

CONTENTS

PREFACE	v
ACKNOWLEDGMENTS	vii
M. P. BACHYNSKI and F. J. F. OSBORNE: <i>Laboratory Geophysics and Astrophysics</i>	3
R. M. PATRICK and E. R. PUGH: <i>Laboratory Simulation of Solar Wind Phenomena</i>	45
K. THOM: <i>NASA Research on Collective Effects in Collisionless Plasmas</i>	63
W. D. MCBEE and L. T. SHEPHERD: <i>Particle Losses in a Simulated Fusion Plasma</i>	85
G. P. WOOD and F. HOHL: <i>Electric Potentials, Forces, and Torques on Bodies Moving through Rarefied Plasmas</i>	99
S. W. KASH: <i>Magnetic Space Shields</i>	135
W. ERICSON, A. MACIULAITIS, and M. FALCO: <i>Magnetoaerodynamic Drag and Flight Control</i>	167
LEON E. RING: <i>Status of MHD Accelerators for Test Facilities</i>	193
S. WAY: <i>Problems of the Coal-Fired MHD Power Plant</i>	235
J. E. ZIMMERMAN: <i>Instrumentation Using Quantum Interference in Superconductors</i>	257
M. C. GOURDINE: <i>Direct Energy Conversion and Astronautics</i>	273
C. HO and D. DUFFEY: <i>Application of Spectroscopic Methods for Measurements of Plasma Electron Temperature and Density</i>	281
C. L. DAILEY: <i>Plasma Properties in an Inductive Pulsed Plasma Accelerator</i>	301
CONWAY W. SNYDER: <i>The Interplanetary Plasma</i>	327