

CONTENTS

FRONTISPIECE	xii
MILTON VAN DYKE, THE MAN AND HIS WORK, <i>Leonard W. Schwartz</i>	1
G.K. BATCHELOR AND THE HOMOGENIZATION OF TURBULENCE, <i>H.K. Moffatt</i>	19
DAVID CRIGHTON, 1942–2000: A COMMENTARY ON HIS CAREER AND HIS INFLUENCE ON AEROACOUSTIC THEORY, <i>John E. Ffowcs Williams</i>	37
SOUND PROPAGATION CLOSE TO THE GROUND, <i>Keith Attenborough</i>	51
ELLIPTICAL INSTABILITY, <i>Richard R. Kerswell</i>	83
LAGRANGIAN INVESTIGATIONS OF TURBULENCE, <i>P.K. Yeung</i>	115
CAVITATION IN VORTICAL FLOWS, <i>Roger E.A. Arndt</i>	143
MICROSTRUCTURAL EVOLUTION IN POLYMER BLENDS, <i>Charles L.</i> <i>Tucker III and Paula Moldenaers</i>	177
CELLULAR FLUID MECHANICS, <i>Roger D. Kamm</i>	211
DYNAMICAL PHENOMENA IN LIQUID-CRYSTALLINE MATERIALS, <i>Alejandro D. Rey and Morton M. Denn</i>	233
NONCOALESCENCE AND NONWETTING BEHAVIOR OF LIQUIDS, <i>G. Paul</i> <i>Neitzel and Pasquale Dell'Aversana</i>	267
BOUNDARY-LAYER RECEPTIVITY TO FREESTREAM DISTURBANCES, <i>William S. Saric, Helen L. Reed, and Edward J. Kerschen</i>	291
ONE-POINT CLOSURE MODELS FOR BUOYANCY-DRIVEN TURBULENT FLOWS, <i>K. Hanjalic</i>	321
WALL-LAYER MODELS FOR LARGE-EDDY SIMULATIONS, <i>Ugo Piomelli</i> <i>and Elias Balaras</i>	349
FILAMENT-STRETCHING RHEOMETRY OF COMPLEX FLUIDS, <i>Gareth H.</i> <i>McKinley and Tamarapu Sridhar</i>	375
MOLECULAR ORIENTATION EFFECTS IN VISCOELASTICITY, <i>Jason K.C.</i> <i>Suen, Yong Lak Joo, and Robert C. Armstrong</i>	417
THE RICHTMYER-MESHKOV INSTABILITY, <i>Martin Brouillette</i>	445
SHIP WAKES AND THEIR RADAR IMAGES, <i>Arthur M. Reed and Jerome</i> <i>H. Milgram</i>	469

SYNTHETIC JETS, <i>Ari Glezer and Michael Amitay</i>	503
FLUID DYNAMICS OF EL NIÑO VARIABILITY, <i>Henk A. Dijkstra and</i> <i>Gerrit Burgers</i>	531
INTERNAL GRAVITY WAVES: FROM INSTABILITIES TO TURBULENCE, <i>C. Staquet and J. Sommeria</i>	559

INDEXES

Subject Index	595
Cumulative Index of Contributing Authors, Volumes 1–34	627
Cumulative Index of Chapter Titles, Volumes 1–34	634

ERRATA

An online log of corrections to the *Annual Review of Fluid Mechanics* chapters
may be found at <http://fluid.annualreviews.org/errata.shtml>