

# Report from the 2nd meeting of 1st year PhD students of Interdisciplinary Polar Studies

Warsaw 16-18.11.2015r.

For the second time PhD students from Interdisciplinary Polar Studies (ISP) meet to learn, experience and expand their horizons. This time meeting was organized in Institute of Geophysics Polish Academy of Sciences in Warsaw. After brief introduction and organization matters from dr hab Mariusz Majdański, prof. PAN and dr hab. Piotr Głowacki we were prepared for our first day of lectures and laboratory exercises.



The first lecture given by dr hab. Piotr Środa was “The Earth’s crust”. The lecture was divided into three parts describing the basics of geophysics, “structure, evolution, geophysical methods”. After coffee break, dr hab. Tomasz Janik, prof. PAN gave us a “Seismic studies of the lithosphere in Western Antarctica” seminary. During the presentation, we get knowledge about Antarctica

research history, policy and detailed about deep seismic soundings. After the lunch break, we moved on the other side of the globe. Dr Wojciech Czuba, gave us a presentation about “Seismic studies of the lithosphere in the Arctic”. The presentation was richly illustrated by maps and field work photos. Dr Wojciech Czuba introduced us the reasons of why the Arctics research are so important in geophysics matters. Next we get to “Dynamics of ionosphere in polar regions” lecture given by dr hab. Krzysztof Mizerski, prof. PAN. The lecture contain information about ionosphere dynamics, general structure and more detailed description of the ionosphere in polar regions. After short break prof. Mizerski continued and moved to the “Earth’s magnetic dynamo” topic. That presentation closed the first day of our meeting.





Next day, after breakfast “The structure of Earth’s magnetic field. Fundamentals of paleomagnetism” seminar took place. Dr Tomasz Werner introduced us with the paleogeographic survey methods, made us familiar with the application and limitations of those studies. After coffee break we moved to the laboratory. Dr Tomasz Werner showed us the equipment used in paleogeographic

survey. For example we had a chance to use magnetometer. After lunch dr Krzysztof Michalski

refer his presentation about “Paleomagnetism as a tool for geotectonic reconstructions”. Then after coffee break we had a chance to discuss with our 2nd year PhD students from Warsaw about theirs PhD thesis during the “Paleomagnetic and rock-magnetic research of the Triassic rocks from Svalbard Archipelago” and



“Paleomagnetic, rock-magnetic and petrographic investigations of magmatic and meta-magmatic rocks of the Western Spitsbergen” seminars. Short discussion took place, and we

took the opportunity to see a real rock samples from Hornsund, prepared for further paleomagnetic analysis.



The third day starts with dr Mariusz Majdański lecture “Methods of seismic tomography”. The seminar was containing theoretical introduction, uncertainty analysis for seismic tomography methods. But mostly interesting for us - the photos

from the IGF field work (SUDETES 2002, Admiralty Bay 2006, Koło 2013). Also the project

results from the measuring and the modeling where shown and discussed. At the end of the 2nd meeting of Interdisciplinary Polar Studies in Warsaw, prof. dr hab. Aleksander Guterch gave us a very right in content lecture about the Seismic studies of the lithosphere in Central and Eastern Europe. The lecture mainly focused at the issues of the major projects that took place at the domain of Central Europe during 1997 – 2003y. period.



To summarize, the 2nd meeting of 1st year PhD students of Interdisciplinary Polar Studies in Warsaw gave us a great opportunity to expand our horizons at the discipline of geophysics. The lectures gave us a chance to discuss what happened to be very fruitful in terms of our understanding. The range of the material presented on the seminars was wide, but hopefully due to good communication between lectures and students we will pass the exam without complications.

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