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Gyorgy Benko, ed.

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16. Abstract

Foreword and table of contents of the book are given.

This monograph presents an overview of Hungarian space research from 1981-1985. Topics discussed in the original report include the development of space research centers, the flight of the first Hungarian astronaut, Hungarian participation in international space programs such as the VEGA/Halley's Comet mission and the BEALUCA materials science experiment, advances in astronomical research and activities of the Cosmic Geodetic Observatory. Other topics discussed include space biomedical studies, meteorological applications of space research, satellite communications and satellite power supply systems.

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HUNGARIAN SPACE RESEARCH 1981-1985

Lectures and review articles presented at the scientific session
of the Intercosmos Council of the Hungarian Academy of Sciences

Edited by
Gyorgy Benko

Budapest 1986

Foreword

The publication entitled "Ten years of the Hungarian space research, containing the lectures presented at the scientific sessions of the Intercosmos Council of the Hungarian Academy of Sciences, held on June 2, 3, and 4, and depicting the activities of the initial years of the Hungarian space research, was published in 1981. This time period was characterized, on the one hand, by the development of space research centers and technical bases, and on the other hand, by the acquisition of scientific and technical experience. The flight of Bertalan Farkas, the first Hungarian astronaut, closed off this period.

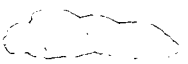
During the period from 1981 to 1985 the Hungarian space research experienced a significant evolution. On the basis of experience gained during the earlier

years, by centering the available intellectual and technical resources, an opportunity was offered to our investigators to become involved in international collaborative programs, such as the Vega program to investigate Halley's Comet, the goal of which was to carry out a "for the first time in the world" experiment. While the Hungarian scientific devices prepared during the previous period participated in the study of the space near the Earth, the more recent ones have been installed into remote space probes. Our experts are participating in the construction of the so-called service installations of space probes and and satellites, such as the on-board data-collecting system, on-board supply system, whereby the designers and builders must satisfy significantly stricter requirements. All this represented a quality jump, a higher level for the Hungarian space research.

Our investigators achieved good success during recent years in the evaluation of biological experiments carried out with the help of satellites. Spectacular results were obtained in the field of cosmic meteorology and space communication. Results of satellite-based power supply research are being widely applied in various branches of the national economy.

This publication summarizes the obtained results. However, the published summarizing lectures and communications present only a part of the widely ramified space-research activities, carried out in Hungarian research institutes on the basis of ever-broadening international cooperation.

The Intercosmos Council of the Hungarian Academy of Sciences expresses its thanks to all the collaborators, who, in spite of the pressure of their work, found time to write review articles and communications, and to every person who contributed to the publication of this work.



The Editor

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