase from Arctic actinomycetes
P.B. 63	7c	NCPS2023/274	Femi Anna Thomas	Uncovering the Genomic signatures of pollution in Arctic bacteria – A De-novo whole Genome-based approach
P.B. 64	7c	NCPS2023/304	Solly Solomon	Unsheathing the biosynthetic gene clusters of Metagenome Assembled genomes (MAGs) resolved from a complex sediment metagenome of Kongsfjorden Arctic.
P.B. 65	7c	NCPS2023/335	Athira Tv	Characterization of The Biosurfactant Producing Bacteria from Antarctic Sediment
P.B. 66	7c	NCPS2023/403	Anju Chalari	Manganese tolerant and Mn-oxidizing bacterial diversity in the western Svalbard fjords, Arctic
P.B. 67	7c	NCPS2023/419	Yuga Ghotge	Studies on pigmented bacteria from high Arctic region for bioprospecting potential
P.B. 68	7c	NCPS2023/455	Akhila A	Unravelling Anaerobic Bacterial Diversity in Arctic Svalbard Coastline Cruise
P.B. 69	7c	NCPS2023/340	Manigundan Kaari	Actinobacterial diversity in the Indian sector of Southern Ocean
P.B. 70	7d	NCPS2023/31	Saritha V K	Perfluorooctanoic acid in the sediment matrices of Arctic fjords, Svalbard
P.B. 71	7d	NCPS2023/48	Priyanka Gaikwad	Mercury Contamination in the environmental matrices of Arctic
P.B. 72	7d	NCPS2023/248	Alok Kumar Sinha	Does the diversity of residential bacterial community changes with oceanic regimes? A review of studies from Antarctica to Indian shoreline
P.B. 73	7d	NCPS2023/252	Siddhartha Sarkar	Spatial and diel variability of CH ₄ , CO ₂ , and N ₂ O in the lakes of Schirmacher Oasis, East Antarctica
P.B. 74	7d	NCPS2023/302	Akhil Prakash E	Antibiotic resistant Mechanisms in the Arctic and Antarctic regions- An In-Silico Study

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Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 75	7d	NCPS2023/342	Princy M John	The distribution of Organochlorine Pesticides and Emerging Contaminants from the Sediments of Kongsfjord, Svalbard
P.B. 76	7d	NCPS2023/379	Harshal L. Patil	Estimation of polar stratospheric clouds using MAX-DOAS
P.B. 77	7d	NCPS2023/11	Abhishek Saxena	Long-term variations in trace pollutants over the western Himalayan Region
P.B. 78	7d	NCPS2023/135	Binish M B	Spatial variability of selected water quality parameters of the lacustrine system in Schirmacher Hills, East Antarctica
P.B. 79	7d	NCPS2023/167	Shabnam Choudhary	Bioavailability of metals in modern fjord sediments, west Spitsbergen, and their influence on benthic foraminifera
P.B. 80	7d	NCPS2023/187	Debmita Bandyopadhyay	Analysing the rapid vegetation line shift in response to glacial dynamics and climate variability in the Himalayas
P.B. 81	7d	NCPS2023/270	Archana Singh	Biochemical Composition of Particulate Organic Matter in Kongsfjorden, an Arctic fjord
P.B. 82	7d	NCPS2023/313	Kannan V M	Dioxins & Furans, Dioxin-like and Nondioxin-like PCBs in the sediments of High Arctic Fjords
P.B. 83	7d	NCPS2023/327	Anand Lokapure	AVP use in low temperature sea conditions and challenges involved

7a Planktons: climatological and ecological perspectives

7b Diversity and Ecology of Flora and Fauna

7c Microbial diversity: their role in the environment and industry

7d Environmental Monitoring and Assessment

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8. Polar Operations

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 84	8a	NCPS2023/199	Sagar F. Wankhede	Earth Observation and Remote Sensing for Identifying Suitable Sites to establish a Research Base in Antarctica
P.B. 85	8d	NCPS2023/268	Ranjita Behera	Exploring the Benefits of Skiing for Enhancing Human Safety and Rescue Operations in the Polar Region
P.B. 86	8e	NCPS2023/78	Priyanka Vadrevu	Indian Polar Research Network: A Multidisciplinary Network of Early Career Polar Researchers in India

8a Cold climate engineering: buildings, mechanical systems, alternate energy systems

8b Communication and AI/ML -digital data management (Nil)

8c Medical & Social issues: Polar medicine, impacts of Polar environment and isolation over winter on individuals and communities (Nil)

8d Safety: human safety, equipment, clothing, operating procedures and search & rescue

8e Education and outreach