



Agenda Item: ATCM 4, CEP 5

Presented by: SCAR

Original: English

Submitted: 4/5/2021

The Scientific Committee on Antarctic Research Annual Report 2021 to the Antarctic Treaty Consultative Meeting XLIII

The Scientific Committee on Antarctic Research Annual Report 2021 to the Antarctic Treaty Consultative Meeting XLIII

Information Paper submitted by SCAR

Summary

This paper presents the annual report of The Scientific Committee on Antarctic Research (SCAR) to the Antarctic Treaty Consultative Meeting. For ease of consideration, the main features of the report are presented as an infographic (attachment 1).

Background

The mission of SCAR is to advance Antarctic research, including observations from Antarctica, and to promote scientific knowledge, understanding and education on any aspect of the Antarctic region. To this end, SCAR is charged with the initiation and international coordination of Antarctic and Southern Ocean research beneficial to global society. SCAR provides independent and objective scientific advice and information to the Antarctic Treaty System and other bodies, and acts as the main international exchange of Antarctic information within the scientific community. Descriptions of SCAR's activities and scientific outputs are available at: https://www.scar.org/.

Science Priorities

Three new flagship scientific research programmes (SRPs) were approved in 2020 and six existing SRPs came to an end. The new SRPs are:

- Integrated Science to Inform Antarctic and Southern Ocean Conservation (Ant-ICON) will answer fundamental science questions (as identified by the SCAR Horizon Scan), relating to the conservation and management of Antarctica and the Southern Ocean and focus on research to drive and inform international decision-making and policy change.
- INStabilities and Thresholds in ANTarctica (INSTANT) will address a first-order question about Antarctica's contribution to sea level. Encompassing geoscience, physical sciences and biological sciences, it aims to quantify the Antarctic ice sheet's contribution to past and future global sea-level change.
- Near-term Variability and Prediction of the Antarctic Climate System (AntClim^{now}) will investigate the prediction of near-term conditions in the Antarctic climate system on timescales of years to multiple decades. Taking an integrated approach, it will consider the Antarctic environment as a whole.

Details of these programmes can be found at https://www.scar.org/science/srp/.

Recent Developments

Key outcomes and activities of SCAR are presented in Attachment 1. SCAR's three science groups, scientific research programmes, and specialized subsidiary groups have undertaken a wide variety of activities and produced many outputs, a range of which are formally presented at this meeting.

In January 2020, SCAR took over the hosting of the Antarctic Environments Portal from the University of Canterbury, New Zealand. Further details can be found in WP 19 *Antarctic Environments Portal*.

Following the cancellation of SCAR's biennial Open Science Conference in Hobart in August 2020 as a result of the pandemic, in August 2020 SCAR hosted SCAR 2020 Online, which featured many of the

highlights of the Hobart meeting and attracted 2712 participants from 60 countries. Further details are available from https://www.scar2020.org/.

SCAR, through its Antarctic Biodiversity Portal, is coordinating a community effort to contribute to the UN Decade of Ocean Science for Sustainable Development (2021-2030) through the development of a Southern Ocean Action Plan. This is a partnership with the Southern Ocean Observing System (SOOS) and many other groups and organisations collectively termed the Southern Ocean Task Force. A website has recently been launched (https://www.sodecade.org) to share information about the process and further detail is provided in IP 136 *The Southern Ocean contribution to the United Nations Decade of Ocean Science for Sustainable Development*.

In order to further understand the complex and far-reaching consequences of the COVID-19 pandemic for the Antarctic community, SCAR's Standing Committee on the Humanities and Social Sciences (SC-HASS) has initiated a research programme to assess the pandemic's impacts on Antarctic research and researchers, as well as the long-term implications of COVID-19 for Antarctic operations, tourism and governance, with the overarching aim to help inform decisions on how to mitigate adverse impacts. Further information can be found at https://www.scar.org/science/hass/covid-project/info/.

In March 2021, the first virtual meeting of the SCAR Delegates took place. At the meeting, the Czech Republic and Turkey were upgraded from Associate to Full Membership of SCAR, and Mexico was admitted as an Associate Member. In addition, two new Executive Committee members were elected by the Delegates: Dr Yeadong Kim (Republic of Korea) was elected as SCAR President, and Prof Deneb Karentz (USA) was elected as Vice President and takes on responsibility for Science. Prof Jefferson Simoes (Brazil) was re-elected for a second term as Vice President and retains responsibility for Finance. Two Vice Presidents remain in position: Dr M. Ravichandran (India) as Vice President for Capacity Building, Education and Training, and Dr Gary Wilson (New Zealand) as Vice President for Administration. Prof Steven Chown remains on the Executive Committee for two years as immediate Past President.

Dr Chandrika Nath is SCAR's Executive Director. Dr Susie Grant is SCAR's representative to the Committee for Environmental Protection. Dr Grant took over this role from Dr Aleks Terauds in September 2020.

Selected Forthcoming Meetings

The 2022 Open Science Conference and SCAR Meetings will be hosted by India in the city of Hyderabad from August $19^{th} - 28^{th}$. The meetings are currently being planned as in-person and contingencies are being included for online and hybrid options for the meetings due to uncertainties arising from the pandemic.

The 2024 Open Science Conference and SCAR Meetings will be hosted by Chile in the city of Pucón. The 2026 Open Science Conference and SCAR Meetings will be hosted by Norway in the city of Oslo. Dates for both meetings will be confirmed at a later stage.