

# Proceedings of the International Symposium on Polar Aspects of Global Change

Tromsø, Norway, 24–28 August 1998



## Preface

The first ideas for this symposium were presented several years ago at SCAR and IASC meetings. They were based on the realization that there had apparently never been such an interdisciplinary bipolar meeting. The intent of the symposium was to provide a current assessment of the role of the polar regions in global change. Contributions were requested primarily on subjects that were *not* narrowly of interest to researchers working only in one hemisphere. This aim was achieved for almost every session. Dealing with social issues, the ninth session was the exception. Here nearly all papers concerned the Arctic.

Keynote addresses by Gunter Weller, Chris Rapley and Hartmut Grassl began the symposium, highlighting the reasons why it was timely and important. Together with the over 120 presentations, these addresses also identified both what is known and gaps in our knowledge.

Attended by 240 participants from 21 nations, the symposium was the first major scientific meeting organized by the Norwegian Polar Institute (Norsk Polarinstitutt) after its move north of the Arctic circle, to Tromsø. Although the main office building at the new Polar Environmental Centre would not be completed for another six weeks, we were proud to give symposium participants a preview of the Centre's facilities and a visit to the exhibition centre Polaria, which had opened to the public earlier in 1998.

The symposium achieved its major aim of bringing together scientists from different disciplines and different regions. Numerous fringe meetings were conducted at the margins of the conference. Vigorous interactions were observed both in the meeting rooms and at the social events, and not least during the sold-out post-symposium excursion to Svalbard.

The symposium was jointly sponsored by the International Arctic Science Committee (IASC) and the Scientific Committee on Antarctic Research (SCAR). Co-sponsors were the European Polar Board, the Nordic Council for Polar Research, the University of Tromsø, the Commission for Scientific Research in Greenland, the International Glaciological Society, the Arctic Monitoring and Assessment Programme (AMAP), the World Climate Research Programme (WCRP)/the Arctic Climate System Study (ACSYS), and the International Arctic Research Center (IARC).

The general scientific planning committee initially comprised Charles Bentley, Gunter Weller and Olav Orheim. The Scientific Steering Committee was later established with Weller and Bentley as chair and co-chair, and augmented by the session chairmen. The latter took on the task of planning and organizing their sessions, including selecting oral presentations. A local organizing committee was led by Orheim and had members from the University of Tromsø, the Norwegian Polar Institute and the Polar Environmental Centre.

The event lasted four days and consisted of the following nine sessions (chairmen in parentheses):

- 1) *Climatic trends in the Arctic and Antarctic* (Gunter E. Weller)
- 2) *Teleconnections linking the polar regions to low and mid-latitudes* (Knut Aagaard)
- 3) *Terrestrial systems and feedbacks on climate change* (Torben R. Christensen)
- 4) *Variability of polar snow, ice and permafrost features* (Jon Ove Hagen)
- 5) *Ice sheets and glacier mass balance and sea level* (Philippe Huybrechts and Vladimir Kotlyakov)
- 6) *Biogeochemical cycles in the Arctic and Antarctic* (Paul Treguer)
- 7) *The circumpolar Arctic/Antarctic palaeoenvironmental record* (Ólafur Ingólfsson and Jörn Thiede)
- 8) *Atmospheric chemistry, ozone and UV-B effects* (Edward C. De Fabo)
- 9) *Regional and socio-economic impacts of global change* (Louwrens Hacquebord)

Some 50 oral presentations were made and about 70 posters set up. About half of these presentations were eventually submitted to *Polar Research* for inclusion in the published proceedings. With the assistance of the session chairmen who subsequently served as special editorial advisors for the proceedings issue, papers underwent the rigours of the peer review process. It posed a stiff challenge for authors to address the critiques of two or three referees – as well as those of the editor and the advisors – while keeping the paper within the strict page limit set in 1998. The authors of the 36 articles printed in the following pages are those who met this challenge. Some submissions which could not be pared down will be published in subsequent issues of the journal.

The editor is grateful to the contributors and referees for their hard work. To show the journal's appreciation, we have printed a list of referees at the back of this issue. The editor would also like to thank the editorial advisors, who were vital to the success of this collaborative effort.

Olav Orheim, Director, Norwegian Polar Institute  
Helle Valborg Goldman, Editor-in-Chief, *Polar Research*