



INTERNATIONAL ARCTIC
SCIENCE COMMITTEE

IASC PROGRESS

SPRING 2013

ASSW 2013: The Arctic Hub - Regional and Global Perspectives

About 400 participants from 25 countries attended the Arctic Science Summit Week (ASSW) 2013, which was held in the beautiful city of Krakow in Poland last month. The ASSW was initiated by IASC in 1999 to provide opportunities for coordination, cooperation and collaboration between the various scientific organizations involved in Arctic research and to economize on travel and time. Any organization engaged in supporting and facilitating Arctic research may participate and also use

the summit to hold its business meeting. Since 2009, every second ASSW includes a three-day Science Symposium and the 2013 symposium focused on the interactions between the Arctic and the lower latitudes and the regional and global implications of Arctic changes. Five disciplinary and four cross-cutting sessions dealing with both environmental and socio-economic conditions and addressing multidimensional changes and linkages were convened. The engagement of the Arctic Coun-

cil Indigenous Peoples Secretariat (IPS) made it possible to – for the first time at an ASSW – fully integrate Arctic people in the scientific program of the Symposium. Thanks to the efforts of the Association of Polar Early Career Scientists (APECS), about 25% of the participants were early career scientists. A political panel „Arctic Dialogue, Science-Policy Interface“, organized by the Polish Ministry of Foreign Affairs, complemented the program of a very productive and highly interesting week in Poland.



IASC Medal awarded to Leif Anderson

The 2013 IASC Medal was awarded in recognition of Leif Anderson's pioneering work on the functioning of the Arctic Ocean and his groundbreaking scientific contributions to understanding the chemistry and carbon cycle of this very special ocean system. The Medal Lecture entitled „Utilizing Chemical Signatures to Study the Arctic Ocean“ was presented during the ASSW 2013 Science Symposium.

IASC President David Hik awarding the IASC Medal to Leif Anderson.



Jacek Jania (President of the Polish Committee on Polar Research and ASSW 2013 Chair) and Maja Lisowska (Executive Director of the ASSW 2013 Conference Secretariat) at the opening ceremony.

Peoples of the Arctic

Almost four million people live in the Arctic today and the interests, perspectives and insight of Arctic residents were an integral part of the ASSW, in particular of the cross-cutting sessions of the Science Symposium, dealing with (1) Applying Local and Traditional Knowledge to Better Understanding of the Changing Arctic; (2) Arctic People and Resources: Opportunities, Challenges & Risks; (3) Arctic System Science for Regional and Global Sustainability; (4) Changing North: Predictions and Scenarios.



Olav Mathis Eira, President of Saami Council Norway, giving a keynote presentation at ASSW 2013.

Preparing for the third International Conference on Arctic Research Planning (ICARP III)

Over the past few months, the IASC Executive Committee developed the concept of a third ICARP to be held in conjunction with IASC's 25th Anniversary at the ASSW 2015. IASC's many partner organizations and the IASC Working Groups were invited to contribute and at the ASSW 2013 IASC Council gave the go-ahead for the implementation of the plans.

ICARP III will provide a framework to identify Arctic science priorities for the next decade and to better coordinate various Arctic research



agendas. It will be designed to inform policy makers, people who live in or near the Arctic and the global community and to build constructive relationships between producers and users of knowledge. It will be a process for integrating priorities for forward-looking, collaborative, interdisciplinary Arctic research and observing and for establishing an inventory of recent

and current synthesis documents and major developments in Arctic research. ICARP III will not undertake the development of new science plans but rather build on the many comprehensive science plans that exist already and complement those with processes to identify gaps that may need attention. Engaging all partners, ICARP III will produce a consensus statement identifying the most important Arctic research needs for the next decade. ICARP III will include a series of events during 2014/15, starting with a formal launch at ASSW 2014 and ending with a final conference during ASSW 2015.

Connecting both Poles

Recognizing that there are many common interests and that there is much to be gained from developing a synergy, IASC and the Scientific Committee on Antarctic Research (SCAR), are working closely together. At the ASSW 2013, the two Executive Committees held a joint meeting to discuss the recommendations of their Bipolar Action Group and to talk about major upcoming activities, such as ICARP III, the International Polar Initiative (IPI) and SCAR's Horizon Scan.



Joint SCAR/IASC Executive Committee meeting at ASSW 2013 (From left to right: Volker Rachold, Karin Lochte, Mike Sparrow, Susan Barr, Geronimo Lopez Martinez, Jackie Grebmeier, David Hik, Yoo Kyung Lee)

Formal Agreements signed during the ASSW 2013

IASC and its partners signed one new Memorandum of Understanding and renewed 4 Formal Agreements to strengthen their joint commitment of supporting international Arctic research:

New Memorandum of Understanding between IASC and FARO:



IASC and FARO (Forum of Arctic Research Operators) identify a joint commitment to support international Arctic research. By means of this Agreement, FARO and IASC aim to expand the capacity for planning and supporting of major international research initiatives that go beyond the capacity of uni- or bilateral efforts.

David Hik and Magnus Tannerfeldt sign the IASC - FARO Memorandum of Understanding in Krakow.



Renewed Letter of Agreement between IASSA and IASC



With this renewed 5-year Letter of Agreement, the International Arctic Social Sciences Association (IASSA) and IASC aim to combine efforts in selected fields and activities so as to raise the level of impact of both organizations in terms of making scientific advances and of advising policy makers, as well as to avoid duplication. The focus of IASSA-IASC joint activities should be on interdisciplinary work.

CliC, SCAR and IASC continue cooperation for the next 5 years



A 5-year Memorandum of Agreement (MoA) between the WCRP Climate and Cryosphere Project (CliC), the Scientific Committee on Antarctic Research (SCAR) and IASC was signed, superseding the WCRP/SCAR/IASC Agreement of 2008. The Parties share common goals of working internationally and across disciplines to increase the understanding of the cryospheric elements of the Earth's climate system and their interconnections. IASC, SCAR and CliC have a long history of successful collaboration through a number of activities and initiatives involving ice sheet mass balance, sea ice, permafrost, and polar oceanography.

IACS, IASC and SCAR renew Letter of Agreement



A trilateral agreement between the International Association of Cryospheric Sciences (IACS), the Scientific Committee on Antarctic Research (SCAR) and IASC was signed, superseding the Agreement of 2008. The Parties share a number of common interests and practices, which will make it relatively easy for them to work together, for example in arranging workshops, conferences, and reports on topics of mutual scientific interest, in developing integrated plans for cryospheric research, in communicating to the public on cryospheric issues, and in providing advice to policy makers.

Memorandum of Understanding renewed between APECS, IASC and SCAR



A 5-year Memorandum of Understanding (MoU) between the Association of Polar Early Career Scientists (APECS), the Scientific Committee on Antarctic Research (SCAR) and IASC was signed, superseding the MoU of 2008. The MoU identifies a joint commitment to the professional development of early career polar researchers and the need for a continuum of leadership in polar research as important mutual aims of all Parties.

IASC Action Group On Geosciences

At its meeting in Krakow, IASC Council approved the terms of references and the recommendations proposed by the recently established Action Group on Geosciences (AGG). The AGG is providing strategic advice to the Council and Working Groups on both long-term opportunities and priorities in the field of Arctic Geoscience research. Since geosciences embrace a wide variety of scientific disciplines, from the deep Earth to the higher atmosphere, emphasis is given to the overarching aspects of research.

Taking into account the upcoming ICARP III, the AGG is planning to promote an assess-

IASC Action Group on Geosciences (Potsdam): Carlo Barbante, Karsten Piepjohn, Victoria Pease, Mikhail Grigoriev, Naja Mikkelsen and Volker Rachold



ment on the „Geodynamic Evolution of the Arctic“ as a major geoscience contribution to the ICARP III process. This will involve an active role of all Working Groups, because of the overarching themes which will be treated. In this context the AGG would like to em-

phasise a careful review of the evolution of the Arctic Ocean basins and ridges, in which important themes such as the correlation of circum-Arctic orogens, foldbelts and fault zones and the history of Arctic gateways will be dealt with.

IASC Data Policy Action Group

Data are central to the mission of IASC. IASC promotes cooperation in all aspects of Arctic research and seeks to act as a scientific and moral authority that promotes the freedom and ethical conduct of science. In this spirit of open collaboration, the IASC Council recently endorsed a new [Statement of Principles and Practices for Arctic Data Management](#).

The document asserts that all IASC-endorsed scientific results shall be verifiable and reproducible through ethically open access to all data necessary to produce those results. Data should be made fully and freely available with minimal delay and with only limited ethical, not proprietary, restrictions.

Data shall be professionally preserved and

readily accessible as described in data management plans, which are required for all new IASC projects. It is also important to recognize the intellectual effort that goes into producing and maintaining good data. IASC encourages fair attribution and use of data and strongly promotes the practice of data citation. IASC Council will also established a new Standing Committee on Data Management to maintain the principles document, review and provide guidance on data management plans and archives, and to generally promote sound data stewardship.

This Statement of Principles is a major, forward-looking action for IASC with important consequences. We welcome any feedback from the Arctic research community. Please contact the IASC Secretariat with your questions and comments.



IASC Data Policy Group (Potsdam): Peter Pulsifer, Mark Parsons, Volker Rachold, Arkady Tishkov and Robert Huber

IASC Working Groups

The five IASC Working Groups (re)elected their Steering Group members during the ASSW 2013 and the current Steering Groups are:

Atmosphere WG:

Jim Overland (Chair), Hiroshi Tanaka (Vice Chair), Michael Tjernström (Vice Chair), Kathy Law (Vice Chair)

Cryosphere WG:

Martin Sharp (Chair), Julian Dowdeswell (Vice Chair), Walt Meier (Vice Chair), Jon Ove Hagen (Vice Chair)

Marine WG:

Bert Rudels (Chair), Rolf Gradinger (Vice Chair), Jinping Zhao (Vice Chair), Savithri Narayanan (Past Chair)

Social and Human WG:

Peter Schweitzer (Chair), Gail Fondahl (Vice Chair), Peter Sköld (Vice Chair), Louwrens Hacquebord (Past Chair)

Terrestrial WG:

Inga Svala Jonsdottir (Chair), Warwick Vincent

(Vice Chair), Torben Christensen (Vice Chair), Terry Callaghan (Past Chair).

The Working Group activities discussed during the ASSW will be summarized in an upcoming IASC Progress shortly.



IASC Social and Human Working Group Meeting in Krakow, Poland

Austrian Polar Research Institute (APRI)

Austria has a long-standing tradition in polar research. A past outstanding milestone was the Austrian-Hungarian Polar Expedition aiming to explore the NE-passage in the early 1870s. Though the expedition failed its original aim it discovered and mapped the Franz Josef Land archipelago and expedition leader Karl Weyprecht identified and formulated the need for an international polar research effort, known as the "International Polar Year". Since then Austria contributed to all international polar years and to polar research through a number of excellent scientists. Citing just one, Norbert Untersteiner, an Austrian geophysicist (who moved to the University of Washington), started with the famous sea-ice drifting station "Alpha" during the IGY 1957/58 and significantly influenced international sea-ice research. During that time the Institute of Meteorology and Geophysics at Innsbruck University was a particular nucleus of the Austrian contribution to international polar research.

In spite of these international science contributions Austria until now, however, failed to establish its polar research at a formal level through an independent polar research institute. Such an institution is essential in order to contribute to international networks such as IASC and SCAR, to represent Austrian polar research at an international level, support, stimulate and consolidate the polar research activities at a national level and motivate and support the next generation of polar researchers and to inform the public on results of polar research and its relevance. Thus, in 2012, scientists of the Universities of Vienna and Innsbruck and the Austrian weather service "Central Institute of Meteorology and Geodynamics" took the initiative and founded the Austrian Polar Research Institute (APRI), a cooperating institute between the founding partners. With the opening cere-



The Director of the Austrian Polar Research Institute (APRI), Prof. Andreas Richter (University of Vienna)

mony at University Vienna on April 8th 2013, the Austrian Minister of Science and Research, the Rector of the University of Vienna, the Director of Central Institute of Meteorology and Geodynamics, the Executive Secretary of IASC and about 200 ceremony guests together with the representatives of APRI celebrated this milestone in the history of Austrian polar research.



Inaugural address of Austrian Minister of Science and Research, Dr. Karlheinz Töchterle, at the Austrian Polar Research Institute (APRI) opening ceremony 2013

The new Austrian Polar Research Institute has a light management structure that promotes and coordinates research and education in the area of polar sciences at the participating organisations. APRI currently comprises about 50 researchers (14 research groups) from the University of Vienna, the University of Innsbruck, the

Vienna University of Technology and the Central Institute of Meteorology and Geodynamics covering three major research fields which are polar ecology, cryosphere and climate as well as social and cultural systems.

The main tasks of the Austrian Polar Research Institute are to:

- Facilitate cooperation and enhance synergies in polar research at the national level
- Foster international cooperation in polar research and represent Austrian research in polar scientific organisations
- Initiate, develop and support interdisciplinary research at the national and European level,
- Support early-career scientists in polar research
- Increase the visibility of Austria in polar research and encourage a dialogue of polar scientists with the public

The management team includes the Director (currently Dr. Andreas Richter, University of Vienna) and Vice-Director (Dr. Birgit Sattler, University of Innsbruck), the Executive Secretary (Dr. Wolfgang Schöner, ZAMG) and the Director of Finances (Dr. Annett Bartsch, Vienna University of Technology). More information on the Austrian Polar Research Institute is available from the website www.polarresearch.at.



The IPY 2007/08 was the starting point of Austrian activities for an Austrian Polar Research Institute: Austrian research group at Zackenberg station (Greenland) in August 2007

ASSW 2014 in Finland

The Arctic Science Summit Week 2014, including the 2nd Arctic Observing Summit, will take place in Helsinki on April 5-11, 2014 on Helsinki Kumpula Campus, in the facilities of the Finnish Meteorological Institute and Physics Department of the University of Helsinki. For more information see: www.assw2014.fi



ASSW 2015 in Japan

The Arctic Science Summit Week 2015 will be held in Japan on 23 - 30 April, 2015, in conjunction with the ICARP III Symposium, planned on 27 - 28 April, and the International Symposium on Arctic Research (ISAR-4) on 29-30 April, 2015. Also in planning is IASC's 25th Anniversary Celebration during the ASSW.

Arctic Observing Summit (AOS)

About 170 participants attended the first AOS in Vancouver (Canada) two weeks ago. The biennial summit is a task of the Sustaining Arctic Observing Networks (SAON) initiative and it developed a set of community-driven, science-based recommendations on the design, implementation, coordination and sustained operation of Arctic observing systems.

For more information see: <http://www.arctic-change.org/arctic-observing-summit-2013>

IASC (www.iasc.info) on Facebook & Youtube



Information, news and videos on IASC are now available on Facebook and Youtube. See us on Facebook: www.facebook.com/groups/343786799008379/ or watch the newest videos on Youtube: www.youtube.com/user/iaschannel/videos?view=0

Kiruna Declaration signed at Arctic Council Ministerial Meeting

At the conclusion of the Swedish Chairmanship, the Ministers from the eight Arctic states, representatives of the Arctic Indigenous Peoples and Observers met in Kiruna on May 15. The Kiruna Declaration, signed by the Ministers, describes the work of the Council during the next two years under Canadian Chairmanship.

For more information see: <http://www.arctic-council.org>



Arctic Council Ministerial Meeting, Kiruna, Sweden

IASC Council

Country

Organization

Representative

Canada	Canadian Polar Commission	David Hik, President
China	Chinese Arctic and Antarctic Administration	Huigen Yang, Vice-President
Czech Republic	Czech Centre for Polar Ecology	Josef Elster
Denmark/Greenland	Agency for Science, Technology and Innovation	Naja Mikkelsen, Vice-President
Finland	Delegation of the Finnish Academies of Science and Letters	Kari Laine
France	Institute Polaire Français	Yves Frenot
Germany	Deutsche Forschungsgemeinschaft	Karin Lochte
Iceland	RANNIS, The Icelandic Centre for Research	Thorsteinn Gunnarsson
India	National Centre for Antarctic and Ocean Research (NCAOR)	Sivaramakrishnan Rajan
Italy	National Research Council of Italy	Carlo Brabante
Japan	Science Council of Japan	Tetsuo Ohata
The Netherlands	The Netherlands Organization for Scientific Research	Louwrens Hacquebord
Norway	The Research Council of Norway	Susan Barr, Vice-President
Poland	Polish Academy of Sciences, Committee on Polar Research	Jacek Jania
Russia	The Russian Academy of Sciences	Vladimir I Pavlenko
Republic of Korea	Korea National Committee on Polar Research	Byong-Kwon Park
Spain	Comité Polar Español	Manuel Catalan
Sweden	The Swedish Research Council	Mats Andersson
Switzerland	Swiss Committee on Polar Research	Martin Lüthi
United Kingdom	Natural Environment Research Council	Cynan Ellis-Evans
USA	Polar Research Board	Jackie Grebmeier, Vice-President