
Chronicle

The First Earth and Planetary Research Centre Conference

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The First Earth and Planetary Research Centre Conference was held on 5 and 6 November 2009 at the Institute of Oceanology PAS in Sopot. The initiative to establish the Earth and Planetary Research Centre (GeoPlanet) was taken jointly by the Institute of Geophysics PAS, the Space Research Centre PAS, the Institute of Geological Sciences PAS and Institute of Oceanology PAS. The Contract to establish the Centre was signed on March 30, 2009. The GeoPlanet Centre is run by a Board of Directors, and it was decided to base GeoPlanet at the Institute of Geophysics PAS. The creation of the Centre, with its scientific and infrastructural potential, common databases and research groups, may constitute a substantial added value, of importance on both the domestic and international scientific markets. In Europe, consolidation of research potential has taken place in recent decades: good examples in the field of Earth Sciences include the IFREMER Centre in France, which incorporates several marine research organizations, and the GeoForschungsZentrum in Germany.

In Poland, the Earth Sciences are scattered among many institutions affiliated to the Polish Academy of Sciences, universities and research-and-development institutes. To enable the scientific community to cope with the complex problems faced by the Earth Sciences, and to keep pace and be competitive with scientific institutions abroad, we need to integrate our efforts. An important factor linking the scientific activities of these institutions is the similar, indeed quite often the very same, research methodology, approaches and apparatus. Besides its research activities, the Centre will be a training centre for PhD students, who disseminate knowledge about the Earth and the solar system.

The Centre's tasks include investigating climate changes, monitoring the dangers to the environment and civilization, researching alternative energy sources, and examining other planets and objects in our solar system. The research fields of the component institutes are broadly the following: analysis of earthquakes and mining-induced tremors; structure and geodynamics

The complete text of the paper is available at <http://www.iopan.gda.pl/oceanologia/>

of the Earth's crust and upper mantle; analysis of mesoscale processes in the ocean; numerical modelling of geomagnetic induction processes within the Earth; atmospheric transparency and electricity; transport and mixing of contaminants in surface waters; sedimentology; isotope geochemistry; mineralogy; flood risk modelling by implementing the latest results of extreme events theory; variability of the ozone layer and solar radiation on various time scales; climate changes; mapping of artificial radionuclides in Baltic sediments or air-sea interaction.

Many scientists in GeoPlanet are involved in polar research (organization of polar expeditions; analysis of data from the Polish Polar Station on Spitsbergen; study of environmental changes in polar regions with the use of new geophysical and satellite methods) and marine research (studies of the role of the oceans in climate change and its effects on European seas; the natural and anthropogenic variability of the Baltic Sea environment). Success in using remote-sensing methods and other space science disciplines, like planetology, analysis of Sun-Earth relations, asteroids and comet physics, geodynamics and space engineering, may significantly broaden GeoPlanet's opportunities.

The founder institutes of the Centre are linked by the same research methodology using the conceptual apparatus of sciences such as physics, chemistry, mathematics and geology. The natural aim of the Conference was therefore to share with its participants the latest developments in the field of geosystems research, as well as to amalgamate projects and to design new ones on a joint basis. The Conference was focused mainly on the need to improve knowledge among GeoPlanet's scientists. A number of innovative approaches to better and more effective cooperation were presented by the speakers from all the institutes. The meeting was also an opportunity to compare international experiences and ideas, and to discuss ways of obtaining funding for science and infrastructure. The oral presentations during the Conference covered all geoscience fields, from geodesy, space science, atmospheric science to geoengineering, which were treated in an interdisciplinary manner in conjunction with physics and technology.

GeoPlanet's scientific community has an important role to play in promoting the Earth Sciences and raising their profile among young people, particularly by increasing participation in educational events. GeoPlanet scientists take part in the Festival of Science, Earth Day, the Baltic Festival of Science, the Science Picnic of Polish Radio and the Copernicus Science Centre, and demonstrate their research findings in an accessible form in schools, at universities, on student training courses, etc. Showing off the achievements of research and development plays an extremely important



part in the comprehensive promotion of science and ensures that its results are used to benefit society as a whole.

In aiming to fulfil its societal obligations, the GeoPlanet Centre is preparing a course of postgraduate studies on extreme phenomena in nature and their influence on everyday life, commerce and population safety.

Lectures will be given and training courses run by professional lecturers and scientists. Coupled with extensive practical knowledge, these studies can help in career development and to improve the qualifications of people employed in government administration or in risk and crisis management.

In conclusion, the Centre has the possibility and will to integrate Polish research into the physical and chemical processes taking place within the Earth and to create its own research tools in multilateral research projects, thus enabling the use of world data bases in planetology, geophysics, oceanology and geology.

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of the GeoPlanet Centre