



Arctic Expedition Prepares K-12 Teachers for the International Polar Year

E.B. Sparrow (1), V.A. Alexeev (1), I.A. Dmitrenko (1)

(1) International Arctic Research Center, University of Alaska Fairbanks

The International Arctic Research Center (IARC) anticipates the International Polar Year with a K-12 Teacher Arctic Expedition from August 15 to September 21, 2006, on board the Russian icebreaker “Kapitan Dranitsyn” . This Arctic Expedition is in concert with the fifth scientific cruise to the Arctic Ocean of the Nansen Amundsen Basins Observation System (NABOS) program that is funded by NOAA and NSF. NABOS, is one of the leading programs in the proposed IPY coordinated large-scale Mooring-based Arctic Ocean Observational System (MAOOS) that will provide long term measurements and crucial information for detection of major climatic changes in the Arctic Ocean. For more information on NABOS see their home page at <http://nabos.iarc.uaf.edu/index.php>

The pre-college teachers will be provided a unique opportunity to learn and engage in high-latitude Arctic climate change research by doing observations, measurements and analysis under the guidance of an international team of experienced polar researchers. In addition to the hands-on authentic research activities, there will also be science content presentations by polar scientists, and activities on best science teaching practices to be led by the IARC Education Outreach Director. There will be time allotted for teachers to develop curricular materials and a plan for implementing in their classrooms, what they are learning on the Arctic Expedition. Logistics are being arranged for real-time transmissions from Kapitan Dranitsyn to classrooms during the expedition.

Eighteen K-12 teachers are expected to participate, with eight teachers coming from the United States, five teachers from Russia and five from Canada. This Arctic Expedition builds on the successful 2005 IARC Summer School for graduate students and early career scientists, organized in collaboration with Laval University (Canada),

the Arctic and Antarctic Research Institute (Russia), and the Obukhov Institute of Atmospheric Physics (Russia). Funding was provided for the 2005 Summer School by NSF, NOAA, the Network of Centres of Excellence of Canada: ArcticNet, the Russian Foundation for Basic Research, the Russian Ministry for Education and Science, the Russian Academy of Science and the Japan Agency for Marine-Earth Science and Technology. This year's Arctic Expedition for K-12 teachers will similarly be funded, and is also being funded and organized in collaboration with the NOAA Climate Change Education Program.