Dedication

At the highly appreciated suggestion of Mr. R. S. UNWIN (New Zealand), Professor Keith D. COLE (President of IAGA and also of SCOSTEP) proposed to dedicate this special issue to Professor Takesi NAGATA for his continuous efforts for developing geophysical research in Antarctica since IGY. It is a great honour for me to be asked by Professor COLE to write these words of dedication on behalf of the world geophysical community for Antarctic research.

It was just a quarter century ago (in 1955) at the CSAGI Meeting in Brussels that Professor NAGATA reported the first proposal from Japan on participation in the Antarctic expedition as a contribution to the International Geophysical Year programme. This proposal was welcomed, and Japan established its Antarctic base on Ongul Island in January 1957. Professor NAGATA went to the Antarctic as leader of the first three parties of the Japanese Antarctic Research Expedition (1956–59). His leadership in the early stages of the Japanese expeditions has led to a firm foundation for excellent future organization of scientific studies of Japan in Antarctica.

When I met Professor NAGATA for the first time, in September 1956 in Barcelona at the CSAGI meeting, he told me of the numerous difficulties he had encountered as leader of the expedition. At the same time his passion and dreams for the development of geophysical research in Antarctica not only for IGY but also for the future, was quite apparent. I also remember his colourful story of his first experience in high mountain skiing in Japan, as part of his personal preparation for the Antarctic expedition. Now we recognize that he is realizing his ideas and plans in one of the most sophisticated national programmes of rocket sounding, satellite telemetry and modernization of facilities at Syowa Station, as well as in the development of the network of unmanned observatories.

Each time at the meetings of IAGA, SCAR and other related groups, he introduced the latest successful research work carried out by the Japanese Antarctic Research Expedition. When he was the President of IAGA, at the IAGA General Assembly in Moscow in August 1971 he gave an impressive Presidential Address entitled "austral substorms". His interest in Antarctic research is not only in the upperatmosphere physics but also in solid earth geophysics, especially meteorites. His scientific vigour, and a highly developed intuition for discovery of new paths in research led him to the brilliant idea to look for meteorites in Antarctica, which as it was confirmed recently is a natural reserve for meteorites. He himself published a number of scientific papers after examining the meteorites found by the Japanese Antarctic Research Expedition in recent years.

Professor NAGATA served also in the administrative work to promote the research

in the Antarctic region. Since the establishment of SCAR in 1958, he has been a representative in SCAR from both IAGA and IUGG. In 1972–76 he was Vice-President of SCAR. IAGA created a special group for the promotion of Antarctic research at its XV General Assembly in Moscow in August 1971. It was a Committee on Antarctic Research, and it was chaired by Professor NAGATA. This Committee was converted to the Interdivisional Commission on Antarctic Research when IAGA reorganization occurred in 1973, and he was asked to continue his leadership, which he did until he retired from this position in 1979 at the XVII General Assembly in Canberra and which he did against and in spite of strong objection from the members of the Commission. This Committee/Commission on Antarctic Research held the following symposia at past IAGA Assemblies:

- 1975 Grenoble, Substorm Observations in Antarctica with Special Emphasis on Unmanned Observatories.
- 1977 Seattle, Interim Results of Antarctic IMS.

These symposia were timely, and they were well attended.

Professor NAGATA served the international community also through the publication of scientific papers on Antarctic research, *e.g.*

Proceedings of the Symposium on Pacific-Antarctic Sciences (The 11th Pacific Science Congress in August 1966 in Tokyo).

JARE Scientific Reports, Special Issue, No. 1, February 1967.

Proceedings of the Symposium on Substorm Observations in Antarctica with Special Emphasis on Unmanned Observatories (IAGA Assembly in September-October 1975 in Grenoble, France).

Memoirs of National Institute of Polar Research, Special Issue, No. 6, August 1976.

Magnetic Maps of the Antarctic published by the Geographical Survey Institute of Japan (according to the official request of SCAR and its Working Group on Solid Earth Geophysics in April 1976).

This time he offered to publish all papers of Antarctic IMS results, which were presented to the IMS Symposium held in Melbourne, Australia, during November 27–December 1, 1979. The present special issue is realized through his courtesy. During the last 25 years Professor NAGATA has generously spent his scientific talents, administrative ability and power, as well as his very well known by many of us, charm, to make investigations in Antarctica a challenge to modern geophysics, and has reached an acknowledged and deserved success as a national and international leader in this field.

In summary, his devotion to the Antarctic research and his personal contribution in this field are extremely great in all respects, and we are very grateful to him for all his efforts to promote geophysical studies in Antarctica, and for his service to the international community facilitating international cooperation in Antarctica.

15th June 1980 V. A. TROITSKAYA Soviet Geophysical Committee Moscow, USSR