

Shaping the Future of Polar Research

An IMPETUS for New Research Collaborations H. Kassens,¹ H. Lantuit,² C. Wegner,¹ J. Baeseman,^{3,4} M. Johansson⁵

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1. Purpose of Workshops

During the IPY, two international hands-on training workshops were held at the Otto-Schmidt Laboratory for Polar and Marine Research at the Arctic and Antarctic Research Institute in St. Petersburg, Russia. These workshops were under the conference heading of IMPETUS, meaning to be the catalyst for new collaborations between young Russian researchers and their international counterparts. The workshops were mostly funded by the German Ministry for Research and Education.

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2. IMPETUS 2007



Figure 1. The attendees and mentors of the first IMPETUS workshop.

50 young researchers from 14 countries met in St. Petersburg, Russia, to learn about the latest methods used in permafrost research and engineering and to discuss future plans to address climate change issues in permafrost areas.

The workshop provided insights into the latest techniques and methods used in permafrost research in fields as diverse as permafrost modeling, investigations of mountain ice segregation, bubbling from lakes, and thermokarst submarine permafrost detection. It brought together experts from Germany, Russia, Switzerland, and the United States to provide young investigators with a multidisciplinary and cross-border perspective on permafrost research, a much needed approach in a discipline marked by strong research history yet strongly entangled within national borders. Presentations and speaker biographies are now available at

http://pyrn.ways.org/activities/pyrnmeetings/2007-saint-petersburg.

3. IMPETUS 2008



Figure 2. 20 nations sharing the Russian culture and planning future research.

85 young researchers from 20 countries met in St. Petersburg, Russia, to learn about the latest methods on modern techniques in polar ocean observation and monitoring and to discuss the advantages and limits of various monitoring techniques and methods of data transmission. This was the largest workshop ever for early career scientists in polar ocean research. The workshop was jointly organized by the Otto-Schmidt Laboratory for Polar and Marine Research in Saint-Petersburg (OSL), located at the Arctic and Antarctic Research Institute, the Association of Polar Early Career Scientists (APECS), and the Permafrost Young Researchers Network (PYRN).

The workshop provided early career scientists with know-how and hand-on skills into the latest techniques and methods used in polar ocean observation in fields as diverse as seafloor mapping and Arctic Ocean Drilling, nutrient and primary production monitoring, data transmission, remote sensing of sea-ice, ocean and atmosphere, and climate modelling. It brought together experts to provide young researchers with a multidisciplinary and crossborder perspective on polar ocean research, a much needed approach in a field characterized by the presence of many different, partially overlapping disciplines. It aimed to improve existing and build up new collaborations and networks along the continuum of senior to early career scientists. Presentations and speaker biographies are available at

> http://www.otto-schmidtlaboratory.de/?Events:IMPETUS_2008.

5. Towards a next IMPETUS?

The success of these two workshops highlights the strong need for scientists to meet beyond the established national and disciplinary established borders. Workshops like these provide excellent platforms for young researchers to move beyond traditional borders, to build-up new networks, and to contribute to the early elaboration of new interdisciplinary monitoring projects, methods and relevant scientific questions.



Figure 3. Brazilian, Russian and German researchers discussing bi-polar international projects they could create together.

