



INTERNATIONAL ARCTIC
SCIENCE COMMITTEE

Spring 2015

IASC PROGRESS

Highlights from ASSW 2015 in Toyama, Japan

The Arctic Science Summit Week (ASSW) is the annual gathering of international organizations that support and facilitate Arctic research and provides a key arena for enhancing cooperation. ASSW 2015 was held on 23-30 April at the Toyama International Conference Center in Toyama, Japan and brought together more than 700 international scientists, students, policy makers, research managers, Indigenous Peoples and others interested in developing, prioritizing

and coordinating plans for future Arctic research. It was arranged under the auspices of IASC and co-organized by the Science Council of Japan.

In addition to the business meetings of the ASSW partner organizations, which were held during the first three days of the week (23-25 April), a joint 4-day science symposium of the 3rd International Conference on Arctic Research Planning (ICARP III) and the 4th In-

ternational Symposium on Arctic Research (ISAR-4) was arranged in the second half of the week (27-30 April).

A public lecture entitled "Arctic came to Toyama!", including presentations from IASC President Susan Barr, geophysicist Shun Akasofu and photographer Naoki Ishikawa, was arranged on 26 April and attracted nearly 500 attendees, including people from the nearby prefectures.

ICARP III / ISAR-4 Opening Session

Chris Rapley presenting the scientific keynote during the opening session (Photo: GH)



The opening session of the ICARP III / ISAR-4 Symposium included welcoming remarks from several dignitaries.

Among them were the Honorary Chairperson of ASSW 2015, Her Imperial Highness Princess

Takamado of Japan, who attended the opening and spoke of her hopes for Arctic research. Also, a message from the Japanese Prime Minister Shinzo Abe was presented.

Additional opening statements were made by the State Minister for Education, Culture, Sports, Science and Technology (MEXT), the President of the Science Council of Japan, the Governor of the Toyama Prefecture, the President of IASC and on behalf of the Ministry of the Foreign Affairs and the Parliamentary League of Arctic Frontier Study.

The Chair and Vice-Chair of the Local Organizing Committee officially opened the symposium and the scientific program began with the first keynote presentation.



Kazuyuki Shiraishi, Chair of the Local Organizing Committee, opening the conference (Photo: GH)



Her Imperial Highness Princess Takamado, Honorary Chair of ASSW 2015, presenting her opening address (Photo: GH)



IASC President Susan Barr and Executive Secretary Volker Rachold during the opening session (Photo: GH)

Toyama Conference Statement

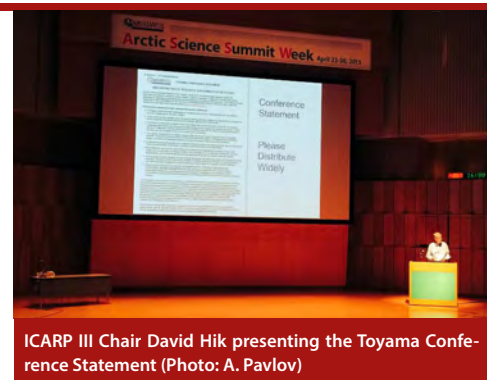
The Toyama Conference was a critical step in the ICARP III process involving hundreds of scientists from 27 countries working to improve our understanding of the consequences of changes taking place in the Arctic region, and their connection to global environmental, economic and social processes. The Toyama Conference Statement, which highlights several overarching messages that emerged during the Conference, was presented in the closing ceremony:

- Changes in the Arctic are challenging our understanding of their consequences and our ability to provide knowledge for decision-makers.
- There needs to be a greater sense of urgency among decision-makers and awareness by the general public regarding the global importance of changes taking place in the Arctic.
- It is critical to anticipate changes in the Arctic rather than respond to them, but to do this requires sustained observations and improved understanding of local, regional and global processes. These research challenges must be addressed in a coordinated and timely manner to ensure sustainable development and resilient Arctic communities and ecosystems.
- The rapidly changing Arctic initiates changes that cascade through the global system impac-



ting weather, commerce and ecosystems in the more temperate regions. Linkages across disciplines, scales, and diverse knowledge systems must be addressed in future research activities.

- Understanding the vulnerability and resilience of Arctic environments and societies requires increased international scientific cooperation, including contributions from non-Arctic states.
- More effective use must be made of local and traditional knowledge by engaging northern and Indigenous communities in setting priorities, the co-design and co-production of research, and the dissemination of this knowledge by ensuring appropriate access to research data and results.
- It is essential to build long-term human capacity to support relevant observations and research among scientists, decision-makers and Arctic residents, including Indigenous Peoples, through education and effective public engagement, and



ICARP III Chair David Hik presenting the Toyama Conference Statement (Photo: A. Pavlov)

by adopting shared principles to guide research activities.

- New markets for Arctic resources and associated activities, including trade, tourism and transportation, will likely emerge faster than the necessary infrastructures on land and sea. Sustainable infrastructure development and innovation to strengthen the resilience of Arctic communities requires a collaborative approach involving scientists, communities, governments, and industry.



ISAR-4 Chair Atsoku Sugimoto presenting the concluding remarks (Photo: GH)

25th Anniversary of IASC

IASC's 25th Anniversary in 2015 presents the opportunity to summarize and review IASC's contributions and recognize those that have been instrumental in its founding, development and growth.

Celebrating the 25th Anniversary, a panel discussion, including former IASC Presidents, Vice-Presidents and others who had contributed substantially to shaping IASC during the last 25 years, was convened as part of the opening session. The panel started with an introduction of the book "IASC after 25 Years - A Quarter of a

Century of International Arctic Research Cooperation", presented by the Executive Secretary Volker Rachold, followed by a panel discussion. The discussions were moderated by Sara Bowden, former Executive Secretary of the Arctic Ocean Sciences Board (AOSB) and Executive Officer of IASC, and included statements from

- Odd Rogne, Executive Secretary 1991-2005;
- Louwrens Hacquebord, Council Member 1992- (IASC Vice President 2000-2008);
- Anders Karlqvist, Regional Board Member 1991-2008 (Chair 1991-1994, 1996-1997);
- Byong-Kwon Park, Council Member 2002- (IASC Vice President 2004-2012);
- Vladimir Pavlenko, Council Member 2001- (Vice President 2014-);
- Kristján Kristjánsson, Council Member 1999-2010 (President 2006-2010, Vice President 2002-2006).



Sara Bowden moderating the IASC History Panel (Photo: GH)

IASC Award for Service

In light of the 25th Anniversary, IASC decided to – for first the time – present a special IASC Award for Service, recognizing "25 Years of Vision, Dedication and Advancement of Arctic Science". The IASC Award for Service was presented to IASC's former Executive Secretary Odd Rogne, who had been instrumental in the founding process of the organization in the late 1980s and making IASC a leading science organization for the Arctic.

Odd Rogne, former IASC Executive Secretary, receiving the IASC Award for Service (Photo: GH)



IASC Fellowship Program



IASC Fellows at ASSW 2015

Left to right: Volker Rachold (IASC Executive Secretary), Paul Suprenand, Emily Choy, Kristina Brown, Louis-Philippe Roy, Elena Kuznetsova, Robert Way, Josefine Lenz, Malgorzata Smieszek, Andrian Vlachov, Jo Browse, Susan Barr (IASC President)

The IASC Fellowship Program is meant to engage Early Career Scientists (ECS) in the work of the IASC Working Groups (WGs). IASC Fellows are doctoral or postdoctoral researchers who actively participate in select activities of the IASC WGs. IASC Fellows are expected to scientifically contribute but also to help organize specific activities and to coordinate reporting. Thus, the Fellowship Program provides the opportunity for ECSs to become involved in leading-edge scientific activities at a circumpolar and international level, to build an international network of contacts and also to develop management skills.

The IASC Fellow selection process is managed in close cooperation with the Association of Polar Early Career Scientists (APECS).

Ten IASC Fellows (five incoming and five from the 2014 round) attended ASSW, including the IASC WG meetings and the ICARP III/ISAR-4 Symposium. In consultation with the WG Chairs, the Fellows developed recommendations on how to make the Program more effective and useful, in

particular that after the one-year program Fellows should have the opportunity to stay involved in IASC activities. IASC welcomed these suggestions and modified the Fellowship Program accordingly. The total duration of the program is now 1+2 years. During the first year, IASC Fellows receive travel support to attend two ASSWs, so that at each ASSW there is one incoming and at least one outgoing Fellow.

New IASC Member Portugal

IASC welcomed Portugal as the 23rd IASC member country. Portugal will be represented in IASC through the Portuguese Foundation for Science and Technology, with João Canario serving as the IASC Council Member.

New Leadership of IASC Working Groups

All five IASC Working Groups elected their Steering Group members and the new leadership includes:

- **Atmosphere WG** – Chair: Thomas Spengler (Norway); Vice-Chairs: Kathy Law (France), John Cassano (USA), Halldor Björnsson (Iceland); past Chair: Jim Overland (USA)
- **Cryosphere WG** – Chair: Francisco Navarro (Spain); Vice-Chairs: Jon Ove Hagen (Norway),



IASC Council Meeting at ASSW 2015

The Council, which is composed of one representative from each IASC member country, is IASC's decision-making body. The Council meets annually at ASSW to review past and ongoing IASC activities and to agree on the organization's future activities and overall strategy.

Walt Meier (USA); past Chair: Martin Sharp (Canada)

• **Marine WG** – Chair: Bert Rudels (Finland); Vice-Chairs: Jinping Zhao (China), Lee Cooper (USA)

• **Social & Human WG** – Chair: Gail Fondahl

(Canada); Vice-Chairs: Hiroki Takakura (Japan), Peter Sköld (Sweden); past Chair: Peter Schweitzer (Austria)

• **Terrestrial WG** – Chair: Inga Svala Jonsdottir (Iceland); Vice-Chairs: Josef Elster (Czech Republic), Phillip Wookey (UK)

ISIRA

The **International Science Initiative in the Russian Arctic** is an IASC advisory group that provides a forum for linking bilateral and international research activities in the Russian Arctic and facilitating improved scientific access to the region. The annual ISIRA meeting was held at ASSW and attended by about 30 participants from 9 countries, including a number of IASC



Participants of the ISIRA Meeting

funded Russian Early Career Scientists. In addition to exchanging updates on ongoing and planned research activities in the Russian Arctic, participants of the meeting discussed ISIRA's contribution to ICARP III and the development of a new IASC website, combining the website of the Eurasian Arctic Sub-Office of the International Polar Year and the current ISIRA pages on the IASC website.

Indigenous Participants



Left to right: Sten Lund, Sharon Edmunds-Potvin, Alona Yefimenko, Gunn-Britt Retter, Janni Staffansson, Liza Marie Mack, Carl Christian Olsen, Larisa Abriutina and Najaaraq Paniula

Working with people who live in or near the Arctic and building constructive relationships between producers and users of knowledge are key elements of ICARP III. In that respect, the involvement of indigenous participants in the ICARP III process is of particular importance. To ensure indigenous participation in ASSW and in the ICARP III Symposium, IASC has been cooperating closely with the Arctic Council Indigenous People Secretariat (IPS). Four of the Arctic Council's Permanent Participants were represented at the ICARP III Symposium, namely Aleut International Association (AIA), Inuit Circumpolar Council (ICC), Russian Association of Indigenous Peoples of the North (RAIPON) and Saami Council. One of the ASSW keynote presentations was given by Gunn-Britt Retter, Head of Arctic- and Environmental Unit of Saami Council, and several science sessions of the ICARP III Symposium benefitted from indigenous contributions.

Arctic Data Committee (ADC)

The Arctic Data Committee (ADC) was established by IASC and the Sustaining Arctic Observing Networks (SAON) and allies IASC's Data Standing Committee and SAON's Committee on Data and Information Services (CDIS). In his report to the IASC Council, the Chair Peter Pulsifer presented the key priorities of ADC, namely:

i) Documenting and understanding the Arctic

data management ecosystem; (ii) Identifying common metadata elements; (iii) Engaging in data citation and publication movement; and (iv) Promoting interoperability through action - interoperability experiment.

A major upcoming event will be the Second Polar Data Forum (PDF II) to be held on **27-29 October 2015 in Waterloo, Ontario, Canada.**



<http://www.polar-data-forum.org>

Upcoming ASSWs 2016 - 2018

ASSW 2016, Fairbanks (USA)

The ASSW 2016 week will be held in **Fairbanks (USA) on 12-18 March 2016** and consists of several separate but related activities to strengthen international collaborations and networks across disciplines and facilitate communication across different groups, including academia, government agencies, local communities, industry, non-governmental organizations and other Arctic stakeholders.

<https://assw2016.org/>



ASSW 2017, Prague (Czech Republic)

The ASSW 2017 will be hosted by the **Czech Republic** and held in Prague on **1-7 April 2017**. The overall theme of the Science Symposium will be "The Circumpolar Arctic: Dynamic Biome in Global Change".

<http://www.assw2017.eu/>



ASSW 2018, Davos (Switzerland)

The ASSW 2018 will be held in conjunction with "POLAR 2018" in **Davos (Switzerland) on 15-27 June 2018**. POLAR 2018 is a joint Open Science Conference of IASC and the Scientific Committee on Antarctic Research (SCAR) and will also include the IASC and SCAR Business Meetings.

<http://www.polar2018.org/>



IASC Medal Award

Jacqueline Grebmeier, IASC Medalist 2015



The IASC Medal 2015 was awarded to Jacqueline Grebmeier, Research Professor and Biological Oceanographer at the University of Maryland Center for Environmental Science, for her exceptional contributions to the understanding of Arctic benthic ecology and marine ecosystem dynamics; her pioneering work interpreting geochemical and stable isotope measurements in sediments; her commitment to the establishment of long-term observatories through international collaboration; and her outstanding leadership and mentorship within the Arctic science community.

In her Medal Lecture, Jacqueline Grebmeier presented an overview on "Marine Ecosystem Responses to Ongoing Environmental Changes in the Arctic".

New SCAR Executive Director Appointed

Dr. Jenny Baeseman has been appointed as the new SCAR Executive Director. Jenny Baeseman has been the Director of the WCRP Climate and Cryosphere (CliC) project since 2012 and previous to that was the Founding Director of the Association of Polar Early Career Scientists (APECS).



Jenny Baeseman, now SCAR Executive Director

1st Central European Polar Meeting

The 1st Central European Polar Meeting will be held on **10-13 November 2015 in Vienna (Austria)**. Registration and abstracts submission is possible on the conference website. Abstract Submission Deadline is Friday, 31 July 2015.

<http://www.polarresearch.at/conference>



Photos: Günther Heinemann (GH)

IASC Council

Country

Organization

Representative

Austria	Austrian Polar Research Institute (APRI)	Wolfgang Schöner
Canada	Polar Knowledge Canada	David Hik
China	Chinese Arctic and Antarctic Administration	Huigen Yang, Vice-President
Czech Republic	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	Institut 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, President
Poland	Polish Academy of Sciences, Committee on Polar Research	Jacek Jania
Portugal	Portuguese Foundation for Science and Technology	João Canario
Russia	The Russian Academy of Sciences	Vladimir Pavlenko, Vice-President
Republic of Korea	Korea National Committee on Polar Research	Byong-Kwon Park
Spain	Comité Polar Español	Manuel Catalan
Sweden	The Swedish Research Council	Magnus Friberg
Switzerland	Swiss Committee on Polar Research	Martin Lüthi
United Kingdom	Natural Environment Research Council	TBD
USA	International Arctic Research Center	Larry Hinzman, Vice-President