Physics and Chemistry in Space

A series of monographs written and published to serve the student, the teacher and the researcher with a clear and concise presentation of up-to-date topics of space exploration.

Edited by J. G. Roederer, Denver, Colo.

Editorial Board: H. Elsässer, Heidelberg; G. Elwert, Tübingen; L. G. Jacchia, Cambridge, Mass.; J. A. Jacobs, Edmonton, Alta.; N. F. Ness, Greenbelt; Md.; W. Riedler, Graz

Volume 5 Hundhausen: Coronal Expansion and Solar Wind

By A. J. Hundhausen, High Altitude Observatory, National Center for Atmospheric Research, Boulder, Colo. USA With 101 figs. XII, 238 pp. 1972 Cloth DM 68,—

The author gives a physical interpretation of basic solar wind phenomena, based on a synthesis of interplanetary observations and theoretical models of the coronal expansion.



Springer-Verlag Berlin Heidelberg New York

London München Paris Sydney Tokyo Wien

Volume 1 Jacobs: Geomagnetic Micropulsations

By J. A. Jacobs, Killam Memorial, Professor of Science, The University of Alberta, Edmonton, Canada With 81 figs. VIII, 179 pp. 1970 Cloth DM 36,—

A detailed account both of the morphology of geomagnetic micropulsations and of the various theories that have been proposed to explain them.

Volume 2 Roederer: Dynamics of Geomagnetically Trapped Radiation

By J. G. Roederer, Professor of Physics, University of Denver, Denver, Colo., USA With 94 figs. XIV, 166 pp. 1970 Cloth DM 36,—

A concise, systematic and up-todate discussion of the basic dynamical processes governing the earth's radiation belts, with guidelines for quantitative applications of the theory.

Volume 3 Adler/Trombka: Geochemical Exploration of the Moon and Planets

By Dr. I. Adler, Senior Scientist, and Dr. J. I. Trombka, both: Goddard Space Flight Center, NASA, Greenbelt, Md, USA With 129 figs. X, 243 pp. 1970 Cloth DM 58,—

A review of progress in the geochemical exploration of the Moon and planets and of future plans for lunar and planetary exploration.

Volume 4 Omholt: The Optical Aurora

By A. Omholt, Professor of Physics, Universitetet i Oslo, Fysisk Institutt, Blindern, Oslo, Norway With 54 figs. XIII, 198 pp. 1971 Cloth DM 58,—

This book deals with the optical aurora, its occurrence and properties and the way it is produced by the primary electrons and protons. The auroral spectrum and its excitation is treated in great detail.

Prospectuses on request