



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

Second edition: the role of climate feedbacks

Online event

4 October – 8 October 2021

FIRST ANNOUNCEMENT

The Arctic is undergoing rapid climate changes; polar regions have been warming at more than twice the global average over recent decades.

Observed changes, climate dynamics in polar regions result from numerous interactions, both radiative and non-radiative, involving the atmosphere, land surfaces, ocean, sea ice and ice sheets. Due to the complexity of the underlying processes, we need to fully get through Arctic Feedbacks curriculum in Arctic domain. Therefore, since this is a key area to investigate, and the changes are very rapid and 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 natural environment and both local and global 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 Amplification and Arctic Feedbacks, as a wider perspective of numerous interactions related to mentioned elements of earth's system in polar regions.

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

Each day we will provide 2 lectures (each 60' long) and dedicated interactive classes (each 90' long) where you will be working in small teams with real datasets with guidance from eminent scientists and group mentors, on interdisciplinary projects.

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.

The School is co-sponsored by **Aerosol d.o.o., Slovenia**
a developer and manufacturer of Aethalometer, Total Carbon Analyzer, DRI-2015 OC/EC Analyzer and associated instrumentation.

Aerosol is focused to research and development in the field of carbonaceous aerosols.

and **project Elektroniczne Centrum Udostępniania Danych Oceanograficznych eCUDO.pl**

No POPC.02.03.01-00-0062/18-00, funded under Program Operacyjny Polska Cyfrowa, II oś priorytetowa E-administracja.



There is no fee, the school is fully free of charge, only registration is needed.

Registration will be opened at the beginning of June.

Organizers will provide certificate of participation to all of ours participants in this 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.
- 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.

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ORGANIZING COMMITTEE

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Paulina Pakszys; IO PAN
Christoph Ritter; AWI
Tymon Zielinski; IO PAN

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IMPORTANT DATES AND DEADLINES

- Registration opening 31 May 2021
- Registration closing 28 June 2021
- Decision Letter 8 June 2021
- The school 4 October – 8 October 2021

SCHOOL LANGUAGE

All classes and activities will be run in English.

LOCATION

The school activities will be held online within ZOOM platform, also on PABLET as an additional tool for posters/idea/presentation. School is hosted by the Institute of Oceanology, Polish Academy of Sciences in Sopot, Poland.

RESEARCH BACKGROUND AND INTERESTS SUBMISSION

Please fill the registration form on the school webpage by **28 June 2021**.
In any case please contact Paulina Pakszys (email: pakszys@iopan.pl)

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, Norwegian Institute for Air Research and Norwegian Polar Institute.

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