

## PREFACE

The Fourth Symposium on Antarctic Biology was held on September 18 and 19, 1980 at the auditorium of the National Institute of Polar Research (NIPR), Tokyo. It was organized by the Institute to encourage Japanese activities in Antarctic biology, in particular, those relating to Biological Investigations of Marine Antarctic Stocks and Systems (BIOMASS). It was also intended to review investigations on the monitoring of Antarctic environments which had been conducted since 1977 in the vicinity of Syowa Station.

Therefore, part of the results obtained by R. V. KAIYO MARU, Fisheries Agency, during her 1979-80 cruise and the data collected on board vessels which were engaged in the researches for the exploratory fishing conducted by the Japan Marine Fishery Resource Research Center were reported as well as the works performed by the Japanese Antarctic Research Expedition. A study which was carried out by T. S. UMITAKA MARU III, Tokyo University of Fisheries, was also presented.

The meeting was composed of two sessions. One session was devoted to the presentation and discussion on the marine ecosystems. The first ten articles out of the 14 papers were read in this session. The rest four were presented in the other session, in which what should be monitored and how the objectives of monitoring should be achieved were discussed intensively from medical, geochemical and biological points of view.

Tatsuro MATSUDA and  
Takao HOSHIAI, Convenors  
NIPR