

# CONTENTS

|                                                                                                 |     |
|-------------------------------------------------------------------------------------------------|-----|
| THE INTERACTION BETWEEN EXPERIMENT AND THEORY IN FLUID MECHANICS,<br><i>G. I. Taylor</i>        | 1   |
| HARBOR SEICHING, <i>John W. Miles</i>                                                           | 17  |
| DOUBLE-DIFFUSIVE PHENOMENA, <i>J. S. Turner</i>                                                 | 37  |
| WATERHAMMER AND SURGE CONTROL, <i>V. L. Streeter and E. B. Wylie</i>                            | 57  |
| SAMPLING TECHNIQUES IN TURBULENCE MEASUREMENTS, <i>Charles W. Van Atta</i>                      | 75  |
| NONLINEAR DISPERSIVE WAVES, <i>O. M. Phillips</i>                                               | 93  |
| THE MEANING OF VISCOMETRY IN FLUID DYNAMICS, <i>C. Truesdell</i>                                | 111 |
| THE ATMOSPHERIC BOUNDARY LAYER BELOW 150 METERS, <i>Hans A. Panofsky</i>                        | 147 |
| SUPERFLUID MECHANICS, <i>Paul H. Roberts and Russell J. Donnelly</i>                            | 179 |
| TRANSPORT PROPERTIES OF TWO-PHASE MATERIALS WITH RANDOM STRUCTURE, <i>G. K. Batchelor</i>       | 227 |
| SPIN-UP, <i>E. R. Benton and A. Clark, Jr.</i>                                                  | 257 |
| NUMERICAL SIMULATION OF VISCOUS INCOMPRESSIBLE FLOWS, <i>Steven A. Orszag and Moshe Israeli</i> | 281 |
| AERODYNAMICS OF POWERED HIGH-LIFT SYSTEMS, <i>G. K. Korbacher</i>                               | 319 |
| REPRINT INFORMATION                                                                             | 359 |
| INDEXES                                                                                         |     |
| AUTHOR INDEX                                                                                    | 361 |
| CUMULATIVE INDEX OF CONTRIBUTING AUTHORS, VOLUMES 2-6                                           | 367 |
| CUMULATIVE INDEX OF CHAPTER TITLES, VOLUMES 2-6                                                 | 368 |
|                                                                                                 | vii |