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## Quaternary of Spitsbergen

During the last fifteen years the Polish studies of the Quaternary of Spitsbergen have been considerably intensified. These works focused both on geomorphology as well as occurrence, lithology, origin and stratigraphy of the Late Quaternary (the last 400 ka) stratigraphy. They comprised also neotectonics, photogeology, examination of recent vegetation and of activity of man before the Little Ice Age. In 1979-1980 these studies were realized mainly within the Interdisciplinary Project MR.II.16B Investigation and protection of a polar environment in the Earth sciences. They were later continued (in 1981-1985) within the Interdisciplinary Project MR.I.29 Studies of sea and land polar regions as basis for rational exploitation of natural resources and the protection of their environment and then (in 1986-1990), within the Central Program of Basal Research CPBP 03.03 Studies of life, lithosphere and environments of polar regions, coordinated by Professor Aleksander Guterch (Institute of Geophysics, Polish Academy of Sciences). In 1981-1990 most of this work has been realized in cooperation and under scientific supervision of Professor Leszek Lindner (Institute of Geology, Warsaw University). Since 1991 the studies of the Quaternary of Spitsbergen have been carried out by the Polish scientists within research projects of individual institutes and universities, occasionally financially supported with grants of the Ministry of National Education and the State Committee for Scientific Research.

This volume presents a collection of six papers, created at suggestion and edited by Leszek Lindner and Leszek Marks (Institute of Geology, Warsaw University). It recapitulates most of the above-mentioned studies, but also some results of works undertaken in new research areas. The first paper describes the Late Quaternary evolution of the environment of Spitsbergen against global changes of this time (Lindner and Marks). The following three ones present the Late Quaternary glacial episodes and marine transgressions in the Kaffiöyra Region (Niewiarowski, Pazdur and Sinkiewicz), the Late Quaternary evolution of the western Nordenskiöld Land (Musiał, Horodyski and Kossobudzki) and the Late Quaternary geological and geomorphological development of the Hornsund Region (Lindner and Marks). The volume is closed by description of the Late Quaternary landforms and sediments of the southern Sörkapp Land (Wójcik and Ziaja) as well as of environmental changes in this area, based on analysis of air photos (Sokołowski and Ziaja).

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