

Pre-Conference Circular

## SCAR Open Science Conference 2022

Antarctica in a Changing World



**SCAR Business Meetings:** 27-29 July 2022 (online)

**SCAR Open Science Conference:** 1-10 August 2022 (online)

**SCAR Delegates Meeting:** 5-7 September 2022  
(in-person with limited online facilitation of reporting)



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Azadi Ka  
Amrit Mahotsav

## Antarctica in a Changing World

The National Centre for Polar and Ocean Research (NCPOR), an autonomous organization under the Ministry of Earth Sciences (MoES), Government of India, takes pride and pleasure in hosting the SCAR Meetings of 2022. The SCAR Business Meetings will precede the Open Science Conference and meet online from 27-29 July 2022. The SCAR Delegates will meet from 5-7 September 2022 and the Meeting is tentatively scheduled to be in-person in India (with limited online facilitation of reporting). Further details about the SCAR Business and Delegates Meetings will be provided later.

The theme of the SCAR Open Science Conference, "Antarctica in a Changing World," reflects not only the significance of ongoing changes in Antarctica and their impact on the Earth System, but also symbolizes the interconnections of global earth system processes. The 2022 version of the biennial science conference provides a platform for the Antarctic science community to share the latest outcomes of Antarctic research and foster new paradigms of collaborative research as our planet witnesses accelerating climate change that is often first expressed in the cryosphere, especially in Antarctica and the Southern Ocean.

The SCAR Open Science Conference of 2022 will feature a comprehensive schedule of meetings, symposia, virtual side events and social activities, daily plenary lectures and poster sessions in an innovative online format (for details see Page 2). All of the events will be designed to facilitate interactions and collaboration among researchers in different time zones across the globe.

An International Scientific Organising Committee has been assembled to develop a high-quality science program that emphasizes inter- and cross-disciplinary topics of high relevance to the most pressing societal issues and policy-makers. The delivery of the science program includes a variety of activities and events, such as a YouTube channel, chat rooms and repeat viewing options, intended to be interactive and encourage broad participation by a global audience.

### Exhibition

Sponsors and exhibitors may be able to participate in a variety of showcase opportunities at the SCAR Open Science Conference 2022 Online. Please contact the SCAR 2022 Project Management Team for any enquiries about exhibition and sponsorship opportunities via email at [scar2022@ncpor.res.in](mailto:scar2022@ncpor.res.in)

For more information or to find out how you can get involved, please contact the SCAR Project Management Team at [scar2022@ncpor.res.in](mailto:scar2022@ncpor.res.in) or keep and eye on our website for updates: [www.scar2022.org](http://www.scar2022.org)

### Important Dates for the SCAR Open Science Conference 2022

|                               |                            |
|-------------------------------|----------------------------|
| 1 <sup>st</sup> February 2022 | Abstract submission opens  |
| 1 <sup>st</sup> June 2022     | Abstract submission closes |
| 2 <sup>nd</sup> June 2022     | Registration opens         |





The Open Science Conference, established 20 years ago, has in many ways become the premier activity of SCAR that supports its mission to promote and facilitate international Antarctic and Southern Ocean science. These biennial meetings have become fertile ground for the exchange of the latest and highest profile Antarctic research outcomes and a place where future collaborations are born. The structure and format for the conference has evolved over the years to enhance attendees' experiences and optimize impact. Recent global events have required innovation and a re-thinking of the delivery and format for the Conference as most of the world's meeting places went online. At the same time, SCAR has committed to ensuring that its activities are conducted in a manner that minimizes its carbon footprint by example as a lead scientific advisor on global climate change. To this end this year's conference will once again be online.

The summaries below provide an overview of the framework for the 2022 Conference.



## SCAR Open Science Conference 2022

Antarctica in a Changing World

### Plenary "Marquee" Lectures\*

- The Weyprecht Lecture – in honor of Karl Weyprecht one of the organizers of the first International Polar Year
- The David Walton Antarctic Science Lecture – sponsored by the Journal *Antarctic Science* honoring its long-time editor Prof DWH Walton
- SCAR Medal Awardees – honorees for Excellence in Antarctic Research, International Coordination, and Education and Communication

\*No conflicting events will be scheduled to allow all to attend.

### Mini-Symposia and Panel Discussion\*\*

- Highlights of SCAR's Scientific Research Programmes
- Teleconnections between the Poles and the Tropics
- Cryospheric change in the Antarctic and Arctic
- Antarctic science and political priorities: trends, challenges, and opportunities

\*\*Dedicated, interactive and interdisciplinary events to highlight the timeliest and cutting edge topics.

### Parallel Sessions\*\*\*

Sessions may include oral and/or poster presentations depending on abstract submissions.

#### Physical Sciences

**14** proposed sessions on aerosols and clouds, global linkages, astronomy and geospace, ice sheet modeling, past climates and sea ice, drivers of sea ice variability, atmospheric processes and meteorology, radio science, remote sensing, ocean circulation, and tropospheric chemistry.

#### Life Sciences

**18** proposed sessions on aeromicrobiology, biological dispersal, seabird ecology, organic pollutants, diversity and community composition, remote sensing, genomics and biodiversity, Southern Ocean management, oceanic microbial diversity, marine mammal populations, environmental protection, physiology and adaptations to climate change, sea ice and the biosphere, contaminant impacts and remediation, sub-Antarctic islands, marine benthic ecosystems, and current challenges in Antarctic medicine.

#### Geosciences

**11** proposed sessions on supercontinent cycles, deformation, geophysical techniques, marine sediment records, ice-sheet solid earth interactions, past ice sheets and oceans, permafrost, geothermal measurements, studies of continental margins, and surficial processes and landforms.

#### Humanities and Social Sciences

**8** proposed sessions on Antarctic Treaty resilience, Antarctic heritage, living and working in Antarctica, Antarctic histories, Antarctic law and governance, tourism, understanding "ice", and values in Antarctica.

#### Cross-Disciplinary Topics

**10** proposed sessions on air-sea interactions and ecosystems, Antarctic futures, subglacial systems, legal and policy needs of research, emerging technologies, collaboration, the effect of the pandemic, oceanic tipping points, public engagement, and sub-ice geology.

\*\*\* Click here or visit [www.scar2022.org](http://www.scar2022.org) to view the full list of proposed sessions.

Proposals for additional sessions are welcomed. Please send your suggestions to [info@scar.org](mailto:info@scar.org) for consideration.