

Foreword

The Second Symposium on Yamato Meteorites was held on February 23rd and 24th, 1977. At the Symposium, some detail of the field work in search of meteorites in the Meteorite Ice Field in East Antarctica in 1974 and 1975 was reported. Also, the first report of a new U.S.-Japan joint program of "Antarctic Search for Meteorites" in West Antarctica was presented. It seems thus that the general behavior of distribution of meteorites on the Antarctic ice plateaus has become clear to a certain extent. With reference to these observed facts of meteorite distribution in Antarctica, and other glaciological and geomorphological data, theoretical discussions of possible mechanisms of the concentrated distribution of meteorites on the Antarctic ice plateaus have become semi-quantitatively possible. The first six papers in this volume are concerned with these aspects of meteorite distribution in Antarctica.

Mineralogical and petrographical studies on typical samples of the 1973 and 1974 Yamato meteorite collections have been extensively promoted. In particular, typical Yamato-1973 meteorites, Yamato-7301(j), -7305(k), -7308(l) and -7304(m), have been almost completely described petrographically and chemically. In the Yamato meteorite collections, achondrites are relatively abundant, and therefore these achondrites have been subjected to specially careful studies. Five papers dealing with the mineralogical and petrographical characteristics of Yamato stony meteorites are included in this volume.

Specific chemical studies on rare gas and rare elements of Yamato stony meteorites also have been in progress, together with the isotope analyses for various purposes. These very informative data are given in five papers contained in this volume.

Magnetic analysis of meteorites is a comparatively new branch of meteorite study. Two papers on the magnetic analyses of Yamato meteorites are presented, together with a paper on the metallographic studies of an iron and a pallasite, in this volume.

Since the Yamato meteorite collection has come to comprise a very large number of specimens amounting to 991 in total, and it has been added with eleven meteorites newly recovered from West Antarctica, even a preliminary identification of these meteorites—1002 pieces in total—will take a long time. In this volume of Proceedings of the Second Symposium on Yamato Meteorites, basic data derived from various analyses of Yamato meteorites obtained to date are summarized. Chemical, petrographical, mineralogical and physical studies of other Yamato meteorites are being carried out by various investigators at

present. The third symposium on Yamato meteorites under contemplation and the succeeding ones will reveal more new knowledge of the huge Yamato meteorite collection.

It is hoped that this volume as the second milestone of the coordinated researches on Yamato meteorites, will prove valuable also to those who are interested in meteorites as well as in Antarctica.

October 1977

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