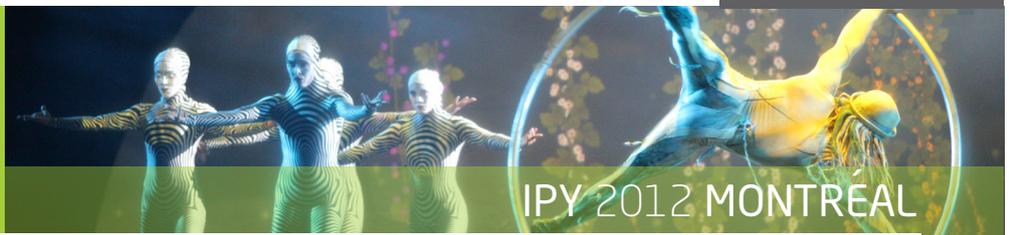




INTERNATIONAL ARCTIC
SCIENCE COMMITTEE



IPY 2012 MONTRÉAL

IASC PROGRESS

Highlights from the IPY 2012 Conference

The third and last conference of the International Polar Year 2007/2008, the IPY 2012 "From Knowledge to Action" Conference, held in Montreal (Canada) at the end of April, was a great success. More than 3,000 scientists, policy- and decision-makers, industry representatives and local residents of the circumpolar communities attended

the conference to share the knowledge of the Polar Regions, to present the latest findings and to discuss solutions for addressing the challenges the Polar Regions are facing. As a member of the Conference Steering Committee, IASC helped shape the conference program.

This IASC Progress presents the highlights of the

various IASC activities in conjunction with the IPY 2012 Conference, including summaries of the meetings of the IASC Council and Working Groups, which were held during the Arctic Science Summit Week 2012, immediately preceding the conference.



IPY 2012: Opening Keynote Speaker, 23 April

Momentum Series- International Polar Initiative

During the IPY Conference in Montreal a series of 4 sessions were held to consider possibilities for sustaining the legacy IPY. This 'Momentum Series' consisted of four open sessions chaired by a group of individuals who had played various roles in establishing IPY 2007-2008. Each of the Momentum Series sessions summarized lessons learned during IPY and engaged the wider polar community in determining the anticipated major polar issues and science questions for the next 20 years; in identifying requirements for critical monitoring, observation, prediction and data management services; and in discussing mechanisms for strengthening coordination, cooperation and planning for the future of polar research. The significance of capacity building, engagement of polar residents, and education and outreach initiatives were also highlighted. The International Polar Initiative paper that was prepared in advance of the IPY Conference (<http://www.ipy2012montreal.ca/docs/>

[ipi_concept.pdf](#)) will be updated and circulated for further discussion over the next few months. Please contact the IASC Secretariat for additional information about this process.

Perceptions and representations of polar (climate) science

Chairs: James Overland (NOAA)
and Peter Schweitzer (UAF)

This IPY 2012 Conference session addressed the following conundrum: while recent years have brought massive advances in understanding the polar systems, popular understanding of these processes seems to be diminishing. In light of tremendous changes threatening the state of the system in the Arctic and Antarctic, misperceptions of polar science are a matter of concern. Session participants included media representatives alongside climate and social scientists. While polar science communication certainly has room for improvement, the session did not just "blame" the state of affairs on communication failures. Rather, several of

IASC Medal Award Ceremony

During the Montreal Conference the IASC Medal 2012 was awarded to Igor Krupnik for his exceptional contribution to the success of the International Polar Year.

Over his career, Dr. Krupnik has been instrumental in increasing public awareness not only about polar bears and ice, but more importantly about the inhabitants of the north. He was awarded the medal for his role in bridging the gap between social and natural sciences and for his leadership during the International Polar Year.



IPY 2012: IASC Medal Award Ceremony

the participants pointed to a lack of receptivity or cultural predisposition as roadblocks to a broader understanding of potential risks and opportunities resulting from climate change. In the end, reframing information so that it is both relevant and non-threatening to the intended audience emerged as one of the recommendations of a stimulating session.

IASC Meetings at ASSW 2012

The **IASC Council**, at its meeting during the ASSW 2012, reviewed the activities of the five IASC Working Groups and highlighted that within only one year they initiated an impressive number of cutting-edge activities. Council also agreed to continue endorsing and sponsoring IASC Networks and adopted Terms of Reference for its networks. Underlining the importance of bipolar research, Council confirmed the value of the synergy with its southern hemisphere counterpart, the Scientific Committee on Antarctic Research (SCAR), and acknowledged the report presented by the 2nd SCAR/IASC Bipolar Action Group (BipAG II). Referring to the recommendations of the Bipolar Action Group, Council deci-

ded to establish two new Action Groups: (1) to provide advice on possible approaches to better address Arctic terrestrial and marine geological research in the broadest sense of geosciences and (2) to undertake the development of an IASC Data Policy that would provide guidance for IASC supported activities, and reinforce IASC's commitment to data management and sharing activities.

Council also discussed joint activities with the Arctic Council, such as Sustaining Arctic Observing Networks (SAON), Adaptation for a Changing Arctic (AACA) and Arctic Resilience Report (ARR), IASC's contributions to the International Council for Science (ICSU) and the cooperation

with the numerous partner organizations. IASC is committed to maintaining the momentum generated by the IPY and is actively involved in the planning of the International Polar Initiative (IPI). To prepare for an important event, namely the 25th Anniversary of IASC in 2015, Council mandated the Executive Committee to form a Steering Group to advance the planning. The final event of the 25 years of IASC celebration will be held at the Arctic Science Summit Week 2015 and include a third International Conference on Arctic Research Planning (ICARP III) and the presentation of an IASC history publication.



IPY 2012: IASC Council Meeting

Marine Working Group: The Arctic in Rapid Transitions program, an early career-led initiative of the AOSB/MWG will hold its first science symposium this fall in Sopot, Poland. The MWG is supporting this effort along with the development of a field study program proposal aboard the R/V Polarstern. The MWG will also continue to support the Distributed Biological Observatory with an emphasis on data issues that cut across disciplines and national boundaries. Recognizing the many issues revolving around data, the MWG has formed a small sub-group to discuss data issues and what can be done by an international science organization to facilitate the fair and open distribution of data. This group will explore the possibility of a one-day workshop prior to the ASSW 2013 in Krakow. The AOSB/MWG is also pleased to be a co-sponsor of two sessions during the ICES annual conference in Bergen in the fall. This is the first cooperative activity under the new agreement between IASC and ICES signed in 2010. Finally, the AOSB/MWG will launch a workshop in January 2013 to focus on the occur-

rence and stability of gas hydrates in the marine Arctic realm, particularly as seen in the perspective of a global warming scenario. The workshop intends to gather specialists and research groups for a three day workshop with the overall goal of formulating a draft of a pan-Arctic gas hydrate drilling proposal.

The **Atmosphere Working Group** continues to pursue activities related to its major scientific foci as developed in Potsdam in 2011. The first is a series of activities related to polar climate predictability. These workshops will focus on three key questions. First, why has the rate of change in the Arctic climate increased in the past decade while the rate of global temperature change has become steadier. Second, why is Arctic change (temperature and sea ice) at the edge or beyond the distribution of model estimates? And, third, do the ongoing amplified changes in the Arctic have an influence on extremes in the Arctic and mid-latitudes? The AWG is also focused on developing a multi-year, inter-

national, drifting ice station experiment in the Arctic in 2017 or beyond. A first workshop on this activity was held in Potsdam in September 2011 and a second will be held in Boulder in June 2012. The workshop will be held in conjunction with the CWG workshop on Ice at the Interface and will have participation from the MWG and the CWG. In addition, the AWG identified the mining of historical data to supplement present day in situ observations as a key activity. Over the next six months, the AWG will be developing a cross-cutting proposal to address ways to enhance historical data acquisition, not only of atmospheric data, but also terrestrial, human and social, marine and cryospheric.

The **Cryosphere Working Group** will kick off 2012 with two workshops. First, the CWG is planning and hosting, Ice at the Interface: Atmosphere-Ice-Ocean Boundary Layer Processes and Their Role in Polar Change, which will be held on 25-27 June in Boulder, CO. The goal of the workshop is to bring together observational

experts, theorists and modelers to better understand the boundary layer processes in the polar seas and to move GCM components towards "earth system" modeling. Second, the CWG is hosting a tidewater glacier workshop and summer experience in Spitsbergen aboard the R/V Horyzont II. The purpose of the workshop is to provide scientists, especially early career scientists, experience in field and remote sensing studies of tidewater glaciers. The intent is to bring together senior scientists, modelers and early career scientists in order to learn new techniques in measuring tidewater glaciers and to discuss the potential for an international program of coordinated field and remote sensing observations of calving glaciers in the Arctic. Additionally, the CWG is supporting the drifting ice station experiment activity of the AWG, revitalization of a bi-polar Ice Sheet Mass Balance and Seal Level (ISMASS) program, and the Global Terrestrial Network on Permafrost (GTN-P).

The Social and Human Working Group reviewed the status of the tasks and activities identified last year and discussed a number of new activities. A major SHWG activity in 2012 will be the preparations for a community-based workshop on Kodiak Island, Alaska, focused on local ecosystem changes and adaptations. The Working Group also re-confirmed its support of the 2nd Arctic Human Development Report (AHDR II) and discussed further opportunities to cooperate with the Arctic Council Sustainable Development Working Group (SDWG) and the International Network for Circumpolar Health Research (INCHR). Together with the Terrestrial Working Group, the SHWG will support the upcoming meeting "Observe, Understand and Act: Adaptively managing caribou abundance through Co-production of Knowledge" of the CARMA (Circum-Arctic Rangifer Monitoring and Assessment) Network, to be held this late fall. Finally, a new activity discussed at the meeting will be a workshop on the "Histories and Methodologies of Arctic Science and Arts" for which a scoping paper is currently being developed.

The Terrestrial Working Group identified five initial focal points for 2012, for which concrete plans will be developed over the next few weeks:

- (1) Initiate a project developing a circumpolar vegetation database. Data bases of Arctic vegetation collected using agreed standard classification methods will be collated from sources throughout the Arctic.
- (2) Establish a microbial genomics database for the Arctic cryosphere. Modern molecular and microbial techniques have not been applied throughout the Arctic and there is a relatively poor understanding of microbial diversity. The plan is to create a database of existing information that would provide a framework for inclusion of future assessments.
- (3) Develop a scoping report on the shaping forces of biodiversity. Monitoring biodiversity is a key element of CBMP but questions related to what shapes the biodiversity patterns that we observe or why those patterns might change in response to different drivers. Such knowledge is of scientific interest as well as fundamental for successful management of biodiversity.
- (4) Contribute to the second phase of "Back to the Future" (BTF II) within the Circumpolar Biodiversity Monitoring Program (CBMP) and the EU-funded INTERACT Project, and involve APECS. Building on the success of the IPY Project "Back to the Future", IASC TWD, INTERACT and CBMP will work together to initiate a second phase to increase the disciplinary scope and geographical representation of data and research site rescue. Explicit in BTF is the transfer of knowledge, data and site stewardship to early career scientists.
- (5) Develop a position paper for a scoping exercise addressing hydrological changes. A particular focus will be on estimating the net outcome of water-body draining and formation and the implications for biogeochemical cycling. Additionally, the Working Group is supporting the next meetings of the CARMA Network (see SHWG) and, together with the CWG, the Vulnerability of Permafrost Carbon Network



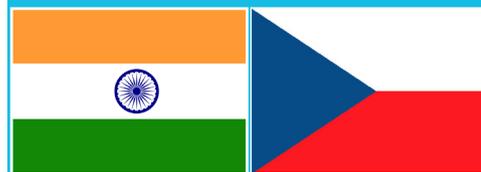
Huigeng Yang

IASC's New Vice President

The Council has elected the Chinese Council Member Huigeng Yang as the new IASC Vice President and member of the IASC Executive Committee.

NEW IASC MEMBER COUNTRIES

The Council approved the membership applications received from India and the Czech Republic and welcomes the two new member countries.



ASSW 2013/2014/2015

14 – 20 April 2013
Kraków, Poland

The Arctic Science Summit Week 2013 will be held in **Kraków, Poland**. It will include a three-day Science Symposium entitled: The Arctic Hub - Regional and Global Perspectives. The Council has agreed on holding the ASSW 2014, which will possibly include an Arctic Observing Summit in **Finland**.

Coming up in 2015 the IASC will hold its 25th Anniversary Celebration in **Tokyo, Japan** during the ASSW 2015, which will also include ICARP III (3rd International Conference on Arctic Research Planning).

For more information about these and other IASC Working Group activities, please visit the IASC website at www.iasc.info



IASC/SCAR/APECS receive the "budstikke" (IPY torch)

During the closing ceremony of the IPY 2012 Conference Peter Harrison presents the "budstikke" to Volker Rachold (IASC), Mike Sparrow (SCAR), Nancy Karetak-Lindell (Chair IKE) and Yulia Zaika (APECS).

IASC Early Career Scientist support was provided for:

- Rasmus G. Bertelsen
- Matthieu Chevallier
- Hidde De Haas
- Justyna Dudek
- Pedro Echeveste
- Jenny Fisher
- Natalia Galin
- Mariash Heather
- Elin Jantze
- Dubrava Kirievskaya
- Frigga Kruse
- Tao Li
- Laura Lukes
- Nathalie Morata
- Julia Schmale
- Matt Strzelecki
- Anna Zavadskaya
- Heather Gordon
- Jai Prakash Chaubey

New APECS Director



Alexey Pavlov

APECS is proud to announce that beginning in June, Alexey Pavlov will take on the challenging and exciting role of APECS Director. As the sole full-time employee of APECS, Alexey will be in charge of guiding the development and administration of the organization, along

with overseeing and managing all APECS activities, finances and events, recruitment of volunteers and members, and interacting with APECS mentors, advisors, and supporters.

New CliC Director

Jenny Baeseman

The World Climate Research Programme (WCRP), the Scientific Committee on Antarctic Research (SCAR) and IASC welcomes Jenny Baeseman as the new director of the Cryosphere and Climate Project (CliC) that is hosted by the Norwegian Polar Institute in Tromso, Norway. "We are fortunate to have Jenny as a member of CliC and WCRP",

said Ghassem R. Asrar, the Director of WCRP. "Jenny brings to CliC and WCRP network a wealth of knowledge on cryospheric research and education. She has been coordinating and managing the network of early career scientists in polar research as a major initiative of the IPY) and its successful legacy since 2006." Jenny Baeseman assumed the post of CliC director in April 2012.



News from the IASC Secretariat:

- Mare Pit, Executive Officer of the Secretariat in Potsdam, Germany, will be on maternity leave as of May 2012. She will be replaced by Ursula Heidbach, who will be in charge of outreach and communication in the Secretariat.

- During the Meeting at the IPY Montreal the IASC Council discussed the future of the IASC Secretariat and agreed to work towards a dispersed secretariat, with the headquarters in Potsdam (Germany) and sub-secretariats in other IASC member countries.

Arctic Council Secretariat Director position open

The Arctic Council Secretariat is currently seeking a Director. The final selection of the candidate for the position will be decided in autumn 2012. The expected date for commencement is 1 February 2013. More information on <http://www.arctic-council.org>

IASC Council

Country

Organization

Representative

Country	Organization	Representative
Canada	Canadian Polar Commission	David Hik, President
China	Chinese Arctic and Antarctic Administration	Huigen Yang, Vice-President
Czech Republik	Czech Centre for Polar Research	Josef Elster
Denmark/Greenland	The Commission for Scientific Research in Greenland	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)	Rasik Ravindra
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	Comite Polar Espanol	Manuel Catalan
Sweden	The Swedish Research Council	Magnus Friberg
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