

## Foreword

The 19th Symposium on Polar Meteorology and Glaciology sponsored by National Institute of Polar Research was held on July 10–11, 1996. The Symposium reported on continuing efforts of Japanese polar meteorologists, glaciologists and physical oceanographers. The research areas covered by this symposium were meteorological and glaciological observations, remote sensing, instrumentation and polar region engineering as well as modeling, dynamics related to polar regions.

Much of topics were related to the outcome of major research programs of the Antarctic Atmospheric Chemistry (1993~) and Deep Ice Coring Project at Dome Fuji Station (1992~) carried out by the Japanese Antarctic Research Expedition and some topics on atmospheric, glaciological and oceanographical research in Arctic region.

A total of 93 papers were presented at the symposium and the present volume contains 21 full-length papers and 37 abstracts. Full-length papers were refereed and arranged in the order of scientific areas of glaciology, meteorology and physical oceanography. It is hoped that this volume will contribute to the progress of research on the polar cryosphere, atmosphere and hydrosphere.

Our sincere thanks are due to all of the contributors and referees who have readily cooperated in publishing the proceedings. We also thank Ms. T. TOMINAGA and Ms. M. TANIKAWA as well as the staffs of polar meteorology and glaciology section and the publication officers at the Library of the National Institute of Polar Research for their arrangement of the symposium and the publication of the proceedings.

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