

Foreword

The Symposium on Pacific-Antarctic Sciences was held in Tokyo from August 23rd to 27th, 1966 as a part of the 11th Pacific Science Congress. No doubt, the Antarctic Continent and neighbouring seas are the southernmost constituents of the Pacific Ocean area, which is the main object of the Pacific Science Congress. In this respect, the Symposium was an important event among a large number of meetings of the Congress.

In the 10th Pacific Science Congress, too, which was held in 1961 in Honolulu, Hawaii, the Matthew Fontaine Maury Memorial Symposium on Antarctic Research was held with great success. The remarkable success in 1961 of the scientific discussions of the nature of the newly developed region of the earth has caused the strong urge for a similar symposium on Antarctic sciences on the occasion of the 11th Pacific Science Congress, in order to review, particularly, the recent developments in Antarctic sciences since 1961.

Besides, the year of 1966 happens to be the 10th anniversary of the international scientific cooperation in Antarctica, which was initiated in 1956 as an important portion of the International Geophysical Year activity. This means also that 1966 is the 10th anniversary of the Japanese Antarctic Research Expedition.

Thus, every circumstance seemed to encourage the Organizing Committee of the 11th Pacific Science Congress to prepare for a symposium on Pacific-Antarctic sciences. The Symposium thus organized consists of three main branches, namely, (a) geomagnetism and aeronomy, (b) general earth sciences (geology, geomorphology, glaciology, etc.) and (c) fauna and flora. Twenty-six papers on these three major topics were presented to the meeting by scientists of five nations, which are related to both Pacific and Antarctic regions.

This volume is the proceedings of the Symposium, containing all the twenty-six papers presented. The papers in this volume cover well the major points of our recent knowledge of Antarctic sciences, and some of them deal with the new discoveries in the special scientific aspects of Antarctica.

Professor F. A. HELLIWELL, Dr. E. H. VESTINE and Dr. C. B. BULL of U.S.A., Dr. A. F. TRESHNIKOV of U.S.S.R. and Dr. R. CARRICK of Australia efficiently conducted various discussions as the chairmen and as the principal guest speakers of the sessions they are concerned with. In his capacity of the general secretary, Dr. Y. HARADA has accomplished very successful works, in preparing the programs, in promoting the meeting and in compiling this volume of Proceedings. Dr. T. OGUTI, Dr. K. KUSUNOKI and Dr. T. HABE have served so effectively, as the secretaries of Sessions (a), (b) and (c) respectively, in preparing for and promoting their sessions to gain success. In addition to his session secretaryship, Dr. K. KUSUNOKI has taken the executive responsibility for compiling and publishing this volume.

The success of the Symposium and the publication of this volume would not have been achieved without cooperation of these people. As the convener of

the Symposium and the editor-in-chief of this volume, I would like to express my sincere thanks to these colleagues for their valuable help in materializing this volume which is undoubtedly very useful to the scientists who are interested in the nature of Antarctica. With the kind cooperation of the Department of Polar Research, National Science Museum, this volume is published as a special issue of the series of JARE Scientific Reports. My deep gratitude is expressed to the staffs of the Museum.

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TAKESI NAGATA

Convener

Symposium of Pacific-Antarctic Sciences

The 11th Pacific Science Congress