

The First International Symposium on the Arctic Research: Drastic Change under the Global Warming

Preface

November 4, 2008

It is our great pleasure to hold the First International Symposium on the Arctic Research (ISAR-1) at Miraikan Tokyo from 4 to 6 November 2008. The ISAR-1 was initiated under the auspice of the IASC and CliC Subcommittee of the Science Council of Japan, with the support of NIPR, JAMSTEC, JAXA, IARC, STEL, and CCS.

The Arctic and the surrounding regions of the Sub-arctic are key areas for the study of global change since the anthropogenic impact is projected to be the largest. The Arctic region has undergone drastic changes in the recent years under global warming, due to the complicated natural feedback processes involved. We should emphasize much more that the Arctic is the best place to study climate change, which is a great concern for humanity.

A number of international and interdisciplinary research projects are in progress, studying the atmosphere-ocean-land system of the Arctic. One of such is the world-wide project of the International Polar Year (IPY) which is currently being held till 2009. In order to understand the feedback processes and to project global warming in the future, we are required to exchange more knowledge and information than ever, by combining the different scientific communities under the common interest of the Arctic.

Several research groups located in Japan discussed the necessity of such an integrated Symposium, and a new "International Symposium on the Arctic Research" was accordingly initiated. This Symposium is planned to be held every 2-years. The following will be the general topics of discussion.

- (1) Changes of the Arctic climate and sub-systems
- (2) Extensive process studies on the atmosphere-ocean-land system in the Arctic
- (3) Feedback embedded in the sub-systems in the Arctic
- (4) Impact and feedback between the Arctic and global climate
- (5) Global and regional modeling with the focus on the Arctic
- (6) Influence of Arctic to the Asian climate

The areas of discipline range from Climatology, Atmospheric Science, Hydrology, Oceanography, Cryosphere Science and Biological Science. In addition to the general sessions covering the above topics, the following two special sessions are planned in this symposium:

- (1) Drastic change in the Arctic under Global Warming
- (2) International Cooperation of Arctic Research and IPY

We hope that the proposed symposium would serve to exchange more knowledge and information by combining the different scientific communities working on the Arctic. We very much hope that ISAR will not become just another arctic conference and not just an assembly of arctic scientists, who only want to pursue their individual, specialized research. However, we hope that the scientists participating in ISAR will have a common goal and interest in the Arctic. We predict that the research in the Arctic would draw increasingly more attention in near future, and the proposed symposium would serve as the first step to reach for that goal.

On behalf of the organizing committee of the ISAR-1, we sincerely appreciate the presence of all the attendants and hope of the continuous participation to ISAR.

Sincerely yours,

Hiroshi L. Tanaka
Chair of the ISAR-1 Organizing Committee