



International School on INtegrated Environmental Studies in the Arctic (INES) with respect to climate changes

28 September – 2 October 2020

FIRST ANNOUNCEMENT

The Arctic region is undergoing rapid climate changes, which is manifested in many ways, e.g. temperature changes are over 3 times greater than the average for the Northern Hemisphere. This phenomenon is commonly known as the Arctic amplification. Therefore, since this is a key area to investigate, and the changes are very rapid and potentially affect the entire globe, the scientific research must be interdisciplinary.

The main goal of the School is to facilitate international and interdisciplinary cooperation in studies on the interactive effects of climate change on Arctic nature and societies. We expect that participants of the International School on Integrated Environmental Studies in the Arctic will understand the need for interdisciplinary scientific approach to discuss issues connected to the Arctic and Climate Change, as well as have a wider perspective of these changes.

The 5-day program will cover a wide range of disciplines: climatology, atmospheric and marine chemistry, biology and physics, studies of marine ecosystems in the Arctic and its socio-economic development.

With guidance from eminent scientists and dedicated group mentors, you will work in small teams on interdisciplinary projects related to climatological changes in the Arctic.

This practical course is designed for early career scientists (**graduate students, PhD students and young researchers, up to 2 years after completion of PhD**) who want to gain confidence, experience and in-depth knowledge about the interdisciplinary Arctic, with a special emphasis on science fieldwork.

Participants will have a chance to work on board of r/v Oceania, to carry on interdisciplinary measurements.

There is a 100 euro FEE which includes: accommodation, light lunch and coffee breaks during 5 days of school.

The School comprehensive program includes the following research topics:

- Oceanography basics and Arctic cryosphere
- Marine and terrestrial food webs, external drivers (abiotic and biotic), and adaptations to changing conditions in the Arctic.
- Societal relevance of climate change in the Arctic.
- Biodiversity changes and adaptations to changing climate.
- Physical and chemical atmospheric processes, including long range and local sources of pollution.
- Interdisciplinary measurements on board r/v Oceania.
- Long-term observations and trends in aerosols, temperature, precipitation, clouds, radiation and ice and snow cover/extent.
- Exercise on Atmosphere, Oceans, Cryosphere, Biology/Ecology
- Real data analyses.

ORGANIZING COMMITTEE

Luca Fererro; University of Milano-Bicocca
Paulina Pakszys; IO PAN
Christoph Ritter; AWI
Tymon Zielinski; IO PAN

LECTURERS

Silvia Becagli; University of Florence
Carlo Barbante; University of Venice
Georg Hansen; NILU
Luca Fererro; University of Milano-Bicocca
Ulf Karsten; University of Rostock
Piotr Markuszewski; IO PAN
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Jan Marcin Weslawski; IO PAN
Tymon Zielinski; IO PAN
Adam Nawrot/Bartłomiej Luks; IG PAS
Judah L.Cohen; AER, a Verisk Business
Agnieszka Promińska; IO PAN
Agnieszka Beszczyńska-Moeller; IO PAN
Piotr Wieczorek; IO PAN

Interested persons should submit a short Abstract, which includes information about person's research background and current and future interests.

IMPORTANT DATES AND DEADLINES

- Short abstract submission 23 March 2020
- Decision Letter 8 June 2020
- The school 28 September – 2 October 2020

SCHOOL LANGUAGE

All classes and activities will be run in English.

LOCATION

The school activities will be held in the Institute of Oceanology, Polish Academy of Sciences in Sopot, Poland. Home Page: <https://www.iopan.pl>.

ACCOMMODATION

Information on accommodation will be provided in the second announcement.

RESEARCH BACKGROUND AND INTERESTS SUBMISSION

Please fill the form present on the school webpage and send to **Paulina Pakszys** (Email: pakszys@iopan.pl) by **23.03.2020**. The abstract should include information about your research background and interests.

This initiative is a joint effort of the Institute of Oceanology Polish Academy of Sciences, University of Milano-Bicocca, Alfred Wegener Institute, University of Florence, NILU, NPI.

The School is a contribution to the Ny-Alesund Atmosphere Flagship Programme.