INDEX

ADAMCZYK, J. J. *See* GOLDSTEIN, BRAUN & ADAMCZYK

AHRENS, C. D. *See* RONNEBERGER & AHRENS

BATCHELOR, G. K. The effect of Brownian motion on the bulk stress in a suspension of spherical particles, 97

BRAUN, WILLIS. *See* GOLDSTEIN, BRAUN & ADAMCZYK

BRIGHTON, P. M. W. *See* SMITH, SYKES & BRIGHTON

BRODKEY, ROBERT S. *See* WALLACE, BRODKEY & ECKELMANN

BROWN, THOMAS D. & HUNG, TIN-KAN. Computational and experimental investigations of two-dimensional nonlinear peristaltic flows, 249

BRUUN, H. H. A time-domain analysis of the large-scale flow structure in a circular jet. Part 1. Moderate Reynolds number, 641

BUSINGER, JOOST A. *See* KATSAROS, LIU, BUSINGER & TILLMAN

CANDEL, SÉBASTIEN M. Numerical solution of conservation equations arising in linear wave theory: application to aeroacoustics, 465

CHEN, C. F. & SANDFORD, R. D. Stability of time-dependent double-diffusive convection in an inclined slot, 83

CLARKE, ALLAN J. Wind-forced linear and nonlinear Kelvin waves along an irregular coastline, 337

COFFEE, TERENCE. Finite amplitude instability of plane Couette flow, 401

DE VAHL DAVIS, G. *See* MALLINSON & DE VAHL DAVIS

ECKELMANN, HELMUT. *See* WALLACE, BRODKEY & ECKELMANN

EMARA, A. A. *See* KULACKI & EMARA

FERGUSON, WARREN E. *See* LAKE, YUEN, RUNDGALDIER & FERGUSON

GOLDSTEIN, M. E., BRAUN, WILLIS & ADAMCZYK, J. J. Unsteady flow in a supersonic cascade with strong in-passage shocks, 569

GRAHAM, J. M. R. & KULLAR, I. Small perturbation expansions in unsteady aerofoil theory, 209

HAMILTON, JAMES. Differential equations for long-period gravity waves on fluid of rapidly varying depth, 289

HINCH, E. J. An averaged-equation approach to particle interactions in a fluid suspension, 695

HINCH, E. J. *See also* RUSSEL, HINCH, LEAL & TIEFFENBRUCK

HOLLIDAY, DENNIS. On nonlinear interactions in a spectrum of inviscid gravity–capillary surface waves, 737

HOYT, J. W. & TAYLOR, J. J. Waves on water jets, 119

HUMPHREY, J. A. C., TAYLOR, A. M. K. & WHITELAW, J. H. Laminar flow in a square duct of strong curvature, 509

HUNG, TIN-KAN. *See* BROWN & HUNG

HURLEY, D. G. *See* SIEW & HURLEY

KATSAROS, KRISTINA B., LIU, W. TIMOTHY, BUSINGER, JOOST A. & TILLMAN, JAMES E. Heat transport and thermal structure in the interfacial boundary layer measured in an open tank of water in turbulent free convection, 311

KEMPTON, A. J. Acoustic scattering by density gradients, 495

KNOBLOCH, EDGAR. The diffusion of scalar and vector fields by homogeneous stationary turbulence, 129

KRAICHNAN, ROBERT H. Eulerian and Lagrangian renormalization in turbulence theory, 349

KULACKI, F. A. & EMARA, A. A. Steady and transient thermal convection in a fluid layer with uniform volumetric energy sources, 375

KULLAR, I. *See* GRAHAM & KULLAR

KUROSAKA, M. Cumulative nonlinear distortion of an acoustic wave propagating through non-uniform flow, 751

LAKE, BRUCE M. & YUEN, HENRY C. A note on some nonlinear water-wave experiments and the comparison of data with theory, 75

LAKE, BRUCE M., YUEN, HENRY C., RUNDGALDIER, HARALD & FERGUSON, WARREN E. Nonlinear deep-water waves: theory and experiment. Part 2. Evolution of a continuous wave train, 49

LAMOURE, JACQUES & MEI, CHIANG C. Effects of horizontally two-dimensional bodies on the mass transport near the sea bottom, 415

LEAL, L. G. *See* RUSSEL, HINCH, LEAL & TIEFFENBRUCK

LIU, J. T. C. Aerodynamic sound in a relaxing medium, 775

LIU, W. TIMOTHY. *See* KATSAROS, LIU, BUSINGER & TILLMAN

MALLINSON, G. D. & DE VAHL DAVIS, G. Three-dimensional natural convection in a box: a numerical study, 1

MEI, CHIANG C. *See* LAMOURE & MEI

MILDER, D. MICHAEL. A note regarding 'On Hamilton's principle for surface waves', 159

MILES, JOHN W. On Hamilton's principle for surface waves, 153

MUNT, R. M. The interaction of sound with a subsonic jet issuing from a semi-infinite cylindrical pipe, 609

NEWMAN, J. N. The motions of a floating slender torus, 721

OCKENDON, H. & OCKENDON, J. R. Variable-viscosity flows in heated and cooled channels, 177

OCKENDON, J. R. *See* OCKENDON & OCKENDON

PAULSON, C. A. *See* WILLIAMS & PAULSON

PEARSON, J. R. A. Variable-viscosity flows in channels with high heat generation, 191

PRAHL, J. M. *See* STRAZISAR, RESHOTKO & PRAHL

REEKS, M. W. On the dispersion of small particles suspended in an isotropic turbulent fluid, 529

RESHOTKO, E. *See* STRAZISAR, RESHOTKO & PRAHL

RONNEBERGER, D. & AHRENS, C. D. Wall shear stress caused by small amplitude perturbations of turbulent boundary-layer flow: an experimental investigation, 433

RUNDGALDIER, HARALD. *See* LAKE, YUEN, RUNDGALDIER & FERGUSON

RUSSEL, W. B., HINCH, E. J., LEAL, L. G. & TIEFFENBRUCK, G. Rods falling near a vertical wall, 273

SANDFORD, R. D. *See* CHEN & SANDFORD

SIEW, P. F. & HURLEY, D. G. Long surface waves incident on a submerged horizontal plate, 141

SMITH, F. T., SYKES, R. I. & BRIGHTON, P. W. M. A two-dimensional boundary layer encountering a three-dimensional hump, 163

SOBEY, IAN J. Laminar boundary-layer flow past a two-dimensional slot, 33

SOD, GARY A. A numerical study of a converging cylindrical shock, 785

STRAZISAR, A. J., RESHOTKO, E. & PRAHL, J. M. Experimental study of the stability of heated laminar boundary layers in water, 225

SYKES, R. I. *See* SMITH, SYKES & BRIGHTON

TAYLOR, J. A. C. *See* HUMPHREY, TAYLOR & WHITELAW

TAYLOR, J. J. *See* HOYT & TAYLOR

TIEFFENBRUCK, G. *See* RUSSEL, HINCH, LEAL & TIEFFENBRUCK

TILLMAN, JAMES E. *See* KATSAROS, LIU, BUSINGER & TILLMAN

WALLACE, JAMES M., BRODKEY, ROBERT S. & ECKELMANN, HELMUT. Pattern-recognized structures in bounded turbulent shear flows, 673

WHITELAW, J. H. *See* HUMPHREY, TAYLOR & WHITELAW

WILLIAMS, R. M. & PAULSON, C. A. Microscale temperature and velocity spectra in the atmospheric boundary layer, 547

YUEN, HENRY C. *See* LAKE & YUEN; LAKE, YUEN, RUNDGALDIER & FERGUSON

REVIEWS

The Thermodynamics of Fluid Systems, by L. C. Woods, 207

Aeroacoustics, by M. E. Goldstein, 396

Theory of Simple Liquids, by J. P. Hansen and I. R. McDonald, 605

Molecular Fluids, edited by T. Balian and G. Weil, 605

Foundations of Aerodynamics, 3rd edition, by A. M. Kuethe and C.-Y. Chow, 606

The Second Law of Thermodynamics, edited by J. Kestin, 607

Gundlagen der Gasdynamik, by K. Oswatitsch, 795

Theoretische Gasdynamik, by J. Zierep, 795

La Turbulence en Mécanique des Fluides, by A. Favre, L. S. G. Kovasznay, R. Dumas, J. Gaviglio and M. Coantic, 796