

## PREFACE

On 8 - 11 November, 1993 the Polar Section of the Czech Geographical Society organised a session of the 6th Coordination Committee for European Arctic Ecological Explorations at Svojanov (Czech Republic). The working seminar was attended by 16 Arctic and Antarctic explorers from Germany, Poland, Russia and the Czech Republic.

The papers read at the conference included the most different regions of polar explorations. J. M. Weslawski (Poland) characterised the present results of the explorations of the Oceanographic Institute of the Polish Academy of Sciences in the region of Svalbard, Zemlya Frantsa Iosifa and Novaya Zemlya oriented on the study of marine ecosystems, their assumed changes due to global warming and the situation of exploiting that part of the Arctic. L. R. Serebryannyi and A. A. Tishkov (Russia) dealt with the palaeoecologic reconstruction of the vegetation in the above regions, presenting new information from Zemlya Frantsa Iosifa and Novaya Zemlya which, after the break-up of the former USSR became a centre of intense scientific interest. A. N. Krenke (Russia) presented an overview of the present state of world glaciological explorations and mentioned the hierarchy of problems on which further glaciological investigation should be oriented.

Several contributions concerned the Norwegian Arctic archipelago of Svalbard. W. Ziája (Poland) oriented his paper on the clarification of physicogeographical differences between the western and the eastern part of the region of Sörkappland (the southern part of the isle of Spitsbergen). R. Brázdil and P. Prošek (Czech Republic) reported about the fluctuation of the climate in the region of Svalbard and about climatological results of three summer expeditions. E. R. Kroemer (Germany) informed about the study of sediments in the fjords of the northern part of the isle of Spitsbergen. G. M. Tertitskiy (Russia) dealt with the role of bird colonies in Arctic island ecosystems. The problems of palynological investigation at Svalbard was then referred to by V. Jankovská (Czech Republic).

The contribution of M. Janouch (Czech Republic) was devoted to the Antarctica. It dealt with the development of the Antarctic ozone hole in the years 1992 and 1993. K. Opalinski (Poland) concentrated on problems of organising Antarctic expeditions, giving an overview of Polish Antarctic explorations. The problems of fresh-water and soil algae in Svalbard and the South Shetlands were reported by J. Komárek (Czech Republic). N. Rasmussen (Czech Republic) dealt with social and psychological problems of the life of Eskymos and their endangering by civilisation.

In a further part of the seminar its participants formulated the key scientific problems that should be solved within the prepared international scientific project. It should be oriented on the one hand on global changes and biodiversity in the ice covered regions of the coastal zone of the Russian part of the European Arctica, on the other hand on the diagnostics of selected ecosystems in Zemlya Frantsa Iosifa and their future development. The project should integrate physicogeographical (climatology, glaciology, geomorphology, landscape dynamics) and biological (marine biology, palynology, botany, bioenergetics of animals) regions of investigation.

This volume include some selected contributions presented at above workshop. The authors of the papers are responsible for the language and factual correctness of the individual papers.

*R. Brázdil*

