



Annual Review of
Fluid Mechanics

Volume 38, 2006

Contents

Nonlinear and Wave Theory Contributions of T. Brooke Benjamin (1929–1995) <i>J.C.R. Hunt</i>	1
Aerodynamics of Race Cars <i>Joseph Katz</i>	27
Experimental Fluid Mechanics of Pulsatile Artificial Blood Pumps <i>Steven Deutsch, John M. Tarbell, Keefe B. Manning, Gerson Rosenberg, and Arnold A. Fontaine</i>	65
Fluid Mechanics and Homeland Security <i>Gary S. Settles</i>	87
Scaling: Wind Tunnel to Flight <i>Dennis M. Bushnell</i>	111
Critical Hypersonic Aerothermodynamic Phenomena <i>John J. Bertin and Russell M. Cummings</i>	129
Drop Impact Dynamics: Splashing, Spreading, Receding, Bouncing... <i>A.L. Yarin</i>	159
Passive and Active Flow Control by Swimming Fishes and Mammals <i>F.E. Fish and G.V. Lauder</i>	193
Fluid Mechanical Aspects of the Gas-Lift Technique <i>S. Guet and G. Ooms</i>	225
Dynamics and Control of High-Reynolds-Number Flow over Open Cavities <i>Clarence W. Rowley and David R. Williams</i>	251
Modeling Shapes and Dynamics of Confined Bubbles <i>Vladimir S. Ajaev and G.M. Homsy</i>	277
Electrokinetic Flow and Dispersion in Capillary Electrophoresis <i>Sandip Ghosal</i>	309
Walking on Water: Biocomotion at the Interface <i>John W.M. Bush and David L. Hu</i>	339

Biofluidmechanics of Reproduction <i>Lisa J. Fauci and Robert Dillon</i>	371
Long Nonlinear Internal Waves <i>Karl R. Helfrich and W. Kendall Melville</i>	395
Premelting Dynamics <i>J.S. Wettlaufer and M. Grae Worster</i>	427
Large-Eddy Simulation of Turbulent Combustion <i>Heinz Pitsch</i>	453
Computational Prediction of Flow-Generated Sound <i>Meng Wang, Jonathan B. Freund, and Sanjiva K. Lele</i>	483

INDEXES

Subject Index	513
Cumulative Index of Contributing Authors, Volumes 1–38	529
Cumulative Index of Chapter Titles, Volumes 1–38	536

ERRATA

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