

# 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

## Young Polar Scientists Meet (YPSM)

Date: 17<sup>th</sup> May 2023 (Wednesday)

Venue: Auditorium, NCPOR

Time	Program Schedule
08:30 – 09:00	<b>Registration</b>
09:00 – 09:45	<b>Invited Lecture: Dr. S. Shivaji</b> , Distinguished Scientist and Director of Research, L V Prasad Eye Institute, Hyderabad Talk Title: "Cold Loving Microbes of the Cryosphere"
09:45 – 10:30	<b>Invited Lecture: Dr. S. Suresh Babu</b> , Scientist SG Space Physics Laboratory, Vikram Sarabhai Space Centre (ISRO), Thiruvananthapuram Talk Title: "Polar Climate Change: On the Warming of the Freezing Environment"
10:30 – 11:00	<b>Invited Lecture: Prof. Raghu Murtugudde</b> , Visiting Faculty, IIT Bombay Talk Title: "Role of the Polar Oceans in the Monsoon Variability, Change and Extremes"
11:00 – 11:30	Group Photograph and Tea Break
11:30 – 13:00	<b>Poster Presentation by Young Polar Scientists</b>
13:00 – 14:00	<b>Lunch Break</b>
14:00 – 15:30	<b>Poster Presentation by Young Polar Scientists</b>
15:30 – 17:30	<b>Panel Discussion</b> on topic " <b>Opportunities and Challenges in Polar Studies</b> " <b>Panelists:</b> Dr. Rasik Ravindra, Former Director, NCPOR Prof. Naresh Chandra Pant, Chair, SCAR India Prof. D. Pallamraju, Dean PRL, Ahmedabad Shri Pallava Bagla, Senior Journalist and Science Editor Dr. Thamban Meloth, Director, NCPOR <b>Moderator:</b> Dr. Rahul Mohan, NCPOR, Goa
17:30 – 18:00	<b>Valedictory and Announcement of YPSM Poster Winners</b>

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## YPSM POSTER SESSIONS

Date: 17<sup>th</sup> May 2023 (Wednesday) Time: 11:30-13:00 and 14:00 - 15:30 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	1b	NCPS2023/315	Sandro Chatterjee	Reworking of the Prydz Bay UHT granulites: a microstructural perspective
P.B. 3	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

1a Geochronology, Geochemistry and Petrology

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

1c Geodesy and geodynamics (Nil)

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### 2. Space Weather and Meteorolgy

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 4	2a	NCPS2023/80	Gourav Mitra	Low-latitude planetary wave dynamics during a rare 2019 Antarctic Sudden Stratospheric Warming
P.B. 5	2a	NCPS2023/112	Reetambhara Dutta	Observational evidence for the influence of stratospheric planetary wave and ozone variabilities on the middle atmospheric winds and tides over Antarctica
P.B. 6	2a	NCPS2023/180	Kshitiz Upadhyay	Investigation of M-I coupling generated mid-latitude phenomena using ground-based OI 630.0 nm dayglow measurements
P.B. 7	2b	NCPS2023/46	Vivek Kumar	Blizzard Phenomenon in Maitri: An Analysis of 32 Years of Katabatic Wind Pattern
P.B. 8	2b	NCPS2023/111	Peeyush Gupta	Role of Domain Size in Simulating Heavy Precipitation Events over Himalaya using WRF Modeling System
P.B. 9	2b	NCPS2023/157	Ritesh Kumar	Variation of Aerosol Optical properties over the Hornsund, Svalbard Arctic
P.B. 10	2b	NCPS2023/158	Sunil Kumar	Investigation of Aerosol properties over Indian Antarctic research station Maitri
P.B. 11	2b	NCPS2023/195	Sibin Simon	An extreme precipitation event over Dronning Maud Land, East Antarctica - A case study of an atmospheric river event using the Polar WRF Model
P.B. 12	2b	NCPS2023/458	Adarsh Dube	A study of upper ocean characteristics in response to the three intense re-curling tropical cyclones from the Arabian Sea using satellite and in-situ measurements

2a Solar-terrestrial Interaction Studies

2b Weather and Climate



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### 3. Southern Ocean

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 13	3a	NCPS2023/115	K.Gurumoorthi	Is Pristine Antarctica at Risk from Microplastics?
P.B. 14	3a	NCPS2023/171	I V Satya Chanakya	Ocean-Atmosphere CO <sub>2</sub> Exchange in Southern Ocean During the Last Deglaciation
P.B. 15	3a	NCPS2023/305	Savio Miranda	Paleoclimatic study from Indian Sector of Southern Ocean based on fossil diatoms
P.B. 16	3a	NCPS2023/316	Aswathi Das M. T.	Interaction of coastal and open ocean waters in the Prydz Bay region of the Indian Sector of the Southern Ocean
P.B. 17	3a	NCPS2023/367	Nirmala J	Southward shift of Polar Front in the Indian sector of the Southern Ocean during austral summer 2017: Hydrographic changes and its responses to chlorophyll-a
P.B. 18	3a	NCPS2023/382	Soumya Parab	Reconstructing Southern Ocean Paleoclimates through analysis of <i>Fragilariopsis Kerguelensis</i> and <i>Thalassiosira Lentiginosa</i> diatom size variations
P.B. 19	3a	NCPS2023/420	Sanket Parabgaonkar	Infering paleoclimate from the Kerguelen region of Southern Ocean of past 35ky to 42ky
P.B. 20	3a	NCPS2023/445	Jessin Joy Alex	Physical and biogeochemical features in the Polar, Subantarctic, and Subtropical fronts of the Indian sector of the Southern Ocean: Insights from the 8th Indian Ocean expedition
P.B. 21	3b	NCPS2023/89	Sunil Kumar Padhi	Decadal variability of phytoplanktonic productivity in the Indian Sector of the Southern Ocean during austral summer
P.B. 22	3b	NCPS2023/214	Sreerag A	Phytoplankton diversity in relation to biophysical processes in the Indian sector of Southern Ocean

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Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 23	3b	NCPS2023/299	Sankirna D. Joge	Sea water Dimethyl sulfide (DMS) climatologies, and trends
P.B. 24	3b	NCPS2023/328	Mohammad Nuruzzama	Biogeochemical cycling of Barium in the Indian Sector of Southern Ocean
P.B. 25	3b	NCPS2023/442	Viola Rodrigues	Oxygen Isotopes in the Southern Ocean during 2017-18 Austral summer
P.B. 26	3b	NCPS2023/446	Krishnaveni Krishnankutty	Observed short-term hydrographic and biogeochemical changes in the Subtropical and Polar Fronts during the austral summer of 2011
P.B. 27	3c	NCPS2023/123	Soumyadeep Dutta	Interannual-to-decadal variability of the Antarctic Slope Front and Southern Boundary of the Antarctic Circumpolar Current in the Indian Sector of the Southern Ocean: A study based on Model and Reanalysis data

3a Ocean-atmospheric Processes

3b Biogeochemical Processes

3c Godesy and geodynamics

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### 4. Climate Change and Variability

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 28	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. 29	4a	NCPS2023/136	Monica S Shamurailatpam	Biological Darkening of the Glacial Surface: A Study at Chhota Shigri Glacier in the Western Himalaya
P.B. 30	4a	NCPS2023/139	Shubham Tripathi	Productivity and Denitrification during Mid-Pleistocene Transition: Implications to South Asian Monsoon variability
P.B. 31	4b	NCPS2023/137	Arnab Sen	The dynamics of Indian Ocean Dipole - Antarctic teleconnection in CMIP6: characteristics and biases
P.B. 32	4b	NCPS2023/146	Ajay	The Imprint of Southern Ocean Stratification on the Isotopic Composition of Antarctic Precipitation
P.B. 33	4b	NCPS2023/221	Uday Sharma	Palaeo-glaciation extents in the Trans-Himalayan region of Lahaul and Spiti, Himachal Pradesh, India.
P.B. 34	4b	NCPS2023/224	Sunil K. Das	Late Miocene to Holocene Paleooceanographic variability near the Subantarctic Front in Central South Pacific (Southern Ocean) and its impact on deep sea biota
P.B. 35	4b	NCPS2023/228	Rahul Dey	Sea ice influenced climate variability in coastal Antarctica
P.B. 36	4b	NCPS2023/262	Shardool Kokare	Paleoclimatic study of lake L2 in Schirmacher Oasis: Magnetic Susceptibility as a proxy
P.B. 37	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. 38	4b	NCPS2023/323	Gayathri E M	Anthropogenic trace element (Cu, Pb) records in a coastal East Antarctic ice core for the past 200 years



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P.B. 39	4b	NCPS2023/333	Joju George Sebastian	High-Resolution Record of Paleoenvironmental Variations from an East Antarctic Lake
P.B. 40	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. 41	4c	NCPS2023/98	Athulya R	Does the Clausius-Clapeyron scaling exist in Ny Alesund, Svalbard?
P.B. 42	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. 43	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. 44	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. 45	4c	NCPS2023/395	Rahul Dev	Role of SST around Svalbard and its importance on precipitation at Ny-Alesund
P.B. 46	4c	NCPS2023/451	Shivang Alok	Examining Climate change over Alaknanda sub-basin from 1981-2020

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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### 5. Cryospheric Processes and Dynamics

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 47	5a	NCPS2023/8	Gautami Samui	Biogeochemical contributions to supraglacial meltwater chemistry and discharge during summer in coastal Antarctica
P.B. 48	5a	NCPS2023/43	Rahul Sheoran	Acoustic emission analysis of an experimental avalanche slope in Great Himalaya for snow slab fracture prediction for snow slab fracture prediction.
P.B. 49	5a	NCPS2023/156	Ashim Sattar	GLOF DRR (Disaster Risk Reduction)- EWS design and Artificial Lake Lowering
P.B. 50	5a	NCPS2023/185	Uday Kumar	Monitoring Antarctic Ice Mass Balance with GRACE: Insights and Applications
P.B. 51	5a	NCPS2023/202	Ravindra Kumar	Features of the Western Disturbances impacting Karakoram Anomaly
P.B. 52	5a	NCPS2023/207	Aaquib Javed	Englacial stratigraphy at Dome A, Antarctica derived using airborne radar-sounding surveys: A COLDEX perspective
P.B. 53	5a	NCPS2023/236	Shivangini Singh	Englacial stratigraphy at Dome A, Antarctica derived using airborne radar-sounding surveys: A COLDEX perspective
P.B. 54	5a	NCPS2023/273	Shubham Awasthi	Hybrid polarimetry-based approach for Snow Wetness Estimation using SAR datasets
P.B. 55	5a	NCPS2023/301	Shrutika Wagh	Halogen chemistry over the Indian Antarctic station Bharati
P.B. 56	5a	NCPS2023/311	Mayank Upadhyay	Snow Cover Characterization Using Multi Temporal Sentinel-1 SAR Datasets in the Beas Basin of North-Western Himalayan Region
P.B. 57	5a	NCPS2023/318	Sayantan Mandal	Role of UAV-Remote Sensing for Glacial Health Monitoring in Western Himalayas



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Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 58	5a	NCPS2023/322	Priyanka Patel	Estimation of Surface Elevation Changes over Thwaites and Pine Island Glaciers, West Antarctica using SARAL/AltiKa
P.B. 59	5a	NCPS2023/346	Das Jay Sapan	Remote Sensing-Based Investigation of Ice Flow Dynamics over Amery and Brunt Ice Shelves using MODIS Data, Antarctica.
P.B. 60	5a	NCPS2023/415	Pooja Mishra	Development and evolution of surface melt features over Dalk glacier near Bharti station, Antarctica during period 2019-2023
P.B. 61	5a	NCPS2023/416	Shivam Sundram	Concentration and Isotope Ratio of Lead in coastal Antarctic ice: Tracing Sources and Transport Pathways
P.B. 62	5a	NCPS2023/418	Madhukar Srigyan	Role of lithology on supraglacial debris distribution and energy exchange processes over the glaciated terrain of Western Himalaya
P.B. 63	5b	NCPS2023/22	Rayees Ahmed	Retreat of Lato group of the glaciers and GLOF hazard assessment of Lato lake in Ladakh region of north-western Himalaya, India.
P.B. 64	5b	NCPS2023/68	Tanisha Ghosh	Glacial Lake Outburst Threat Assessment Using AHP Multi-Criteria Decision-Making Techniques in the Sikkim Himalaya
P.B. 65	5b	NCPS2023/106	Arushi Sharma	Semi-Distributed Conceptual Hydrological Modelling of Dunagiri Glacier Streamflow, Dhauliganga River Basin, Central Himalaya, India
P.B. 66	5b	NCPS2023/114	Vikram Goel	Glaciological site survey to determine an optimal ice coring site in coastal Dronning Maud Land, Antarctica
P.B. 67	5b	NCPS2023/121	Payal Sharma	Evaluation of spatial distribution of glacier retreat and its controlling climatic parameters from 1971-2022 in Ravi basin, Western Himalaya

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P.B. 68	5b	NCPS2023/127	Sourav Laha	An analysis of Sutri Dhaka glacier discharge in the western Himalaya
P.B. 69	5b	NCPS2023/143	Roja Asharaf	Estimation of Glacier thickness and Volume in Kabul Basin, Afghanistan
P.B. 70	5b	NCPS2023/197	Kamini Meshram	Optical properties and export of dissolved organic matter from Chandra basin glaciers in the western Himalayas
P.B. 71	5b	NCPS2023/203	Vijaya Kumar Thota	Feasibility of using Sentinel-1 data for resolving seasonal ice velocity of glaciers in High Mountain Asia
P.B. 72	5b	NCPS2023/211	Arya A R	Himalayan Glaciers are losing mass at higher rate than previous estimates: A case study in the Baspa river basin
P.B. 73	5b	NCPS2023/225	Subhranil Mustafi	Ab initio analysis of the Reduction in Snow Cover due to Black Carbon by Cellular Automata
P.B. 74	5b	NCPS2023/261	Atar Singh	Distributed glacier ice thickness and volume estimation for Baspa Basin, Western Himalaya
P.B. 75	5b	NCPS2023/276	Sunil N. Oulkar	Distributed surface energy and mass balance modeling of Chandra Basin glaciers in the semi-arid zone of Western Himalaya
P.B. 76	5b	NCPS2023/300	Umar Faruque	Mapping and Measurement of Glacier Dynamics in Suru Basin
P.B. 77	5b	NCPS2023/303	Durgesh Dwivedi	Temporal Analysis of Glacier Mass Balance of Gori Ganga Basin using IAAR Method
P.B. 78	5b	NCPS2023/312	Tapas Kumar Nahak	Glacial Lake dynamics and its response to climate variability in Eastern Himalaya (1990-2019)
P.B. 79	5b	NCPS2023/332	Rajeev Rajak	Assessment of glacial lakes prone to glacial lake outburst flood using multi-criteria decision analysis (MCDA) in Changme Khangpu basin, Sikkim Himalaya, India

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P.B. 80	5b	NCPS2023/337	Deva Jefflin A R	Estimation of Accumulation Area Ratio of Mulkila glacier, Bhaga basin using ELA and pixel based approaches
P.B. 81	5b	NCPS2023/349	Joshal Kumar Bansal	Application of Machine Learning Techniques combined with the Stumpf model for bathymetry extraction and GLOF modelling at Drang Drung Glacial Lake, Ladakh, India
P.B. 82	5b	NCPS2023/369	Bisma Yousuf	Mass balance sensitivities of the Gangotri glacier, central Himalaya
P.B. 83	5b	NCPS2023/396	Robi Routh	Preliminary mapping of Rock glacier in Chandra Basin, Western Himalaya, India, using High-Resolution Google Earth Imagery and Sentinel Data
P.B. 84	5b	NCPS2023/398	Nita Roy	Impact of rainfall on enhanced melting and solute export in the glacierized basin, Central Himalaya, India
P.B. 85	5b	NCPS2023/402	Vivek Kumar	Study Land surface and Sea Surface Temperature Dynamics in Amundsen Bay Area, Antarctica for the year 2017 - 2018
P.B. 86	5b	NCPS2023/404	Varun Khajuria	Quantification of Glacier Ice Thickness and Volume in the Zaskar Basin of Western Himalaya via Modelling Techniques
P.B. 87	5b	NCPS2023/409	Tarang Patadiya	A Decadal Analysis of Snow and Glacier Melt Runoff over Parbati Sub-Basin Using Temperature Degree-Day Approach

5a Cryospheric Processes and Variability

5b Glacier dynamics, processes and glacio-hydrological responses



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### 6. Sea ice Variability and modelling

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 88	6a	NCPS2023/90	Ahammed Shereef Ms	Barotropic and baroclinic tides on the shelf off Svalbard and their role in shelf-fjord exchange
P.B. 89	6a	NCPS2023/244	Juhi Yadav	Investigating the Role of Atmospheric Forcing on the Unprecedented Decline of Antarctic Sea Ice in February 2022
P.B. 90	6a	NCPS2023/280	Swathi M	Spatiotemporal Evolution of Sea Ice and Its Teleconnections with Large-Scale Climate Indices over Antarctica
P.B. 91	6a	NCPS2023/325	Ajay B	Thermodynamic evolution of sea ice near Indian Antarctic research station Bharati
P.B. 92	6a	NCPS2023/217	Kshitija Suryawanshi	Recent changes in Antarctic sea ice cover modulated by ocean-atmospheric warming
P.B. 93	6b	NCPS2023/254	Mayank Pandey	Forecasting and Analysis of Seasonal Arctic sea ice variability using ML/DL Techniques
P.B. 94	6b	NCPS2023/447	Ananthu Pradeep	Impact of Atmospheric Heat Flux and Ocean Vertical Processes on the Interannual Variability of Sea Ice and Sea Surface Temperature in the Antarctic Ocean.

6a Sea ice variability and dynamics through time and space

6b Sea-ice modelling and observations

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### 7. Environment and Ecology

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 95	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. 96	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. 97	7b	NCPS2023/76	Santoshkumar Potadar	"Climate change and Arctic ecosystems: impacts on biodiversity".
P.B. 98	7b	NCPS2023/184	Snigdha Bhaumik	Unveiling the structural and functional diversity of marine macrobenthic community from Prydz Bay, East Antarctica
P.B. 99	7b	NCPS2023/188	Soumya Subhra Baishnab	The meiobenthic community structure of Prydz Bay, Antarctica during austral summer: Unravelling through Biological Trait Analysis
P.B. 100	7b	NCPS2023/213	Jabir T	Diversity and distribution of diazotrophs in the Central Arctic Ocean
P.B. 101	7b	NCPS2023/259	Praveen Raj C	Environmental influence on the mesozooplankton community structure from Krossfjorden, Svalbard archipelago.
P.B. 102	7b	NCPS2023/265	Disha Sachan	Climatic and Anthropogenic Vulnerabilities for the Himalayan Ecosystem
P.B. 103	7b	NCPS2023/282	Shekar Babu Kumbha	Bioprospecting of Antarctic benthic fauna in search of bioactive Marine Natural Products (MNPs).
P.B. 104	7b	NCPS2023/354	Haritha Prasad	Mesozooplankton community structure in Kongsfjorden: Investigating the environmental influence and depth-wise variations
P.B. 105	7b	NCPS2023/394	Ahmed Shahir	Unravelling the state of the art of polar benthic research through computational research synthesis and weaving techniques.

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<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



## YPSM POSTER SESSIONS

Date: 17<sup>th</sup> May 2023 (Wednesday) Time: 11:30-13:00 and 14:00 - 15:30 Hrs

Venue: Auditorium Basement

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 106	7c	NCPS2023/118	Aritri Sanyal	Marine Siderophores: its ecological role and applications
P.B. 107	7c	NCPS2023/159	Rantim Bhattacharjee	Do Antarctic cryoconite hole bacterial communities respond to seasonal melting?
P.B. 108	7c	NCPS2023/249	Shahana Kabeer. S	Enzymatic mitigation of acrylamide in potato chips using L- asparaginase from Arctic actinomycetes
P.B. 110	7c	NCPS2023/274	Femi Anna Thomas	Uncovering the Genomic signatures of pollution in Arctic bacteria – A De-novo whole Genome-based approach
P.B. 111	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. 112	7c	NCPS2023/335	Athira Tv	Characterization of The Biosurfactant Producing Bacteria from Antarctic Sediment
P.B. 113	7c	NCPS2023/403	Anju Chalari	Manganese tolerant and Mn-oxidizing bacterial diversity in the western Svalbard fjords, Arctic
P.B. 114	7c	NCPS2023/419	Yuga Ghotge	Studies on pigmented bacteria from high Arctic region for bioprospecting potential
P.B. 115	7c	NCPS2023/455	Akhila A	Unravelling Anaerobic Bacterial Diversity in Arctic Svalbard Coastline Cruise
P.B. 116	7d	NCPS2023/31	Saritha V K	Perfluorooctanoic acid in the sediment matrices of Arctic fjords, Svalbard
P.B. 117	7d	NCPS2023/48	Priyanka Gaikwad	Mercury Contamination in the environmental matrices of Arctic
P.B. 119	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. 120	7d	NCPS2023/252	Siddhartha Sarkar	Spatial and diel variability of CH <sub>4</sub> , CO <sub>2</sub> , and N <sub>2</sub> O in the lakes of Schirmacher Oasis, East Antarctica



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Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 121	7d	NCPS2023/302	Akhil Prakash E	Antibiotic resistant Mechanisms in the Arctic and Antarctic regions- An In-Silico Study
P.B. 122	7d	NCPS2023/342	Princy M John	The Distribution of Organochlorine Pesticides And Emerging Contaminants From The Sediments of Kongsfjord, Svalbard
P.B. 123	7d	NCPS2023/379	Harshal L. Patil	Estimation of polar stratospheric clouds using MAX-DOAS

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. 124	8d	NCPS2023/268	Ranjita Behera	Exploring the Benefits of Skiing for Enhancing Human Safety and Rescue Operations in the Polar Region
P.B. 125	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 (Nil)

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