



The PhD position is offered by the Institute of Biochemistry and Biophysics, Polish Academy of Sciences within the National Science Center of Poland project i.e., “**Quantitative assessment of sediment transport from glaciers of South Shetland Islands on the basis of selected remote sensing methods**”. Please note that in order to be eligible for this position, applicants must meet National Science Centers eligibility criteria for the scholarship, which will be offered for a period of 36 months.

The overall goal of the project is to quantitatively estimate of suspended matter delivered from the glaciers of the South Shetland Islands to their shelf waters with the use of a wide spectrum of remote sensing methods in order to assess the water’s turbidity. We address two hypotheses: (1) general: that increased activity of glaciers and shifting their hydrological cycle due to the climate change and the amount of glacial material delivered to the waters of shelf South Shetland are interrelated and thus the impact of glaciers on the value of suspended solids in these waters changes and; (2) detailed one: that the existing algorithms and methodology of the evaluation parameters of seawater from satellite, terrestrial or aerial images are by no means universal, and it is important to complement them with new theoretical considerations and field experimental observations.

The candidate will be expected to complete the requirements of the **Doctoral degree** within the **36 month duration** of the project. He/she will be supervised by the leader of the team Dr Robert Bialik, and will be examined according to the rules of the institution. He/She should have a Master of Science Degree or equivalent qualification in physical geography, oceanography, civil engineering, sedimentology or a closely-related discipline. The main focus of the PhD will be an analysis of satellite and aerial images to determine ranges and concentration of suspended solids in the sea water. The ideal candidate should be familiar with remote sensing methods and have extensive experience in field/experimentation, statistical data analysis, and be familiar with MATLAB and ArcGis or closely-related software. Experience in Polar Expeditions and knowledge of Spanish will be desirable. The candidate will be expected to work partially in Antarctica, during 3-5 months expeditions and work on secondment at other partners in the project i.e., from Spain and Chile. He/she will attend a series of training in key fundamental and applied subjects relevant to the polar studies i.e., full training of UAV surveys. He/she will be expected to attend at least one international conference per year i.e., SCAR Open Science Conference in 2020 in Australia.

All general enquiries and formal applications including: letter of motivation, current CV, copies of certificates, list of courses with grades taken during MSc and BSc studies, (all in Polish or English) should be send to Dr Bialik ([rbialik@ibb.waw.pl](mailto:rbialik@ibb.waw.pl)).

Closing date for applications: **Friday 4<sup>th</sup> May, 2018.**

The position will be started in **June, 2018.**

The first **Antarctic Expedition** is going to be in **January, 2019.**