



**Institute of Geophysics
Polish Academy of Sciences**

BULLETIN 2/2019, JUNE 2019

Dear Friends,

Welcome to the second issue of the IG PAS BULLETIN. In this time we will summarize the Institute's activities and achievements from the last month and invite you to cooperate in the citizenship project. There's also a first ever Op-Ed column, this time delivered by Professor Piotr Głowacki. Enjoy your reading!

Latest events

Workshops, Science Picnic, conference, modern laboratory and a new edition of doctoral education.

The Institute leading an international consortium

The Institute at the head of an international consortium Geophysical threats related to the exploitation of Earth's natural resources, including seismic threats, play a huge and constantly growing socio-economic role in Poland and around the world. To meet this challenge, scientific entities from the 16 European Countries, headed by the Institute of Geophysics PAS, consolidated their work under the EPOS (European Plate Observing System), and their unique character was emphasized by the creation of a dedicated WP14 package Thematic Core Services Anthropogenic Hazards (TCS AH) as part of the implementation phase of the EPOS project (EPOS-IP). In May an inaugural meeting and workshops were held in Pisa.

SCIENCE PICNIC 2019

Once again, the GEOPLANET stand, with the participation of the Institute was an attraction of the Science Picnic of the Polish Radio and the Copernicus Science Center. This year, the visiting crowds were really enormous! We had an opportunity to present some measuring equipment, and the boat Gavia immer was a cherry on top!

Modern geomagnetic laboratory in Belsk

On Thursday, June 13, in a beautiful natural setting at the Central Geophysical Observatory in Belsk, a modern Geomagnetic and Magnetotelluric Research Infrastructure Research Center was opened - GeoEIMag coordinated by the Institute of Geophysics PAS and Institute of Geodesy and Cartography as part of the EPOS-PL European Observation System.

Doctoral schools: new opening of post-graduate education

The "Constitution for science" introduced a number of changes in the third level education system. Previous doctoral studies (third-cycle studies) have been replaced with the education of PhD students in doctoral schools. The right to run a doctoral school with a scientific category was attached - it may be conducted by an entity conducting scientific activity in at least two scientific disciplines with the category A +, A or B +. In the place of environmental doctoral studies, entities that have at least one scientific category not lower than B + may run a joint doctoral school. Soon recruitment will begin for two doctoral schools, of which the IGF PAN is part of: GEOPLANET and the International Environmental Doctoral School at the Center for Polar Studies at the University of Silesia in Katowice

EDU-ARCTIC project final conference and new mobile app!

Thousands of teachers and students involved, hundreds of online lessons, educational resources, polar expeditions: in Paris, on May 23 and 24, with the participation of distinguished guests, we summarized the EDU-ARCTIC project. In the historic interiors of the Polish Academy of Sciences Station in Paris, we hosted ambassadors, politicians and scientists - including the Nobel Peace Prize laureate, prof. Terry Callaghan, decision makers from the Arctic states or representatives of the Polish ambassador and the Ministry of Science and Higher Education. There were educators from France, Poland, Greece, Bulgaria, Albania and even India!

The conference was also an opportunity to officially launch the "THE ARCTIC EXPLORER" mobile application - a virtual journey through the Arctic in the form of a Quiz. This is a particularly interesting results of the project, and it was no coincidence that it was presented by 14-year-old Yngva who came to Paris with her teacher from the Faroe Islands. It was Yngva's idea, submitted during the

second edition of the competition, that inspired us to prepare an application that not only allows you to test your knowledge of polar regions, but also ask yourself questions in biology, geography, geology or simply broadly understood natural sciences. [The application can be downloaded for free from the Android store.](#) We encourage you to play and add your own questions :)

Upcoming events

Who will win a scholarship this year? How to use citizen science for your own research?

June 25 - the ceremony of presenting the scholarship prof. Kacper Rafał Rybicki, combined with the awarding of doctoral and postdoctoral diplomas. Scholarship, funded by the late Professor Rybicki, an eminent scholar, long-term employee and Director of the Institute of Geophysics PAS, is awarded to a young (up to 35 years) scientific employee of the Institute of Geophysics PAS or participant in a doctoral study run by the Institute of Geophysics, for outstanding and creative research work in the field of fundamental science Earth, in the discipline of geophysics, documented by a publication or series of publications published in the three years preceding the date of awarding the Scholarship. We invite you to room 213 at 11:00!

BRITEC, or society for scientists: we invite you to cooperate! The BRITEC project proposes to introduce scientific research into school practice through civic learning activities co-created by schools and research institutions, initially in four partner countries (Belgium, Greece, Poland and Spain), and then all over Europe and beyond. An important element of the BRITEC project is the creation of an international community of teachers and researchers, the aim of which will be to determine the conditions for cooperation in the field of school education and research. If you want to be part of this project, please report your civic initiative, which will be implemented by students under the watchful eye of teachers in the school year 2019/2020. Sketch the topic, question and research methods, and the students will help you in obtaining the data you specify, thus saving time that you would have to spend on field trips, or provide you with information that would previously be difficult or impossible to obtain.

Management's view

Ladies and Gentlemen, below we present selected data from the financial report for 2018:

Operational costs: 31 146 000 PLN – including remuneration with overheads: PLN 18 181 000 PLN

The statutory subsidy received in 2018: PLN 14 432 000 PLN.

Thus, it is obvious that from the financial point of view it is important to obtain further projects for the continuity of our activities and further development. Project Management Department provides information about the possibilities of obtaining financing from various sources - we encourage you to [APPLY](#).

(non)Scientific op-ed - by Professor Piotr Głowacki

Participation of the Institute of Geophysics PAS in the implementation of the tasks of the National Leading Research Center in 2014-2018

In the summer of 2013, in response to second competition announced by the Ministry of Science and Higher Education for the National Scientific Leading Centers in the field of natural sciences together with Prof. Jacek Jania from the Faculty of Earth Sciences, University of Silesia in Katowice, we have initiated the project of jointly establishing the Center for Polar Studies inviting cooperation as a partner of the Institute of Oceanology of the Polish Academy of Sciences. The main purpose of the future consortium, briefly referred to as **Polar KNOW**, was the further development of interdisciplinary research on the Arctic and Antarctic environment at a global level, and even more effective training of young scientific staff.

An additional effect of joint activities was to be the activation and cooperation of inter-institutional interdisciplinary research teams:

- to examine and understand changes and interactions between the most important abiotic elements of the polar environment being the main subject of the proposed scientific studies, as well as the significant impact of these changes on the marine and terrestrial ecosystems.
- to assess the impact of accelerated climate changes in the Arctic on the climate and extreme phenomena in medium latitudes, including those covering Poland.

Suggested proposals for a new pro-quality interdisciplinary doctoral and student education, as well as a research program concentrated in the unique Arctic field laboratory Hornsund in Svalbard

received the best marks in the eyes of foreign and domestic experts, which resulted in giving the Center for Polar Studies the status of the National Leading Research Center for 2014-2018 in the field of Earth sciences.

What else was Polar-KNOW in these years, apart from additional financing, for IGF PAN?

He was an opportunity to acquire new, young, well-educated staff for the development of research and tasks planned at the Institute of Geophysics in the coming years, as well as the release of new initiatives and even greater engagement among the scientists working there and support staff.

During these five years 144 people were involved in the implementation of Polar-KNOW projects, ie over ¾ of the employees employed or educated by the Institute.

The eight thematic teams appointed by the Director of the Institute considered 531 applications for financial support for actions improving the qualifications and competences of employees and PhD students, supporting the program of internships and trips abroad, inspiring applications for national and foreign grants, or mobilizing to publish research results in the best scientific journals.

The direct beneficiaries of financial support by Polar-KNOW were 117 people, and the amount of support is PLN 3 million.

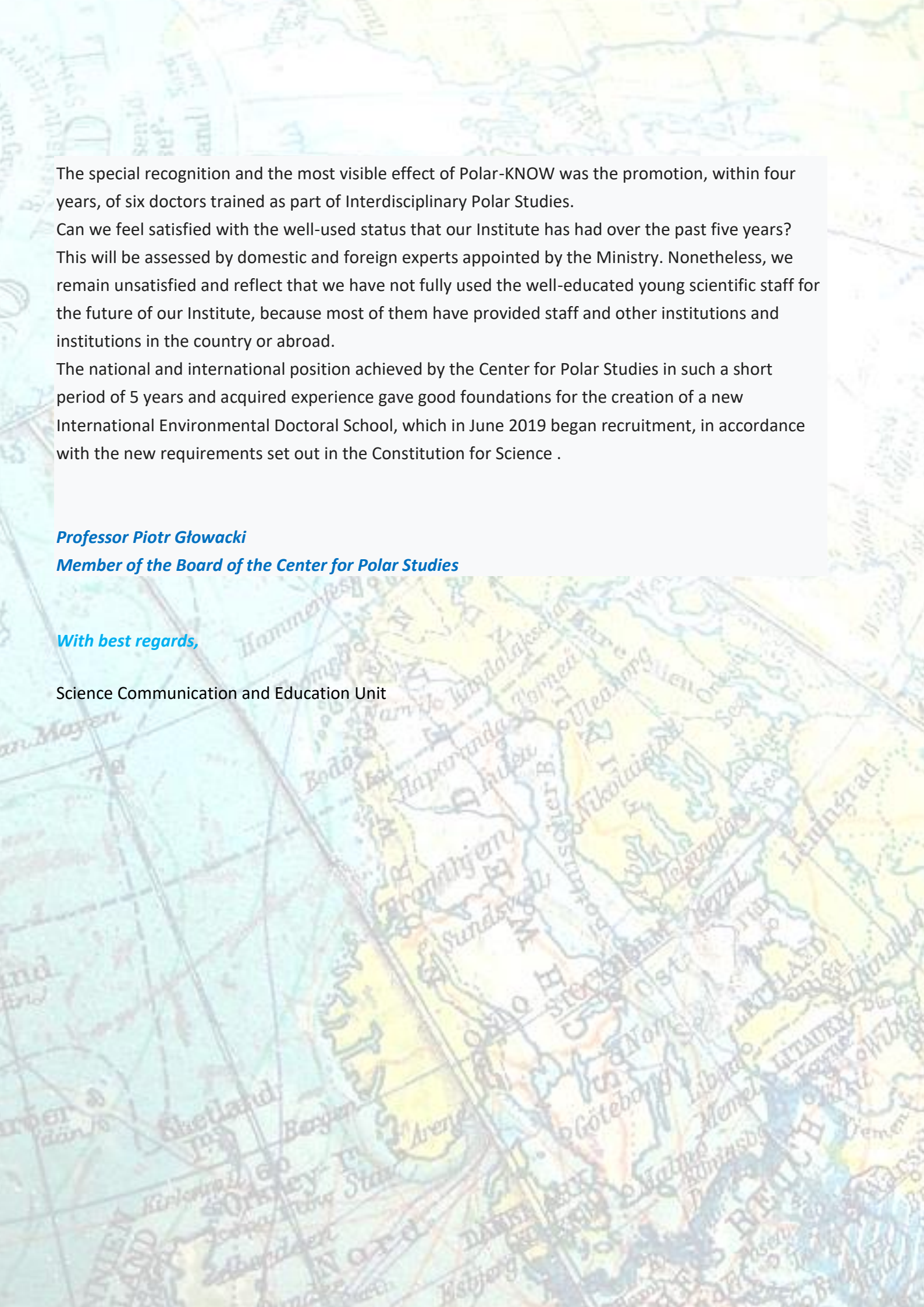
Polar-KNOW, in addition to a significant improvement of the Institute's workplaces and research facilities, for which almost PLN 1.6 million was allocated, improved the Institute's financial comfort by enriching revenues with indirect costs of PLN 2.5 million. It also allowed to significantly improve contacts with internationally recognized specialists from abroad. During these five years we hosted 39 people from all over the world, we also organized several international conferences and meetings.

The added value of establishing a partnership between the units of the Polish Academy of Sciences and the University of Silesia was the involvement and use of the didactic potential of our Institute's employees to conduct 3 years of classes and work on the master's thesis exploration of the polar and mountain areas. As part of the didactic classes, the Institute organized 19 meetings with lecture and seminar blocks as well as specialist workshops in the observatories in Belsk and Świdar. One of the elements of our application for KNOW status was the personnel development related to polar research in individual units of the Center over a 5-year period.

In the group of independent employees of the IGF PAN - 2 professors and 4 postdoctoral degrees are envisaged.

The effect is given by the President of the Republic of Poland 3 titles of the professor (including one polar) and 2 applications for professions submitted to the Central Commission for Titles and Degrees), as well as 14 postdoctoral degrees (including four polar) and 2 habilitation proceedings in progress .

However, from the planned development of a young scientific team of 5 PhDs in the field of polar research at the IGF PAS, the doctoral degree was awarded to 8 people, out of a total of 26 doctors promoted at our Institute in 2014-2018.

A background map of Europe, showing various countries and cities. The map is slightly faded and serves as a decorative backdrop for the text.

The special recognition and the most visible effect of Polar-KNOW was the promotion, within four years, of six doctors trained as part of Interdisciplinary Polar Studies.

Can we feel satisfied with the well-used status that our Institute has had over the past five years? This will be assessed by domestic and foreign experts appointed by the Ministry. Nonetheless, we remain unsatisfied and reflect that we have not fully used the well-educated young scientific staff for the future of our Institute, because most of them have provided staff and other institutions and institutions in the country or abroad.

The national and international position achieved by the Center for Polar Studies in such a short period of 5 years and acquired experience gave good foundations for the creation of a new International Environmental Doctoral School, which in June 2019 began recruitment, in accordance with the new requirements set out in the Constitution for Science .

Professor Piotr Głowacki

Member of the Board of the Center for Polar Studies

With best regards,

Science Communication and Education Unit