

CURRICULUM VITAE

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Education:

2004-present: PhD student, Arctic and Antarctic Research Institute, Department of Perfection of the Ice Data System, St. Petersburg, Russia.

PhD thesis: Sea Ice Cover Monitoring of the Arctic Ocean Using ENVISAT/ASAR.

2001-2003: Master's degree in Physical Oceanography. Faculty of Oceanology, Russian State Hydrometeorological University, St.Petersburg, Russia.

Thesis: Variability of the sea level in the Arctic Ocean and Nordic Seas.

1997-2001: Bachelor's degree in Physical Oceanography, Faculty of Oceanology, Russian State Hydrometeorological University, St.Petersburg, Russia.

Thesis: Method of the reconstruction of thermohaline characteristics at the surface of the Arctic Ocean and their statistical structure.

Scientific interests:

Remote sensing of sea ice; Satellite sea ice data assimilation and interpretation; Automatic classification of sea ice; Neural Network technique.

Languages:

Russian–native
English–good user

Skills:

MATLAB, FORTRAN, BASIC, GIS-technology: ArcView, SURFER, GRAFER

Practice courses:

2008, 26-30 May: Theoretical course of sea ice experts–ice observers, AARI, St. Petersburg, Russia.

2007, 9-14 September: International Summer School on High Northern Latitude Climate, St.Petersburg, Russia.

2007, 2-14 July: Sea Ice Summer School, Svalbard, Norway.

2006, April-May: visit and practice at NERSC, Bergen, Norway.

2000: Sea Ice Charts analysis, AARI. St. Petersburg, Russia.

1999: Sea ice observations and data processing.

1998-1999: Diving courses and diving diploma.

1998: practise in hydrometeorological observations, hydrochemical samples, data processing and preliminary analysis.

Student researches and presentations:

- ◆ Planetary phenomena of El Nino.
- ◆ Analysis of components of heat balance in the North Atlantic.

Expeditions:

2001: Oceanographic expedition on board R/V Lance, Fram Strait and Greenland Sea. Oceanographic observations (TRAKTOR EC Project).

1999: Sea ice expedition in the Finland Gulf. *In situ* Sea Ice and Snow measurements.

1998-1999: Oceanographic expeditions on board catamaran “Tsintausus-2”, Baltic Sea. Meteorological and CTD observations.

Conferences:

The 6th Russian annual conference “The modern problems of remote sensing of the Earth from space”, Institute of Space Researches, Russian Academy of Sciences, Moscow, November 10-14, 2008. Oral presentation: Sea ice classification from ENVISAT SAR images (N. Piotrovskaya, V. Alexandrov and A. Korosov).

The 2nd International workshop “Advances in SAR Oceanography from ENVISAT and ERS missions” (SEASAR 2008), ESA ESRIN, Frascati-Rome, Italy, January 21-25, 2008. Oral presentation: Sea Ice Classification using ASAR Alternating Polarization Images (V. Alexandrov, N. Piotrovskaya, S. Sandven and K. Kloster).

http://earth.esa.int/workshops/seasar2008/participants/96/pres_96_sandven.pdf

Conference “High Latitude Seas and Sea Cryosphere”, AARI, St.Petersburg, Russia, October 25–27, 2007. Oral presentation: Digital processing of ENVISAT SAR images of the sea ice. (V.Y. Alexandrov and N.Yu. Piotrovskaya).

Research Seminar “Norwegian-Russian collaboration in Svalbard”, Tromsø, Norway, March 9-10, 2006. Poster: Automatic classification of the Arctic sea ice from Envisat/ASAR images using Neural Networks (N. Piotrovskaya).

Publications:

V.Y. Alexandrov and **N.Yu. Piotrovskaya**, 2008. Derivation of the backscatter coefficients for different sea ice types from Envisat ASAR images. *Earth Observation from Space*, № 4, p. 3–11.

V.Y. Alexandrov and **N.Yu. Piotrovskaya**, 2008. Digital processing of ENVISAT SAR images of the sea ice. *Problems of Arctic and Antarcti*, Proc. of the conference “High Latitude Seas and Sea Cryosphere”, №1 (78), p. 90–94.

N.Yu. Piotrovskaya and V.I. Sychev, 2001. Comparison of the calculation methods of thermohaline characteristics at the surface of the Arctic Ocean for the climate estimation. *Actual problems of the modern science: Proc. of the 2th International conference of young scientists and students. Natural sciences. Path 5. Ecology. Samara, Russia*, p. 49.