

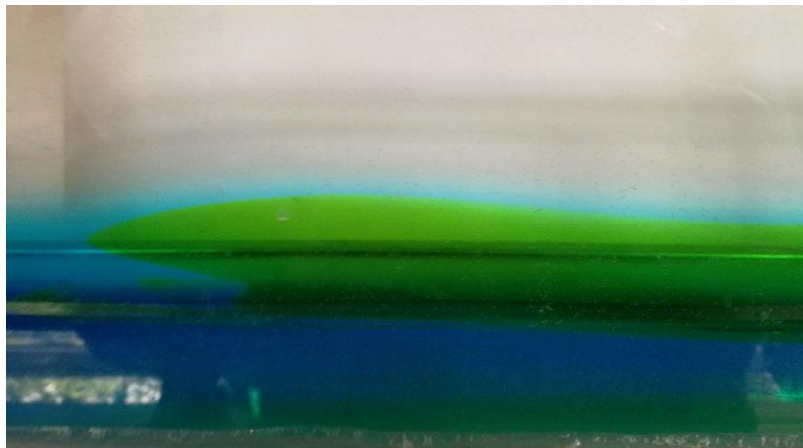
## Report from the meeting of Interdisciplinary Polar Studies

Institute of Geophysics PAS, Warsaw

21-25 May 2018

From 21 to 25 May 2018 in Warsaw the last meeting of Interdisciplinary Polar Studies was organized. During those five days, students from the University of Silesia and Institute of Oceanology Polish Academy of Sciences within the Centre for Polar Studies had the pleasure to take part in interesting lectures, exercises and laboratories. The main two topics of the meeting were **“Abiotic monitoring systems in the Arctic ”** and **“Unity and diversity”**.

The first day of the meeting started with a lecture given by Dr Magdalena Mrokowska from IGF PAS, about *Hydrodynamic Models Laboratory*. During the lecture Dr Magdalena Mrokowska presented the laboratory and



introduced us to modelling of buoyancy-driven flows. After

Figure 1 An example of a density current - experiment taken by the students in Belsk laboratory.

lunch break, Dr Agnieszka Beszczyńska-Moller from the Institute of Oceanology PAS, presented an interesting lecture about *International initiatives to sustain Arctic Observations*. Information about the most important initiatives taken by IPY, SAON or AON were presented. The lecture gathered much attention not only among the PhD students, but also employees of the Institute. In the afternoon of the first day of the meeting, *EU Arctic Cluster – INTAROS and its links to other Arctic projects* presentation took place. Dr Agnieszka Beszczyńska-Moller presented a short introduction about Integrated Arctic Observation System and main objectives of the project. The overall goal of the INTAROS is to build an efficient integrated Arctic Observation

System by extending, improving and unifying existing systems in the different regions of the Arctic.

During the second day, we had a great opportunity to listen our colleagues' presentations from the previous year of the Interdisciplinary Polar Studies. It was a very interesting experience for us because we could learn more about their ongoing works and also take part in discussions about the graduation of their PhD thesis. Last lesson was led by Prof. dr hab. Marek Lewandowski from IGF about global changes in the past and in the future. He explained us the different points of view existing in regard of global warming. We also discussed the hypothesis that the current glaciation is the last global glaciation in the Earth's future history.

The third day was more practical as we went to IGF PAS Belsk observatory. Our practical classes were about the buoyancy-driven flows in Hydrodynamic Models Laboratory led by Dr Magdalena Mrokowska from Institute of Geophysics. Those laboratory classes were very interesting as we could

prepare our own water flow experiments. After the lunch break we had two lectures. One of them was led by Prof. dr hab. Jacek Jania from the University of Silesia about the unity and diversity of polar sciences. The last lecture during that day was about recent discoveries on



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Figure 2 Students and dr Magdalena Mrokowska in the Hydrodynamic Models Laboratory in Belsk.

biome. Thanks to this we could meet a very passionate scientist: Dr Krzysztof Zawierucha from Adam Mickiewicz University in Poznań.

First lecture on the third day of the meeting, *King George Island, Antarctica – environment, research and protection* was led by Dr Marta Potocka. This lecture was very fascinating due to the research area - most of our studies are focused on the Arctic, not Antarctic. During the next lecture we had a chance to listen a professor from the University of Iceland in Reykjavik, Prof. Guðfinna Aðalgeirsdóttir, who presented *Impact of the Greenland ice sheet in warmer climate as simulated with the coupled model system EC-Earth – PISM*. The lecture ended with a discussion about the model, in which not only students but also scientists from IGF PAS took part. After the lunch break we started *Polar social sciences and humanities: specificity,*

*scope and importance* lecture prepared by Dr hab. Michał Łuszczuk from the Maria Curie Skłodowska University in Lublin, where different aspects of social sciences and influence of politics on Arctic and Antarctic were presented. Next lecture was also related to humanities and social sciences. Dr Agnieszka Skorupa from the University of Silesia gave an interesting speech about Polar psychology (from adaptation to work in polar stations to space mission simulations). One of the conclusions from this topic is that people living in the polar regions, e.g. the Svalbard archipelago should have better psychological protection due to the frequent occurrence of sadness and depression. As the summary of this day we had short lecture with Prof. dr hab. Jacek Jania about the conclusions from the whole meeting and about our future validation of PhD thesis.

The last day was the shortest from the whole meeting. After the breakfast we had two lectures. First of them, was about the relevance of science communication, interactions with journalists, different formats of science communication, and how to explain our research in a simplified language. It was led by Dr Arko Olesk from the Tallinn University in Estonia. Next lecture was led by Dr Agata Goździk from the Institute of Geophysics, and the topic was EDU-ARCTIC project. After the lunch we had a summary meeting, led by Prof. dr hab. Piotr Głowacki.

During the last meeting of 3rd year PhD students of the Centre for Polar Studies, all participants had the chance to take part in interesting lectures, seminars and laboratories. Students had a great opportunity to gain a new knowledge which will be very useful for their future work and meet many interesting people from the scientific community. The last meeting was very beneficial and characterized by a very pleasant ambiance.

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