



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--|--|------------------------|--------|--|
| 1. Crustal Evolution And Reconstruction | | | | |
| 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 | Prof. K S Misra | Oral | Crustal Evolution: Insight from Recent Geophysical and Geological Investigations |
| NCPS2023/163 | Broadband Seismological Observatory Analysis of noise characteristics and crustal structure beneath the Larsemann Hills, Antarctica | Dr. Padma Rao B | Oral | Geochronology, Geochemistry and Petrology |
| NCPS2023/166 | A geophysically constrained crustal element map of East Antarctica between Enderby Land and Princess Elizabeth Land: Implications towards Proterozoic supercontinent amalgamations | Dr. Giri Yellalaheruvu | Oral | Crustal Evolution: Insight from Recent Geophysical and Geological Investigations |
| NCPS2023/238 | Solid Earth Interactions in Antarctica: Insights from Geophysical and Geodetic Measurements | Dr. Ravi Kumar Muppidi | Oral | Geodesy and geodynamics |
| NCPS2023/440 | Elucidating sub-ice geology of Princess Elizabeth Land-Amery Ice Shelf, East Antarctica by connecting geology and geophysics | Dr. Devsamridhi Arora | Oral | Crustal Evolution: Insight from Recent Geophysical and Geological Investigations |
| NCPS2023/450 | Metamorphic evolution of Easter Peninsula Gneiss, Larsemann Hills, East Antarctica: insights from phase equilibria modelling and monazite-zircon geochronology | Mr. Mohammad Sadiq | Oral | Geochronology, Geochemistry and Petrology |
| NCPS2023/454 | Geology of cDML through two orogenies-A review. | Dr. Sandip Kumar Roy | Oral | Geochronology, Geochemistry and Petrology |
| NCPS2023/140 | Petrogenetic evolution of the alkaline intrusions from Schirmacher Oasis, central Dronning Maud Land, East Antarctica. | Mr. Raghuram | Poster | Geochronology, Geochemistry and Petrology |
| NCPS2023/190 | Gravity Inversion with Seismic Constraints to map the crustal thickness beneath Antarctica | Mr. Arka Roy | Poster | Crustal Evolution: Insight from Recent Geophysical and Geological Investigations |
| NCPS2023/232 | Shear Zone related high grade metamorphism in the Schirmacher Oasis | Mr. Rosan Kumar Mallik | Poster | Crustal Evolution: Insight from Recent |



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|--|------------------------|--------|--|
| | and its implications on the East African Orogeny geodynamics-an overview | | | Geophysical and Geological Investigations |
| NCPS2023/267 | Meteorite found in Antarctica - Unlock the aqueous history of Mars. | Mr. Aditya Das | Poster | Geochronology, Geochemistry and Petrology |
| NCPS2023/437 | 3D lithospheric velocity structure of India, Himalaya and Tibet using Rayleigh wave dispersion data | Dr. Siddharth Dey | Poster | Crustal Evolution : Insights from recent Geophysical and Geological Investigations |
| NCPS2023/453 | Presence of complex metamorphic terrain in the interior of Princess Elizabeth Land: evidence from englacial moraines | Dr. Mayuri Pandey | Poster | Crustal Evolution: Insight from Recent Geophysical and Geological Investigations |
| NCPS2023/173 | Collisional setting signatures through Geochemical Characterization of offshore sediments from Prydz Bay, East Antarctica | Mr. Akash Kumar Pandey | Poster | Geochronology, Geochemistry and Petrology |
| NCPS2023/315 | Reworking of the Prydz Bay UHT granulites: a microstructural perspective | Mr. Sandro Chatterjee | Poster | Crustal Evolution: Insight from Recent Geophysical and Geological Investigations |
| NCPS2023/320 | 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 | Ms. Aishi Debnath | Poster | Crustal Evolution: Insight from Recent Geophysical and Geological Investigations |

2. Space Weather And Meteorology

| | | | | |
|-------------|---|----------------------|------|---------------------------------------|
| NCPS2023/3 | Investigation of dust aerosols over the Arctic in regional climate model | Dr. Rohit Srivastava | Oral | Weather and Climate |
| NCPS2023/27 | Characteristics of precipitation in Arctic-perspectives from Ny Alesund, Svalbard | Dr. Nuncio Murukesh | Oral | Weather and Climate |
| NCPS2023/91 | Influence of tides in driving the polar upper atmospheric winds | Dr. S Sridharan | Oral | Solar-terrestrial Interaction Studies |

Note: Please confirm your acceptance of participation using your NCPS log-in account (<http://ncps.ncpor.res.in/login.php>) as soon as possible, but no later than April 30th, 2023, or it will be considered declined. A formal acceptance email with all the conference details will be sent shortly.



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|---|---------------------------|--------|---------------------------------------|
| NCPS2023/235 | A new perspective on multi-platform observations of stratospheric intrusion into the troposphere over Bharati (69.41°S, 76.19°E) during ISEA-35 | Dr. Siddarth Shankar Das | Oral | Weather and Climate |
| NCPS2023/277 | Simulation and evaluation of short range prediction using Polar WRF model over Antarctica | Mr. Anikender Kumar | Oral | Weather and Climate |
| NCPS2023/278 | Response of low-latitude middle atmosphere to a major Antarctic sudden stratospheric warming | Dr. Amitava Guharay | Oral | Solar-terrestrial Interaction Studies |
| NCPS2023/357 | High and low latitudes coupling during the intense geomagnetic storms of solar cycle 25 | Dr. Rashmi Rawat | Oral | Solar-terrestrial Interaction Studies |
| NCPS2023/435 | Global lightning activity and its effects on surface electric field over Antarctica | Dr. Jeni Victor N | Oral | Weather and Climate |
| NCPS2023/460 | Decadal variability of aerosol properties over Ny-Ålesund: Results from Indian scientific expeditions to the Arctic | Dr. Mukunda M Gogoi | Oral | Weather and Climate |
| NCPS2023/44 | Spatial and Temporal Variation of Bipolar Air Ion Concentrations- dual station observation at Maitri and Bharati | Mr. Jeeva K | Poster | Solar-terrestrial Interaction Studies |
| NCPS2023/209 | Quiet time geomagnetic field variations at polar latitudes | Mr. Atul Kulkarni | Poster | Solar-terrestrial Interaction Studies |
| NCPS2023/241 | Comparison of bottomside ionospheric profile parameters (B0 and B1) extracted from FORMOSAT-7/COSMIC-2 GNSS Radio occultations with Digisondes and IRI-2016 model | Dr. Arun Kumar Singh | Poster | Solar-terrestrial Interaction Studies |
| NCPS2023/256 | Application of Machine Learning for the Understanding of High-Latitude Substorm Dynamics | Dr. Anand K. Singh | Poster | Solar-terrestrial Interaction Studies |
| NCPS2023/353 | Analysis of variations in Solar and Geomagnetic Parameters for Solar Cycle 24 using Statistical (ANOVA) method | Dr. Deepak Kumar Sondhiya | Poster | Solar-terrestrial Interaction Studies |
| NCPS2023/358 | Trends in Tropopause Folding Events Over Antarctica in the Recent Decade Using Movable Atmospheric Radar for Antarctica | Mr. Ajilesh P P | Poster | Weather and Climate |

Note: Please confirm your acceptance of participation using your NCPS log-in account (<http://ncps.ncpor.res.in/login.php>) as soon as possible, but no later than April 30th, 2023, or it will be considered declined. A formal acceptance email with all the conference details will be sent shortly.



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|--|-----------------------|--------|---------------------------------------|
| NCPS2023/380 | Seasonal and solar activity dependence of TEC over Bharati station | Prof. Gopi K Seemala | Poster | Solar-terrestrial Interaction Studies |
| NCPS2023/46 | Blizzard Phenomenon in Maitri: An Analysis of 32 Years of Katabatic Wind Pattern | Mr. Vivek Kumar | Poster | Weather and Climate |
| NCPS2023/80 | Low-latitude planetary wave dynamics during a rare 2019 Antarctic Sudden Stratospheric Warming | Mr. Gourav Mitra | Poster | Solar-terrestrial Interaction Studies |
| NCPS2023/111 | Role of Domain Size in Simulating Heavy Precipitation Events over Himalaya using WRF Modeling System | Mr. Peeyush Gupta | Poster | Weather and Climate |
| NCPS2023/112 | Observational evidence for the influence of stratospheric planetary wave and ozone variabilities on the middle atmospheric winds and tides over Antarctica | Ms. Reetambhara Dutta | Poster | Solar-terrestrial Interaction Studies |
| NCPS2023/157 | Variation of Aerosol Optical properties over the Hornsund, Svalbard Arctic | Mr. Ritesh Kumar | Poster | Weather and Climate |
| NCPS2023/158 | Investigation of Aerosol properties over Indian Antarctic research station Maitri | Mr. Sunil Kumar | Poster | Weather and Climate |
| NCPS2023/180 | Investigation of M-I coupling generated mid-latitude phenomena using ground-based OI 630.0 nm dayglow measurements | Mr. Kshitiz Upadhyay | Poster | Solar-terrestrial Interaction Studies |
| NCPS2023/195 | An extreme precipitation event over Dronning Maud Land, East Antarctica - A case study of an atmospheric river event using the Polar WRF Model | Mr. Sibin Simon | Poster | Weather and Climate |
| NCPS2023/458 | A study of upper ocean characteristics in response to the three intense re-curving tropical cyclones from the Arabian Sea using satellite and in-situ measurements | Dr. Adarsh Dube | Poster | Weather and Climate |

3. Southern Ocean

Note: Please confirm your acceptance of participation using your NCPS log-in account (<http://ncps.ncpor.res.in/login.php>) as soon as possible, but no later than April 30th, 2023, or it will be considered declined. A formal acceptance email with all the conference details will be sent shortly.



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|---|----------------------------|--------|-----------------------------|
| NCPS2023/67 | Short-term time-series observations of phytoplankton light-absorption and productivity in Prydz Bay, coastal Antarctica_x000D_x000D_ | Dr. Sarat Chandra Tripathy | Oral | Biogeochemical Processes |
| NCPS2023/141 | Barotropic Tides in MPAS-Ocean: Impact of Ice Shelf Cavities | Dr. Nairita Pal | Oral | Ocean Modelling |
| NCPS2023/168 | Interannual variability of bio-optical characteristics in the Indian sector of the Southern Ocean during austral summer | Dr. Sudarsana Rao Pandi | Oral | Biogeochemical Processes |
| NCPS2023/226 | Decadal changes in phytoplankton compositions in Southern Ocean and Global Ocean influenced by biogeochemical variables | Dr. Rajani Kanta Mishra | Oral | Biogeochemical Processes |
| NCPS2023/286 | Influence of Circumpolar Deep Water intrusion on the nutrient dynamics and biogeochemical processes at the Polar Front in the Indian sector of the Southern Ocean | Dr. Melena A. Soares | Oral | Biogeochemical Processes |
| NCPS2023/397 | Dimethyl sulfide (DMS) flux parametrization – Quantifying the differences | Dr. Shrivardhan Hulswar | Oral | Ocean-atmospheric Processes |
| NCPS2023/436 | Impact of ENSO, SAM and AMO over Extreme Wave Climate in Southern Ocean | Dr. Prashant Kumar | Oral | Ocean Modelling |
| NCPS2023/452 | Recent unusual warming events in the Prydz Bay, East Antarctica during austral summer | Dr. P. Sabu | Oral | Ocean-atmospheric Processes |
| NCPS2023/246 | Occurrence of Antarctic bottom water in the Southwest Indian ridge, the eastern side of the Melville fracture zone | Mr. Srinivas Rao Arvapalli | Poster | Ocean-atmospheric Processes |
| NCPS2023/289 | Biogeochemical cycling of cadmium in the Southern Ocean- A promising productivity tracer? | Dr. Ejin George | Poster | Biogeochemical Processes |
| NCPS2023/314 | Seasonal chlorophyll modulation in the Indian sector of the Southern Ocean: Bio-Argo measurements | Dr. Prince Prakash | Poster | Biogeochemical Processes |



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|---|------------------------|--------|-----------------------------|
| NCPS2023/89 | Decadal variability of phytoplanktonic productivity in the Indian Sector of the Southern Ocean during austral summer | Mr. Sunil Kumar Padhi | Poster | Biogeochemical Processes |
| NCPS2023/115 | Is Pristine Antarctica at Risk from Microplastics? | Dr. K.Gurumoorthi | Poster | Ocean-atmospheric Processes |
| NCPS2023/123 | 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 | Mr. Soumyadeep Dutta | Poster | Ocean Modelling |
| NCPS2023/171 | Ocean-Atmosphere CO ₂ Exchange in Southern Ocean During the Last Deglaciation | Mr. I V Satya Chanakya | Poster | Ocean-atmospheric Processes |
| NCPS2023/214 | Phytoplankton diversity in relation to biophysical processes in the Indian sector of Southern Ocean | Mr. Sreerag A | Poster | Biogeochemical Processes |
| NCPS2023/299 | Sea water Dimethyl sulfide (DMS) climatologies, and trends | Mr. Sankirna D. Joge | Poster | Biogeochemical Processes |
| NCPS2023/305 | Paleoceanographic study from Indian Sector of Southern Ocean based on fossil diatoms | Mr. Savio Miranda | Poster | Ocean-atmospheric Processes |
| NCPS2023/316 | Interaction of coastal and open ocean waters in the Prydz Bay region of the Indian Sector of the Southern Ocean | Ms. Aswathi Das M. T. | Poster | Ocean-atmospheric Processes |
| NCPS2023/328 | Biogeochemical cycling of Barium in the Indian Sector of Southern Ocean | Mr. Mohammad Nuruzzama | Poster | Biogeochemical Processes |
| NCPS2023/367 | 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 | Ms. Nirmala J | Poster | Ocean-atmospheric Processes |
| NCPS2023/382 | Reconstructing Southern Ocean Paleoclimates through analysis of <i>Fragilariaopsis Kerguelensis</i> and <i>Thalassiosira Lentiginosa</i> diatom size variations | Mr. Soumya Parab | Poster | Ocean-atmospheric Processes |

Note: Please confirm your acceptance of participation using your NCPS log-in account (<http://ncps.ncpor.res.in/login.php>) as soon as possible, but no later than April 30th, 2023, or it will be considered declined. A formal acceptance email with all the conference details will be sent shortly.



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|--|-------------------------------|--------|-----------------------------|
| NCPS2023/420 | Inferring paleoclimate from the Kerguelen region of Southern Ocean of past 35ky to 42ky_x000D_x000D_ | Mr. Sanket Parabgaonkar | Poster | Ocean-atmospheric Processes |
| NCPS2023/442 | Oxygen Isotopes in the Southern Ocean during 2017-18 Austral summer | Ms. Viola Rodrigues | Poster | Biogeochemical Processes |
| NCPS2023/445 | Physical and biogeochemical features in the Polar, Subantarctic, and Subtopical fronts of the Indian sector of the Southern Ocean: Insights from the 8th Indian Ocean expedition | Ms. Jessin Joy Alex | Poster | Ocean-atmospheric Processes |
| NCPS2023/446 | Observed short-term hydrographic and biogeochemical changes in the Subtropical and Polar Fronts during the austral summer of 2011 | Ms. Krishnaveni Krishnankutty | Poster | Biogeochemical Processes |

4. Climate Change And Variability

| | | | | |
|--------------|--|----------------------------|------|---|
| NCPS2023/40 | Is Amundsen-Bellinghausen Seas-Low affecting trace gas air-sea fluxes in_x000D_the Antarctic Ocean? | Dr. Vinu Valsala | Oral | Physical forcings, biogeochemical feedbacks and variability |
| NCPS2023/60 | Beryllium isotopic distribution in the Indian Ocean: Implications to spatial heterogeneity, sedimentation rates, depositional flux and production rate variation | Prof. Ravi Bhushan | Oral | Past climate variability and global linkages |
| NCPS2023/131 | Influence of Azores High on Indian summer monsoon in the current climate change regime | Dr. Dr. Ramesh Kumar Yadav | Oral | Climate change and impact in polar regions |
| NCPS2023/134 | Late Holocene environments in Subarctic Atlantic and Arctic Seas | Dr. Alexander Matul | Oral | Past climate variability and global linkages |
| NCPS2023/151 | Intensification of Arabian Sea Cyclone Genesis potential and its association with Arctic Warming | Dr. Vidya P.J | Oral | Climate change and impact in polar regions |
| NCPS2023/165 | Arctic-Indian Monsoon Teleconnections: Insights from a Multi-proxy Geochemical Record from Kongsfjorden | Dr. Vikash Kumar | Oral | Past climate variability and global linkages |

Note: Please confirm your acceptance of participation using your NCPS log-in account (<http://ncps.ncpor.res.in/login.php>) as soon as possible, but no later than April 30th, 2023, or it will be considered declined. A formal acceptance email with all the conference details will be sent shortly.



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|--|--------------------------------|--------|---|
| NCPS2023/201 | Secondary Organic Aerosol Formation over the Eastern Himalayas: Implications from Atmospheric Water-Soluble Low-Molecular-Weight Organic Compounds | Dr. Dhananjay Kumar | Oral | Climate change and impact in polar regions |
| NCPS2023/212 | Variations in the Agulhas Current during Quaternary: Planktic Foraminiferal Evidences from IODP-U1474A | Dr. Vikram Pratap Singh | Oral | Past climate variability and global linkages |
| NCPS2023/215 | Role of regional climate modes in Kongsfjorden over the last decade | Ms. Divya David T | Oral | Climate change and impact in polar regions |
| NCPS2023/245 | Recent ice sheet surface warming over Dronning Maud land, East Antarctica | Dr. Lalraj C M | Oral | Climate change and impact in polar regions |
| NCPS2023/329 | RESPONSE OF AN EAST ANTARCTIC LAKE TO THE GLACIAL-INTERGLACIAL VARIATIONS IN CLIMATE: PRELIMINARY RESULTS | Dr. Anish Kumar Warrier | Oral | Climate change and impact in polar regions |
| NCPS2023/336 | Evolution of Mochou Lake ecosystem in Larsemann Hills, East Antarctica over the last c.30,000 years | Dr. Mahesh Badnal | Oral | Climate change and impact in polar regions |
| NCPS2023/345 | â€œHotspotsâ€™ of summer melting over coastal Dronning Maud Land | Dr. Pranab Deb | Oral | Climate change and impact in polar regions |
| NCPS2023/399 | Biostratigraphic record of Late Quaternary glacial-interglacial events in Kongsfjordhallet, North West Svalbard, Arctic | Dr. Anupam Ghosh | Oral | Past climate variability and global linkages |
| NCPS2023/408 | Hydrological Response to Climate change in Third Pole: implications for water security of South Asia | Dr. Jayanarayanan Kuttippurath | Oral | Climate change and impact in polar regions |
| NCPS2023/443 | The Southern Indian Ocean calcifying nannoplankton in the changing climate | Dr. Rahul Mohan | Oral | Physical forcings, biogeochemical feedbacks and variability |
| NCPS2023/26 | Spatial distribution of modified Circumpolar Deep Water based on Instrumental Seal data in the Prydz Bay for Climate Change | Dr. Shailesh Pednekar | Poster | Climate change and impact in polar regions |



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|--|----------------------------------|--------|---|
| NCPS2023/85 | Atlantic water influence in Hornsund fjord, Svalbard | Dr. Vineet Jain | Poster | Climate change and impact in polar regions |
| NCPS2023/107 | Last Glacial to interglacial productivity pattern and dissolved iron utilization of the Prydz bay, Antarctica; Implications to meltwater plugs. | Dr. Sarathchandraprasad T | Poster | Past climate variability and global linkages |
| NCPS2023/138 | Deglaciation ensued throughout the last glacial maxima in Ny-Ålesund region of Svalbard, Arctic. | Mr. Abhishek Verma | Poster | Climate change and impact in polar regions |
| NCPS2023/161 | Environmental magnetism from lake sediment reveals late glacial “ Holocene paleoenvironmental conditions and ice sheet changes in the Larsemann Hills. | Dr. Cheryl A. Noronha-D Mello | Poster | Physical forcings, biogeochemical feedbacks and variability |
| NCPS2023/169 | Increase in tropospheric ozone in the Arctic as analysed using the ozonesonde and reanalysis data | Mr. Gopikrishnan G S | Poster | Climate change and impact in polar regions |
| NCPS2023/234 | Ozone trends in the Antarctic and Arctic stratosphere for the period 1985-2020: Assessment of ozone recovery | Ms. Anjali Sathyanath | Poster | Climate change and impact in polar regions |
| NCPS2023/266 | Implementation and evaluation of a high-resolution ecosystem model for the Kongsfjorden-Krossfjorden system | Dr. Teesha Mathew | Poster | Physical forcings, biogeochemical feedbacks and variability |
| NCPS2023/291 | Comparison of Ocean Surface Conditions in Kongsfjorden, Svalbard, during the Holocene Thermal Maximum and Contemporary Warming Periods | Mr. Harikrishnan Guruvayoorappan | Poster | Past climate variability and global linkages |
| NCPS2023/295 | Sources and formation processes of secondary organic aerosols in coastal Antarctic during summer | Dr. Suresh Kumar Reddy B | Poster | Climate change and impact in polar regions |
| NCPS2023/307 | Variations in the Southern Ocean carbonate production, preservation, and hydrography for the past 41, 500 years: Evidence from coccolith and CaCO ₃ records | Ms. Dr. Abhilash Nair | Poster | Physical forcings, biogeochemical feedbacks and variability |
| NCPS2023/309 | Coccolithophores calcification response to environmental changes and its implications on carbonate burial in the Southern Indian Ocean | Dr. Shramik | Poster | Climate change and impact in polar regions |



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|--|--------------------------|--------|---|
| NCPS2023/341 | Thirty-year Surface Climatology of Maitri, East Antarctic Station of India | Mr. Sunny Chug | Poster | Climate change and impact in polar regions |
| NCPS2023/360 | Paleoceanographic Changes in the Indian Sector of the Southern Ocean- Radiolarian Based Sub-Surface Temperature Reconstruction | Dr. Abhilash Nair | Poster | Past climate variability and global linkages |
| NCPS2023/371 | High-resolution record of Sea Surface Temperatures in the Indian sector of the Southern Ocean since ~26 kyr | Dr. Sunil Kumar Shukla | Poster | Past climate variability and global linkages |
| NCPS2023/383 | Competing effects of Atlantification and meltwater discharge on productivity and preservation of organic carbon off Kongsfjorden, Svalbard during the Holocene | Dr. Syed Mohammad Saalim | Poster | Past climate variability and global linkages |
| NCPS2023/388 | Ice-rafted debris variability from the western Indian sector of the Southern Ocean over the past 650 ka | Dr. Manoj M C | Poster | Past climate variability and global linkages |
| NCPS2023/393 | Mid-latitude westerlies matter for the Third pole | Dr. Om Kumar | Poster | Past climate variability and global linkages |
| NCPS2023/421 | Discernable role of dust in snowmelt over Himalayas, an anomaly from polar snowmelt | Prof. Chandan Sarangi | Poster | Physical forcings, biogeochemical feedbacks and variability |
| NCPS2023/465 | 'The organic scales of Haptophytes from the Southern Indian Ocean' An application study using FE-SEM technique | Ms. Sahina Gazi | Poster | Past climate variability and global linkages |
| NCPS2023/494 | Late Quaternary glacial advance and retreat in Larsemann Hills, East Antarctica: Application of OSL surface exposure dating technique | Mr. Sharat Dutta | Poster | Past climate variability and global linkages |
| NCPS2023/38 | Status of Glaciers in the Suru Basin and Chandra Basin in the Twenty-First Century using Non-Parametric Statistical Methods | Mr. Supratim Guha | Poster | Physical forcings, biogeochemical feedbacks and variability |
| NCPS2023/98 | Does the Clausius-Clapeyron scaling exist in Ny Ålesund, Svalbard? | Ms. Athulya R | Poster | Climate change and impact in polar regions |



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|---|------------------------------|--------|---|
| NCPS2023/136 | Biological Darkening of the Glacial Surface: A Study at Chhota Shigri Glacier in the Western Himalaya | Ms. Monica S Shamurailatpam | Poster | Physical forcings, biogeochemical feedbacks and variability |
| NCPS2023/137 | The dynamics of Indian Ocean Dipole - Antarctic teleconnection in CMIP6: characteristics and biases | Mr. Arnab Sen | Poster | Past climate variability and global linkages |
| NCPS2023/139 | Productivity and Denitrification during Mid-Pleistocene Transition: Implications to South Asian Monsoon variability | Dr. Dr. Shubham Tripathi | Poster | Physical forcings, biogeochemical feedbacks and variability |
| NCPS2023/146 | The Imprint of Southern Ocean Stratification on the Isotopic Composition of Antarctic Precipitation | Mr. Ajay | Poster | Past climate variability and global linkages |
| NCPS2023/221 | Palaeo-glaciation extents in the Trans-Himalayan region of Lahaul and Spiti, Himachal Pradesh, India. | Mr. Uday Sharma | Poster | Past climate variability and global linkages |
| NCPS2023/224 | Late Miocene to Holocene Paleoceanographic variability near the Subantarctic Front in Central South Pacific (Southern Ocean) and its impact on deep sea biota | Mr. Sunil K. Das | Poster | Past climate variability and global linkages |
| NCPS2023/228 | Sea ice influenced climate variability in coastal Antarctica | Mr. Rahul Dey | Poster | Past climate variability and global linkages |
| NCPS2023/257 | Response of East Antarctic temperature and sea ice variability over the Indian Ocean to climatic modes during the past two centuries | Mr. Tariq Ejaz | Poster | Climate change and impact in polar regions |
| NCPS2023/262 | Paleoclimatic study of lake L2 in Schirmacher Oasis: Magnetic Susceptibility as a proxy | Mr. Shardool Kokare | Poster | Past climate variability and global linkages |
| NCPS2023/279 | Energy Modelling and Cyclic variability in Sedimentation Pattern near the Chilean Margin during the middle to late Pleistocene (South East Pacific) | Mr. Suman Datta | Poster | Past climate variability and global linkages |
| NCPS2023/283 | Spatiotemporal Variability in Aerosol Distribution Over the Indian Sector Of Southern Ocean And Coastal Antarctica During The Austral Summer | Ms. Shaikh Atiba Anis Ahmead | Poster | Climate change and impact in polar regions |



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|--|--------------------------|--------|--|
| NCPS2023/323 | Anthropogenic trace element (Cu, Pb) records in a coastal East Antarctic ice core for the past 200 years | Ms. Gayathri E M | Poster | Past climate variability and global linkages |
| NCPS2023/330 | APPLICATION OF EUCLIDEAN DISTANCE IN IDENTIFYING A RELATIONSHIP BETWEEN CORONAL MASS EJECTION AND OUTGOING LONGWAVE RADIATION IN ANTARCTIC REGION | Mr. Adith V B | Poster | Climate change and impact in polar regions |
| NCPS2023/333 | HIGH-RESOLUTION RECORD OF PALEOENVIRONMENTAL VARIATIONS FROM AN EAST ANTARCTIC LAKE | Mr. Jojugeorge Sebastian | Poster | Past climate variability and global linkages |
| NCPS2023/384 | 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 | Mr. Masud Kawsar | Poster | Past climate variability and global linkages |
| NCPS2023/395 | Role of SST around Svalbard and its importance on precipitation at NyALesund | Mr. Rahul Dev | Poster | Climate change and impact in polar regions |
| NCPS2023/448 | Identification of elevated dust layers and their effect on snow over the Western Himalayas _x000D_ | Mr. Amit Singh Chandel | Poster | Climate change and impact in polar regions |
| NCPS2023/451 | Examining Climate change over Alaknanda sub-basin from 1981-2020 | Mr. Shivang Alok | Poster | Climate change and impact in polar regions |

5. Cryospheric Processes And Dynamics

| | | | | |
|--------------|--|-------------------------------|------|---|
| NCPS2023/4 | Deglaciation phases and generation of glacial deposits in Schirmacher Oasis, East Antarctica._x000D_ | Dr. Yogesh Ray | Oral | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/149 | Glacier's response to changing climate in Chandra basin, western Himalaya, during the last two decades | Dr. Parmanand Sharma | Oral | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/200 | Holocene recession of Teesta Khangtse glacier, North Sikkim | Mr. Prakash Kumar Shrivastava | Oral | Cryospheric Processes and Variability |

Note: Please confirm your acceptance of participation using your NCPS log-in account (<http://ncps.ncpor.res.in/login.php>) as soon as possible, but no later than April 30th, 2023, or it will be considered declined. A formal acceptance email with all the conference details will be sent shortly.



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|---|----------------------------|--------|---|
| NCPS2023/237 | Glacier mass-balance processes to river runoff | Dr. Argha | Oral | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/242 | Glaciological characteristics of the lake terminating Gepang Gath Glacier in the western Himalaya, India. | Dr. Bhanu Pratap | Oral | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/264 | Snowfall from Western Disturbances sustained the ‘Karakoram Anomaly’ | Prof. Pankaj Kumar | Oral | Cryospheric Processes and Variability |
| NCPS2023/296 | Source and recharge estimation in groundwater using stable isotopes in the Tawi Watershed, Lesser Himalayas, Jammu District. | Dr. Meenu Sharma | oral | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/425 | The dynamic East Antarctica Ice Sheet with special reference to cDML-A review. | Dr. Sandip Kumar Roy | Oral | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/55 | Monitoring of Glacial Lake Dynamics in East Antarctica using UAV-based multispectral data | Dr. Geetha Priya M | poster | Cryospheric Processes and Variability |
| NCPS2023/95 | Integrated Remote Sensing for Mapping the Seasonal, Annual and Long Term Accumulation and Depletion Patterns of Snow Cover and Their Bearing on Climate Variability in Parts of Gharhwal Himalaya | Dr. Anshuman Misra | Poster | Cryospheric Processes and Variability |
| NCPS2023/125 | Unravelling the Mysteries of Antarctic Albedo Changes in Response to ocean-atmospheric Factors | Ms. Aakriti Srivastava | Poster | Cryospheric Processes and Variability |
| NCPS2023/142 | Differential velocity of the Ice sheet in Larsemann Hills area, East Antarctica: Based on precise ground observations | Mr. Surendra Jat | Poster | Cryospheric Processes and Variability |
| NCPS2023/150 | Long term trend of Dakshin Gangotri glacier snout, Schirmacher Oasis, East Antarctica | Mr. Deepak Yuvraj Gajbhiye | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/155 | Object-Based Image Analysis for Discrimination of Glacier Surface and Non-Glacier Surface Classes: A Case Study of Chhota Shigri Glacier | Ms. Kavita V. Mitkari | Poster | Glacier dynamics, processes and glacio-hydrological responses |



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|---|----------------------------|--------|---|
| NCPS2023/191 | The pixel, the method, the map: Testing the reliability of facies mapping using very high-resolution satellite data | Mr. Sagar F. Wankhede | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/218 | How can we map blue ice in Antarctica using satellites? | Mr. Sagar F. Wankhede | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/231 | Influence of debris on mass balance, extent, velocity and surface morphology evolution at Companion Glacier, Central Himalaya | Dr. Purushottam Kumar Garg | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/343 | Application of Ground Penetrating Radar in Permafrost mapping "a case study from Tso-Kar lake basin, Ladakh Himalaya", India. | Dr. Ahsan Ul Haq | Poster | Cryospheric Processes and Variability |
| NCPS2023/361 | SCATSAT-1: Application in Snow-cover Monitoring using Super-Resolution Mapping | Dr. Vishakha Sood | Poster | Cryospheric Processes and Variability |
| NCPS2023/373 | Application and potential of AMS based Radiocarbon Dating from Aeolian and Lacustrine Deposits for Reconstructing Quaternary Glaciation in the Himalaya | Dr. Pawan Kumar | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/462 | Predictive Tool for Arctic Coastal Hydrodynamics and Sediment | Dr. Mohammad Saud Afzal | Poster | Cryospheric Processes and Variability |
| NCPS2023/8 | Biogeochemical contributions to supraglacial meltwater chemistry and discharge during summer in coastal Antarctica | Dr. Gautami Samui | Poster | Cryospheric Processes and Variability |
| NCPS2023/22 | Retreat of Lato group of the glaciers and GLOF hazard assessment of Lato lake in Ladakh region of north-western Himalaya, India. | Mr. Rayees Ahmed | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/43 | Acoustic emission analysis of an experimental avalanche slope in Great Himalaya_x000D_for snow slab fracture prediction. | Mr. Rahul Sheoran | Poster | Cryospheric Processes and Variability |
| NCPS2023/68 | Glacial Lake Outburst Threat Assessment Using AHP Multi-Criteria Decision-Making Techniques in the Sikkim Himalaya | Ms. Tanisha Ghosh | Poster | Glacier dynamics, processes and glacio-hydrological responses |



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|---|------------------------|--------|---|
| NCPS2023/106 | Semi-Distributed Conceptual Hydrological Modelling of Dunagiri Glacier Streamflow, Dhauliganga River Basin, Central Himalaya, India | Ms. Arushi Sharma | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/108 | Glacier Mass Balance Changes Over The Pir-Panjal Range (PPJR) and Great Himalayan Region (GHR) of North-Western Himalayas | Mr. Syed Towseef Ahmad | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/114 | Glaciological site survey to determine an optimal ice coring site in coastal Dronning Maud Land, Antarctica | Dr. Vikram Goel | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/121 | Evaluation of spatial distribution of glacier retreat and its controlling climatic parameters from 1971-2022 in Ravi basin, Western Himalaya | Ms. Payal Sharma | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/127 | An analysis of Sutri Dhaka glacier discharge in the western Himalaya | Dr. Sourav Laha | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/143 | Estimation of Glacier thickness and Volume in Kabul Basin, Afghanistan | Ms. Roja Asharaf | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/156 | GLOF DRR (Disaster Risk Reduction)-EWS design and Artificial Lake Lowering | Dr. Ashim Sattar | Poster | Cryospheric Processes and Variability |
| NCPS2023/185 | Monitoring Antarctic Ice Mass Balance with GRACE: Insights and Applications. | Mr. Uday Kumar | Poster | Cryospheric Processes and Variability |
| NCPS2023/197 | Optical properties and export of dissolved organic matter from Chandra basin glaciers in the western Himalayas | Ms. Kamini Meshram | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/202 | Estimating the accuracy of empirical volume estimation models of Glacial Lakes using ICESat/ICESat-2 and multispectral imagery in the Himalayas | Mr. Ravindra Kumar | Poster | Cryospheric Processes and Variability |
| NCPS2023/203 | Feasibility of using Sentinel-1 data for resolving seasonal ice velocity of x000D_glaciers in High Mountain Asia | Mr. Vijaya Kumar Thota | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/207 | Features of the Western Disturbances impacting Karakoram Anomaly | Mr. Aaquib Javed | Poster | Cryospheric Processes and Variability |

Note: Please confirm your acceptance of participation using your NCPS log-in account (<http://ncps.ncpor.res.in/login.php>) as soon as possible, but no later than April 30th, 2023, or it will be considered declined. A formal acceptance email with all the conference details will be sent shortly.



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|--|-----------------------|--------|---|
| NCPS2023/211 | Himalayan Glaciers are losing mass at a higher rate than previous estimates: A case study in the Baspa river basin_x000D_ | Ms. Arya A R | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/225 | Ab initio analysis of the Reduction in Snow Cover due to Black Carbon by Cellular Automata | Mr. Subhranil Mustafi | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/236 | Englacial stratigraphy at Dome A, Antarctica derived using airborne radar-sounding surveys: A COLDEX perspective_x000D_ | Ms. Shivangini Singh | Poster | Cryospheric Processes and Variability |
| NCPS2023/261 | Distributed glacier ice thickness and volume estimation for Baspa Basin, Western Himalaya | Dr. Atar Singh | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/273 | Hybrid polarimetry-based approach for Snow Wetness Estimation using SAR datasets | Mr. Shubham Awasthi | Poster | Cryospheric Processes and Variability |
| NCPS2023/276 | Distributed surface energy and mass balance modeling of Chandra Basin glaciers in the semi-arid zone of Western Himalaya | Mr. Sunil N. Oulkar | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/300 | Mapping and Measurement of Glacier Dynamics in Suru Basin | Mr. Umar Faruque | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/301 | Halogen chemistry over the Indian Antarctic station Bharati | Ms. Shruti Wagh | Poster | Cryospheric Processes and Variability |
| NCPS2023/303 | Temporal Analysis of Glacier Mass Balance of Gori Ganga Basin using IAAR Method | Mr. Durgesh Dwivedi | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/311 | Snow Cover Characterization Using Multi Temporal Sentinel-1 SAR Datasets in the Beas Basin of North-Western Himalayan Region | Mr. Mayank Upadhyay | Poster | Cryospheric Processes and Variability |
| NCPS2023/312 | Glacial Lake dynamics and its response to climate variability in Eastern Himalaya (1990-2019) | Mr. Tapas Kumar Nahak | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/318 | Role of UAV-Remote Sensing for Glacial Health Monitoring in Western Himalayas | Mr. Sayantan Mandal | Poster | Cryospheric Processes and Variability |

Note: Please confirm your acceptance of participation using your NCPS log-in account (<http://ncps.ncpor.res.in/login.php>) as soon as possible, but no later than April 30th, 2023, or it will be considered declined. A formal acceptance email with all the conference details will be sent shortly.



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|---|-------------------------|--------|---|
| NCPS2023/322 | Estimation of Surface Elevation Changes over Thwaites and Pine Island Glaciers, West Antarctica using SARAL/AltiKa | Ms. Priyanka Patel | Poster | Cryospheric Processes and Variability |
| NCPS2023/332 | Assessment of glacial lakes prone to glacial lake outburst flood using multi-criteria decision analysis (MCDA) in Changme Khangpu basin, Sikkim Himalaya, India | Mr. Rajeev Rajak | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/337 | Estimation of Accumulation Area Ratio of Mulkila glacier, Bhaga basin using ELA and pixel based approaches | Mr. Deva Jefflin A R | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/346 | Remote Sensing-Based Investigation of Ice Flow Dynamics over Amery and Brunt Ice Shelves using MODIS Data, Antarctica. | Mr. Das Jay Sapan | Poster | Cryospheric Processes and Variability |
| NCPS2023/349 | Application of Machine Learning Techniques combined with the Stumpf model for bathymetry extraction and GLOF modelling at Drang Drung Glacial Lake, Ladakh, India | Mr. Joshal Kumar Bansal | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/369 | Mass balance sensitivities of the Gangotri glacier, central Himalaya | Ms. Bisma Yousuf | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/390 | Remote sensing-based assessment of surge of Batura Glacier, Karakoram between 2013 and 2021 | Ms. Heena Naz | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/391 | Dynamics of Zanskar group of glaciers using surface ice velocity, debris and land surface temperature. | Ms. Nufaisa Farooq | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/396 | Preliminary mapping of Rock glacier in Chandra Basin, Western Himalaya, India, using High-Resolution Google Earth Imagery and Sentinel Data | Mr. Robi Routh | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/398 | Impact of rainfall on enhanced melting and solute export in the glacierized basin, Central Himalaya, India | Ms. Nita Roy | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/402 | Study Land surface and Sea Surface Temperature Dynamics in Amundsen Bay Area, Antarctica for the year 2017 - 2018 | Mr. Vivek Kumar | Poster | Glacier dynamics, processes and glacio-hydrological responses |

Note: Please confirm your acceptance of participation using your NCPS log-in account (<http://ncps.ncpor.res.in/login.php>) as soon as possible, but no later than April 30th, 2023, or it will be considered declined. A formal acceptance email with all the conference details will be sent shortly.



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|--|------------------------|--------|---|
| NCPS2023/404 | Quantification of Glacier Ice Thickness and Volume in the Zanskar Basin of Western Himalaya via Modelling Techniques | Mr. Varun Khajuria | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/409 | A Decadal Analysis of Snow and Glacier Melt Runoff over Parbati Sub-Basin Using Temperature Degree-Day Approach | Mr. Tarang Patadiya | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/414 | First Comprehensive rock glacier inventory for Western Himalaya- An initiative for the permafrost research | Mr. Imtiyaz Ahmad Bhat | Poster | Glacier dynamics, processes and glacio-hydrological responses |
| NCPS2023/415 | Development and evolution of surface melt features over Dalk glacier near Bharti station, Antarctica during period 2019-2023 | Ms. Pooja Mishra | Poster | Cryospheric Processes and Variability |
| NCPS2023/416 | _x000D_ Concentration and Isotope Ratio of Lead in coastal Antarctic ice: Tracing Sources and Transport Pathways_x000D_ | Mr. Shivam Sundram | Poster | Cryospheric Processes and Variability |
| NCPS2023/418 | Role of lithology on supraglacial debris distribution and energy exchange processes over the glaciated terrain of Western Himalaya | Mr. Madhukar Srigyan | Poster | Cryospheric Processes and Variability |

6. Sea Ice Variability and Modelling

| | | | | |
|--------------|--|-----------------------|------|---|
| NCPS2023/42 | Record low sea ice cover around Antarctica in two contrasting seasons of ice melt and growth | Dr. C C Bajish | Oral | Sea ice variability and dynamics through time and space |
| NCPS2023/117 | Role of oceanic processes on recent decadal changes of sea surface_x000D_ temperature and ice concentration in the Antarctic Ocean | Dr. Arnab Mukherjee | Oral | Sea-ice modelling and observations |
| NCPS2023/164 | An observational study connecting Antarctic Sea ice, Pacific SST and the Indian summer monsoon in the recent decades | Dr. Amita Prabhu | Oral | Sea ice variability and dynamics through time and space |
| NCPS2023/216 | Ocean-atmosphere feedback in the Barents-Kara Sea driven by sea ice | Mr. Sourav Chatterjee | Oral | Sea ice variability and dynamics through time and space |



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|--|--------------------------------------|--------|---|
| NCPS2023/351 | PRydz bay Air-Ice-Sea Exchange (PRAISE) observatory: a sea-ice station to monitor climatic relevant processes related to sea-ice in the Eastern Antarctica | Dr. Jenson V George | Oral | Sea-ice modelling and observations |
| NCPS2023/210 | Open ocean polynyas in the Weddell Sea, Southern Ocean | Dr. Babula Jena | Poster | Sea ice variability and dynamics through time and space |
| NCPS2023/377 | Exploring the halocline and sea-ice variability over the Arctic Ocean using CMIP6 simulations | Mr. Suraj Ravindran | Poster | Sea ice variability and dynamics through time and space |
| NCPS2023/413 | Sea ice characterisation using multi polarisation RISAT-1A SAR data | Mr. Ghetiya Satyeshkumar Girdharbhai | Poster | Sea ice variability and dynamics through time and space |
| NCPS2023/482 | Analyzing Sea Ice Variability and Dynamics in the Weddell Sea of Antarctica: A Comprehensive Study | Mr. Ramakant Prasad | Poster | Sea ice variability and dynamics through time and space |
| NCPS2023/90 | Barotropic and baroclinic tides on the shelf off Svalbard and their role in shelf-fjord exchange | Mr. Ahammed Shereef Ms | Poster | Sea ice variability and dynamics through time and space |
| NCPS2023/244 | Investigating the Role of Atmospheric Forcing on the Unprecedented Decline of Antarctic Sea Ice in February 2022 | Ms. Juhi Yadav | Poster | Sea ice variability and dynamics through time and space |
| NCPS2023/254 | Forecasting and Analysis of Seasonal Arctic sea ice variability using ML/DL Techniques | Mr. Mayank Pandey | Poster | Sea-ice modelling and observations |
| NCPS2023/280 | Spatiotemporal Evolution of Sea Ice and Its Teleconnections with _x000D_ Large-Scale Climate Indices over Antarctica_x000D_ | Ms. Swathi M | Poster | Sea ice variability and dynamics through time and space |
| NCPS2023/325 | Thermodynamic evolution of sea ice near Indian Antarctic research station Bharati | Mr. Ajay B | Poster | Sea ice variability and dynamics through time and space |
| NCPS2023/217 | Recent changes in Antarctic sea ice cover modulated by ocean-atmospheric warming | Ms. Kshitija Suryawanshi | Poster | Sea ice variability and dynamics through time and space |
| NCPS2023/447 | Impact of Atmospheric Heat Flux and Ocean Vertical Processes on the Interannual Variability of Sea Ice and Sea | Mr. Ananthu Pradeep | Poster | Sea-ice modelling and observations |

Note: Please confirm your acceptance of participation using your NCPS log-in account (<http://ncps.ncpor.res.in/login.php>) as soon as possible, but no later than April 30th, 2023, or it will be considered declined. A formal acceptance email with all the conference details will be sent shortly.

**National Conference on Polar Sciences (NCPS-2023)**
May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|----------|---|-------------------|------|---------|
| | Surface Temperature in the Antarctic Ocean. | | | |

7. Environment And Ecology

| | | | | |
|--------------|---|------------------------------|------|---|
| NCPS2023/6 | Dynamic bathymetry of proglacial lake associated with Drang Drung Glacier, Zanskar Himalaya | Dr. Irfan Rashid | Oral | Environmental Monitoring and Assessment |
| NCPS2023/66 | Effect of Extreme Environment and Isolation on Subjective Time Estimation in Antarctica During Summer: A Cross Sectional Investigation | Prof. Azizuddin Khan | Oral | Planktons: climatological and ecological perspectives |
| NCPS2023/172 | The single-cell metagenomic approach reveals biotic interactions of Antarctic <i>N. pachyderma</i> with the ambient pelagic eukaryotic community. | Dr. Tushar Kaushik | Oral | Planktons: climatological and ecological perspectives |
| NCPS2023/175 | Transport and local sources of atmospheric non-methane hydrocarbons in the sub-Himalayan region of India during winter | Prof. L. K. Sahu | Oral | Environmental Monitoring and Assessment |
| NCPS2023/182 | Does suspended sediment affect the phytoplankton community composition and diversity in the Arctic fjord: A comparative study during summer | Dr. Jane T Bhaskar | Oral | Environmental Monitoring and Assessment |
| NCPS2023/192 | Status of blue carbon, and its link with environmental settings in Prydz Bay, east coastal Antarctica. | Dr. Ravidas Krishna Naik | Oral | Planktons: climatological and ecological perspectives |
| NCPS2023/204 | Nitrogen transformation potential of Himalayan soils at different temperature and elevation conditions | Dr. Sanjeev Kumar | Oral | Environmental Monitoring and Assessment |
| NCPS2023/208 | Microbiomes of Arctic glacier foreland ecosystems and their metabolic potentials | Dr. Siddarthan Venkatachalam | Oral | Microbial diversity: their role in the environment and industry |
| NCPS2023/250 | Exploration of Extremophilic Microorganisms from the Indian Region of the Southern Ocean for the Biodegradation of Anionic Surfactants | Prof. Tanu Jindal | Oral | Microbial diversity: their role in the environment and industry |



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|--|-------------------------|------|---|
| NCPS2023/258 | Hydrodynamics and vertical distribution of zooplankton community structure in coastal Antarctica during the austral summer | Dr. V. Venkataramana | Oral | Diversity and Ecology of Flora and Fauna |
| NCPS2023/288 | Dynamics of particle-attached and free-living microbial communities: studies from a high Arctic fjord | Dr. Anand Jain | Oral | Microbial diversity: their role in the environment and industry |
| NCPS2023/294 | Vertical segregation and phylogenetic characterization of archaea and archaeal ammonia monooxygenase gene in the water column of the western Arctic Ocean | Dr. P V Vipindas | Oral | Microbial diversity: their role in the environment and industry |
| NCPS2023/339 | MICROPLASTICS AS TRACE METAL SCAVENGERS IN THE _x000D_ SOUTHERN OCEAN SEDIMENTS_x000D_ | Dr. Dr Anu Gopinath | Oral | Environmental Monitoring and Assessment |
| NCPS2023/368 | Conservation planning for seabirds in Antarctica | Dr. Anant Pande | Oral | Diversity and Ecology of Flora and Fauna |
| 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 | Dr. Punarbasu Chaudhuri | Oral | Environmental Monitoring and Assessment |
| NCPS2023/381 | Cyanobacteria and microalgae in terrestrial habitats of Larsemann Hills, Antarctica with special reference to new taxa | Dr. Sukumar Bhakta | Oral | Diversity and Ecology of Flora and Fauna |
| NCPS2023/385 | THE POLAR DERIVED ACTINOMYCETES: THE WAY FORWARD | Dr. Dr Sivakumar Kannan | Oral | Diversity and Ecology of Flora and Fauna |
| NCPS2023/386 | The blue carbon potential of meiobenthic nematodes in the Prydz Bay, Antarctica- A pilot study | Prof. Sumit Mandal | Oral | Diversity and Ecology of Flora and Fauna |
| NCPS2023/407 | Presence of Microplastics in Antarctica and Its Surrounding Environment | Dr. Laxmi Kant Bhardwaj | Oral | Environmental Monitoring and Assessment |



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|---|---------------------------|--------|---|
| NCPS2023/444 | An hour-long passive environmental observation of bearded seal _x000D_ (<i>Erignathus barbatus</i>) at Nansen Basin, Arctic | Dr. R Kannan | Oral | Diversity and Ecology of Flora and Fauna |
| NCPS2023/11 | Long-term variations in trace pollutants over the western Himalayan Region | Dr. Abhishek Saxena | Poster | Environmental Monitoring and Assessment |
| NCPS2023/135 | Spatial variability of selected water quality parameters of the lacustrine system in Schirmacher Hills, East Antarctica | Dr. Binish M B | Poster | Environmental Monitoring and Assessment |
| NCPS2023/167 | Bioavailability of metals in modern fjord sediments, west Spitsbergen, and their influence on benthic foraminifera | Dr. Shabnam Choudhary | Poster | Environmental Monitoring and Assessment |
| NCPS2023/187 | Analysing the rapid vegetation line shift in response to glacial dynamics and climate variability in the Himalayas | Dr. Debmita Bandyopadhyay | Poster | Environmental Monitoring and Assessment |
| NCPS2023/270 | Biochemical Composition of Particulate Organic Matter in Kongsfjorden, an Arctic fjord | Ms. Archana Singh | Poster | Environmental Monitoring and Assessment |
| NCPS2023/313 | Dioxins & Furans, Dioxin-like and Nondioxin-like PCBs in the sediments of High Arctic Fjords | Dr. Kannan V M | Poster | Environmental Monitoring and Assessment |
| NCPS2023/327 | AVP use in low temperature sea conditions and challenges involved | Mr. Anand Lokapure | Poster | Environmental Monitoring and Assessment |
| NCPS2023/340 | Actinobacterial diversity in the Indian sector of Southern Ocean | Dr. Manigundan Kaari | Poster | Microbial diversity: their role in the environment and industry |
| NCPS2023/31 | Perfluorooctanoic acid in the sediment matrices of Arctic fjords, Svalbard | Ms. Saritha V K | Poster | Environmental Monitoring and Assessment |
| NCPS2023/39 | A brief study on monitoring and recording of the habitat quality and fishery of Mahseer fishes in Himalayan and western Ghats rivers. | Mr. Sreebin.P | Poster | Diversity and Ecology of Flora and Fauna |
| NCPS2023/48 | Mercury Contamination in the environmental matrices of Arctic | Ms. Priyanka Gaikwad | Poster | Environmental Monitoring and Assessment |

Note: Please confirm your acceptance of participation using your NCPS log-in account (<http://ncps.ncpor.res.in/login.php>) as soon as possible, but no later than April 30th, 2023, or it will be considered declined. A formal acceptance email with all the conference details will be sent shortly.



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|---|----------------------------|--------|---|
| NCPS2023/76 | "Climate change and Arctic ecosystems: impacts on biodiversity". | Mr. Santoshkumar Potadar | Poster | Diversity and Ecology of Flora and Fauna |
| NCPS2023/118 | Do Antarctic cryoconite hole bacterial communities respond to seasonal melting? | Ms. Aritri Sanyal | Poster | Microbial diversity: their role in the environment and industry |
| NCPS2023/159 | Marine Siderophores: its ecological role and applications | Mr. Rantim Bhattacharjee | Poster | Microbial diversity: their role in the environment and industry |
| NCPS2023/184 | Unveiling the structural and functional diversity of marine macrobenthic community from Prydz Bay, East Antarctica | Ms. Snigdha Bhaumik | Poster | Diversity and Ecology of Flora and Fauna |
| NCPS2023/188 | The meiobenthic community structure of Prydz Bay, Antarctica during austral summer: Unraveling through Biological Trait Analysis | Mr. Soumya Subhra Baishnab | Poster | Diversity and Ecology of Flora and Fauna |
| NCPS2023/213 | Diversity and distribution of diazotrophs in the Central Arctic Ocean | Dr. Jabir T | Poster | Diversity and Ecology of Flora and Fauna |
| NCPS2023/248 | Does the diversity of residential bacterial community changes with oceanic regimes? A review of studies from Antarctica to Indian shoreline | Dr. Alok Kumar Sinha | Poster | Environmental Monitoring and Assessment |
| NCPS2023/249 | Enzymatic mitigation of acrylamide in potato chips using L- asparaginase from Arctic actinomycetes | Ms. Shahana Kabeer. S | Poster | Microbial diversity: their role in the environment and industry |
| NCPS2023/251 | Variability of phytoplankton community structure during the melting phase of the land-fast ice in Prydz Bay, East Antarctica | Ms. Pratiksha D. Deshmukh | Poster | Planktons: climatological and ecological perspectives |
| NCPS2023/252 | Spatial and diel variability of CH4, CO2, and N2O in the lakes of Schirmacher Oasis, East Antarctica | Mr. Siddhartha Sarkar | Poster | Environmental Monitoring and Assessment |
| NCPS2023/259 | Environmental influence on the mesozooplankton community structure from Krossfjorden, Svalbard archipelago. | Mr. Praveen Raj C | Poster | Diversity and Ecology of Flora and Fauna |
| NCPS2023/265 | Climatic and Anthropogenic Vulnerabilities for the Himalayan Ecosystem | Ms. Disha Sachan | Poster | Diversity and Ecology of Flora and Fauna |

23

OSC Oral

OSC Poster

YPSM

Note: Please confirm your acceptance of participation using your NCPS log-in account (<http://ncps.ncpor.res.in/login.php>) as soon as possible, but no later than April 30th, 2023, or it will be considered declined. A formal acceptance email with all the conference details will be sent shortly.



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|---|------------------------|--------|---|
| NCPS2023/274 | Uncovering the Genomic signatures of pollution in Arctic bacteria – A De-novo whole Genome-based approach | Ms. Femi Anna Thomas | Poster | Microbial diversity: their role in the environment and industry |
| NCPS2023/282 | Bioprospecting of Antarctic benthic fauna in search of bioactive Marine Natural Products (MNPs). | Mr. Shekar Babu Kumbha | Poster | Diversity and Ecology of Flora and Fauna |
| NCPS2023/302 | Antibiotic resistant Mechanisms in the Arctic and Antarctic regions- An In-Silico Study | Mr. Akhil Prakash E | Poster | Environmental Monitoring and Assessment |
| NCPS2023/304 | Unsheathing the biosynthetic gene clusters of Metagenome Assembled genomes (MAGs) resolved from a complex sediment metagenome of Kongsfjorden Arctic. | Mr. Solly Solomon | Poster | Microbial diversity: their role in the environment and industry |
| NCPS2023/335 | CHARACTERIZATION OF THE BIOSURFACTANT PRODUCING BACTERIA FROM ANTARCTIC SEDIMENT | Ms. Athira Tv | Poster | Microbial diversity: their role in the environment and industry |
| NCPS2023/342 | THE DISTRIBUTION OF ORGANOCHLORINE PESTICIDES AND EMERGING CONTAMINANTS FROM THE SEDIMENTS OF KONGSFJORD, SVALBARD | Ms. Princy M John | Poster | Environmental Monitoring and Assessment |
| NCPS2023/354 | Mesozooplankton community structure in Kongsfjorden: Investigating the environmental influence and depth-wise variations | Ms. Haritha Prasad | Poster | Diversity and Ecology of Flora and Fauna |
| NCPS2023/379 | Estimation of polar stratospheric clouds using MAX-DOAS | Mr. Harshal L. Patil | Poster | Environmental Monitoring and Assessment |
| NCPS2023/394 | Unravelling the state of the art of polar benthic research through computational research synthesis and weaving techniques. | Mr. Ahmed Shahir | Poster | Diversity and Ecology of Flora and Fauna |
| NCPS2023/403 | Manganese tolerant and Mn-oxidizing bacterial diversity in the western Svalbard fjords, Arctic | Ms. Anju Chalari | Poster | Microbial diversity: their role in the environment and industry |

Note: Please confirm your acceptance of participation using your NCPS log-in account (<http://ncps.ncpor.res.in/login.php>) as soon as possible, but no later than April 30th, 2023, or it will be considered declined. A formal acceptance email with all the conference details will be sent shortly.



National Conference on Polar Sciences (NCPS-2023)

May 16-19, 2023

| Reg. No. | Abstract Title | Presenting Author | Mode | Session |
|--------------|--|-------------------|--------|---|
| NCPS2023/419 | Studies on pigmented bacteria from high Arctic region for bioprospecting potential | Ms. Yuga Ghotge | Poster | Microbial diversity: their role in the environment and industry |
| NCPS2023/455 | Unravelling Anaerobic Bacterial Diversity in Arctic Svalbard Coastline Cruise | Ms. Akhila A | Poster | Microbial diversity: their role in the environment and industry |

8. Polar Operations

| | | | | |
|--------------|--|-----------------------|--------|---|
| NCPS2023/122 | Enhancing Public Outreach Initiatives: A Multi-Lingual Approach for Increased Effectiveness | Dr. Swati Nagar | Oral | Education and outreach |
| NCPS2023/287 | Performance monitoring of Wastewater system at Bharati Research Base, East Antarctica | Mr. Rahul Kumar | Oral | Cold climate engineering: buildings, mechanical systems, alternate energy systems |
| NCPS2023/292 | Science Photography and Filmmaking an Effective tool for Polar Science Communication and Education | Mr. Rakesh Rao | Oral | Education and outreach |
| 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 | Mr. Ariz Ahmad | Oral | Cold climate engineering: buildings, mechanical systems, alternate energy systems |
| NCPS2023/199 | Earth Observation and Remote Sensing for Identifying Suitable Sites to establish a Research Base in Antarctica | Dr. Sagar F. Wankhede | Poster | Cold climate engineering: buildings, mechanical systems, alternate energy systems |
| NCPS2023/78 | Indian Polar Research Network: A Multidisciplinary Network of Early Career Polar Researchers in India | Ms. Priyanka Vadrevu | Poster | Education and outreach |
| NCPS2023/268 | Exploring the Benefits of Skiing for Enhancing Human Safety and Rescue Operations in the Polar Region | Ms. Ms Ranjita Behera | Poster | Safety: human safety, equipment, clothing, operating procedures and search & rescue |