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## **Mineralogical Society** of Poland

## MEMBERS OF THE MINERALOGICAL SOCIETY OF POLAND ON SPITSBERGEN

International Polar Year (IPY), which began in March 2007, attracts thousands of researchers to the Arctic. This is currently the largest scientific program in the world, with over 50,000 researchers from more than 60 nations involved. Polish mineralogists and petrologists are also participating in IPY activities. Last summer, members of the Mineralogical Society of Poland took part in the Geological Polar Expedition to Spitsbergen, organized for the fifth year in a row by AGH-University of Science and Technology in Kraków.

The metamorphic rocks of the Hecla Hoek succession, Proterozoic in age, are a major target of the fieldwork. These rocks comprise the crystalline basement of the Svalbard Archipelago (a group of Norwegian islands, including Spitsbergen, in the Arctic Ocean). This field work belongs to the second cycle of expeditions. The first cycle took place from 1983 to 1990 and resulted in a detailed geological map. The objectives of the ongoing projects include the reconstruction of the P-T conditions and the age of metamorphic events recorded in the rocks, determination of the age and character of the regional

Torellian unconformity, correlation of rock sequences on opposite sides of the Torellbreen glacier, and dating the felsic igneous rocks in the region. Monazite microprobe dating and the Ar/Ar method were applied to these rocks for the first time, revealing a multiphase metamorphic history.

The most significant discovery in recent years is a metamorphic event around 630 Ma, which was not known earlier. Petrologists, mineralogists, and structural and regional geologists are involved in the investigations. This year, the expedition consisted of eight participants from Poland, Russia,



Members of the Geological Polar Expedition in front of Hyttevika. From the left: Maciej Manecki (AGH Kraków, Poland), Jerzy Czerny (AGH Kraków, Poland), Emily Thiem (Lawrence University, USA), Nikolay Kouznietsov (Russian Academy of Science, Moscow, Russia), Jaroslaw Majka (AGH Kraków, Poland), Alicja Kawalec-Majka (AGH Kraków, Poland), Marek Michalik (Jagiellonian University, Kraków, Poland). Marcia Bjornerud (Lawrence University, USA) is not in the photo.



Tent camp on the moraine of Werenskioldbreen glacier



Maciej Manecki operating the motorboat in Hornsund

and the United States. In July, the expedition operated between Hornsund and Torellbreen, using historical hus (huts) in Hyttevika as a major station. The fieldwork inland was carried out from tent camps. In August, fieldwork was concentrated on the ridges along the southern shores of Bellsund, with Fleur de Lys and Calypsobyen as field stations. Geologists used a small motorboat for local transportation, while the long-range logistics were supported by the Polish sailboat Eltanin.



Discussions in the field

## POLISH MINERALOGISTS, PETROLOGISTS, AND GEOCHEMISTS – STATISTICAL DATA FOR 2006

According to *Informator o Naukach Mineralogicznych w Polsce* (Newsletter of Mineralogical Sciences in Poland), prepared by the Committee of Mineralogical Sciences of the Polish Academy of Sciences (Tomasz Bajda and Andrzej Skowroński, editors), the number of workers employed in 2006 in the fields of mineralogy, petrology, and geochemistry, and in related sciences was 326, up from 274 in 1994. More than two-thirds of Polish scientists in the fields mentioned above were employed in universities (229), 42 persons work at the State Geological Institute (Geological Survey), and 25 at the Polish Academy of Sciences. Four centers dominate in Polish mineralogy—Kraków (110 workers), Warszawa (82 workers), Sosnowiec and Gliwice (53 workers), and Wrocław (45 workers). About two-thirds of these scientists are members of the Polish Mineralogical Society.

ELEMENTS OCTOBER 2007