

IAC2009

Ukrainian Polar Association
National Kharkiv University
With the help of
Ukrainian Scientific Club
and British Council in Ukraine

**International scientific conference
"International Polar Year in Ukraine: results and horizons "**

May 22-24 2009, Kharkiv, Ukraine

Dear colleagues!

We have the honour to invite you to an international conference to discuss the scientific contribution of Ukraine to the world's treasury of knowledge of the Polar Regions, created by the International Polar Year.

Though the main goal of the conference is summarizing the IPY's results – drawing up investigations foreground to the worldwide scientific community, reviewing latest accomplishments and questions yet to be answered – there will also be discussed the project of the Ukrainian State Program of Investigations in Antarctica of 2011-2020 to fully integrate national researches into international scientific projects planned during the Polar Year. The revival of the Ukrainian Polar Association also brings forth questions of scientific community's possible role and place in national and international programs of polar research, and of efficient cooperation between scientists and officials.

Sections:

Biology and ecology; physics of atmosphere and near space; meteorology and climate; geology, geophysics, and glaciology; underwater investigations (photo-, video), Antarctic photo-, video.

Organizing Committee:

Andrij Utevsky, *National Kharkiv University* – *chief of the C* autevsk@yandex.ru

Yevgen Dyky, *National University of Kyiv-Mohyla Academy* – *deputy chief of the C*

Nataliya Shulga, *Ukrainian Scientific Club* – *scientific coordinator*

Katerina Petrenko, *Central Geophysical Observatory* – *secretary of conference*

Svitlana Krakovska, *Ukrainian Scientific Research Institute of Hydrometeorology*

Gennadi Milinevsky, *National Taras Shevchenko University of Kyiv*

Vladyslav Tymofeyev, *National Taras Shevchenko University of Kyiv, Ukrainian Scientific Research Institute of Hydrometeorology*

Languages: English and Ukrainian, publication in English.

To participate in the conference, please send your application before **February 15**, 2009. Abstracts (an example is given in the attachment) are to be submitted before **March 15**, 2009 via e-mail **only**; the corresponding address is IAC_2009@ukr.net . Please name your letter Abstract IAC2008.

Organizing Committee retains the right to choose plenary and poster papers. Registration fee 20 \$ is to be paid during registration. Distribution set includes book of abstracts and other information materials. For further information, look up www.nauka.in.ua after **January 30**, 2009.

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An example of abstracts of the IAC2008 conference: no more than 300 words, MS Word, ASII, Arial 12 (text) and 10 (information about authors). The name of the author presenting the data at the conference is **in bold script**, his e-mail address is given. Please send to IAC_2009@ukr.net

THE STRUCTURE AND DYNAMIC OF THE WATER IN THE REGION

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The structure of the thermohaline and the characteristics of the currents in the region of the shelf on the base of chemical, optical and current observations during the) and expeditions are analyzed. All observations were realized during three years at the end of March – the beginning of April. Water area with the depths have been examined. It is shown that the vertical stratification of the all researched environment parameters feature of the vertical structure is typical for the Antarctic shelf water at the beginning of the autumn season. Tidal activity is the essential factor which induce variability in the thermohaline and hydrochemical fields.

Part connected with this phenomenon in the summary dispersion of the temperature, salinity and oxygen content at the scale of the and the diurnal tidal waves, which come to the shelf from the open Pacifica. waves spread from NNW to SSE, diurnal waves – from. The remainder currents represented by the wind and the compensation components. Wind currents were typical for the upper water layer. Compensation currents have been fixed near bottom. Tidal and remainder currents were very weak. Speeds were not more than.

The quasi-stationary ozone distribution in the high latitudes of Northern and Southern hemispheres are investigated. The 8th version of TOMS total ozone satellite data is used. A visualization of the variations of the longitudinal ozone distribution from day to day was made using the five-month time–longitude plots for the 1979–2004 period. Then the five-month average longitudinal profiles were analyzed to determine the main characteristics of the quasi-stationary distribution of TOC at the 55-70-latitude band, divided in three 5-degree zones. The characteristics of planetary wave impact on ozone distribution are calculated. Seasonal variations of amplitude and phase values are compared for Arctic and Antarctic regions. Long-term changes of quasi-stationary wave characteristics are discussed.