

Following the Footsteps of the First Polish Expedition to Greenland

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Abstract

Polar regions have always been the subject of human interest. Polish researchers began to intensively explore north pole at the second half of the 19th century. After two great field-works at Spitsbergen, Poles decided to reach the largest of islands – Greenland. At the beginning of June 1937, first polish scientific expedition to Greenland set off from the seaport in Gdynia (Köhler 2017). The expedition headed to Arfersiorfik fjord (western coast of Greenland), where observations of environment most familiar to the one during Pleistocene glaciation in Poland were conducted. The Capitan of the expedition was Aleksander Kosiba, rest of the research group were scientists from Poland. One of them was Antoni Gawel, polish geologist, whose legacy from this event enabled setting exact track of the expedition. Almost all materials collected during the expedition were untouched for almost ninety years. This poster will be focused on the expedition to Greenland in 1937 and will follow Antoni Gawel's trail. His collection allows to show geological diversity of western coast of Greenland and will be the subject of more detailed research.

Keywords: Greenland, Arfersiorfik fjord, Antoni Gawel, expedition, west coast.

1. EXPEDITION TO GREENLAND 1937

The Poles have a relatively long story of polar research. Exploration of north pole started in the second half of 19th century and continues to this day. First expeditions took place on Svalbard, Novaya Zemlya and Spitsbergen. In 1934 Aleksander Kosiba went to Greenland during Danish expedition (Köhler 2014). After three years he decided to set off on a venture with group of six polish scientists (Fig. 1) to west coast of Greenland. Expedition headed to Arfersiorfik fjord, where they spent almost three months. Expedition was focused on charting a map of the fjord and studies on environment with conditions most similar to those during glaciation in Pleistocene in Poland. Meteorological, glaciological, geological, geomorphological, and botanical research were conducted (Birkenmajer 2017).



Fig. 1. Photo of participants of the expedition to Greenland 1937; from left: A. Zawadzki, A. Kosiba, S. Bernardzikiewicz, A. Gawel, R. Wilczek, S. Siedlecki, and A. Jahn (photo by A. Jahn).

2. ANTONI GAWEL'S LEGACY

One of the participants was Antoni Gawel, Polish geologist who specialized in petrology and mineralogy. During expedition Gawel conducted research on geological nature of Arfersiorfik fjord and material of moraines. Practically most of the collected materials were untouched since 1937. Thanks to the kindness of the Nature Education Centre Jagiellonian University and Archive of Science of Polish Academy of Sciences and Polish Academy of Arts and Sciences, I have possibility to work with Antoni Gawel's legacy from the expedition. Collection includes metamorphic rocks (mainly granite–gneiss (Fig. 2) and biotite shist (Fig. 3)), mineralogical and moraines sands samples. The aim of the work will be description of hand specimens as well as thin sections of metamorphic rocks from A. Gawel's collection. The collection and his field notebook allow both to set track of the expedition and for initial description of geology of the fjord.

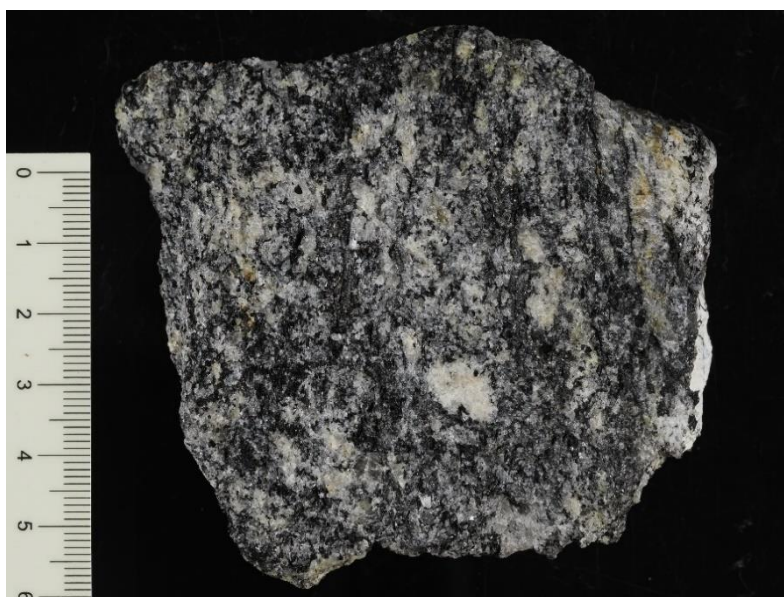


Fig. 2. Example of granite-gneiss with biotite from the collection (photo by Waldemar Obcowski).



Fig. 3. Example of biotite schist from the collection (photo by Waldemar Obcowski).

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