

the international journal of
**HEAT AND
 FLUID FLOW**

Index to Volume 3, 1982

March 1982, Number 1, 1-56
 June 1982, Number 2, 57-112

Authors

Barozzi, G. S. 45
 Bejan, A. 67
 Collins, M. W. 53
 Chisholm, D. 149
 Coney, J. E. R. 31, 39, 101, 125
 Crane, R. I. 13
 Dumas, A. 45
 Elsayed, M. M. 207
 Enayet, M. M. 213, 221
 Fathalah, K. A. 207
 Gibson, M. M. 213, 221
 Glynn, D. R. 73
 Gorla, R. S. R. 195
 Gotham, D. H. T. 21
 Haynes, J. B. 21
 Horlock, J. H. 3
 Launder, B. E. 171
 Marsh, H. 3
 Martin, C. N. B. 135
 Oliver, A. R. 81
 Peacock, R. E. 185
 Peretz, R. 147
 Pompoli, R. 45
 Ryley, D. J. 115
 Spencer, E. A. 59
 Spiga, G. 143
 Spiga, M. 143
 Sproston, J. L. 225
 Taylor, A. M. K. P. 213
 Wan, C. C. 31, 39, 101, 125
 Yianneskis, M. 213, 221
 Yilmaz, T. 201
 Zuber, I. 91

Titles

Air-lift pumps, Prediction of the performance of 149
 Bends and valves on orifice plate pressure distributions and discharge coefficients, Effects of upstream 135
 Bernoulli surface distortion; Calculation of secondary flow in cascades including effects of 73
 Blading: achievements and prospects, Modelling of turbulent flow in gas turbine 171
 Bubble formation, Heat transfer during 21
 Calculation of secondary flow in cascades including effects of Bernoulli surface distortion 73
 Cascades, A review of turbomachinery tip gap effects. Part 1 185
 Cascades including effects of Bernoulli surface distortion, Calculation of secondary flow in 73
 Channels, Numerical solution of the turbulent flow of an incompressible fluid in curved planar and axially symmetrical 91

September 1982, Number 3, 113-168
 December 1982, Number 4, 169-232

Circular ducts: a theoretical assessment, The influence of an abrupt convergence on heat transfer in 53
 Circular ducts, The influence of an abrupt convergence on heat transfer in 45
 Condenser lengths of a finless heat pipe to achieve a maximum heat flow per unit weight, Relation between evaporator and 147
 Convergence on heat transfer in circular ducts: a theoretical assessment, The influence of an abrupt 53
 Convergence on heat transfer in circular ducts, The influence of an abrupt 45
 Cross-wire probes, An investigation of adiabatic spiral vortex flow by means of 125
 Design of S-shaped diffusers in incompressible flow 225
 Diffusers in incompressible flow, Design of S-shaped 225
 Digital analysis, An investigation of adiabatic spiral vortex flow in wide gaps by visualisation and 39
 Discharge coefficients, Effects of upstream bends and valves on orifice plate pressure distributions and 135
 Double vortex sheet model of the viscous flow near the trailing edge of a lifting aerofoil, A 81
 Drop coalescence and deposition in turbulent wet steam pipe flows 13
 Duct, Measurements of turbulent developing flow in a moderately curved square 221
 Effects of upstream bends and valves on orifice plate pressure distributions and discharge coefficients 135
 Evaporator and condenser lengths of a finless heat pipe to achieve a maximum heat flow per unit weight, Relation between 147
 Exergy from solar collectors under time-varying conditions, Extraction of 67
 Experimental study of diabatic spiral vortex flow, An 31
 Extraction of exergy from solar collectors under time-varying conditions 67
 Finless heat pipe to achieve a maximum heat flow per unit weight, Relation between evaporator and condenser lengths of a 147
 Flow between two parallel plates, Simultaneous convection and radiation in 207
 Flow in a moderately curved square duct, Measurements of turbulent developing 221
 Flow in a pipe bend, Laser-Doppler measurements of laminar and turbulent 213
 Flow measurement, Progress on international standardisation of orifice plates for 59
 Fluid flow, Geothermal energy: problems in heat and 115
 Fluid mechanics of turbomachines: a review 3
 Gas turbine blading: achievements and prospects, Modelling of turbulent flow in 171
 Geothermal energy: problems in heat and fluid flow 115
 Heat and fluid flow, Geothermal energy: problems in 115
 Heat transfer, Influence of turbulence intensity and free stream velocity oscillations on stagnation point 195
 Heat transfer during bubble formation 21
 Heat transfer in circular ducts: a theoretical assessment, The influence of an abrupt convergence on 53
 Heat transfer in circular ducts, The influence of an abrupt convergence on 45
 Incompressible flow, Design on S-shaped diffusers in 225
 Influence of an abrupt convergence on heat transfer in circular ducts: a theoretical assessment, The 53
 Influence of an abrupt convergence on heat transfer in circular ducts, The 45
 Influence of turbulence intensity and free stream velocity oscillations on stagnation point heat transfer 195
 Investigation of adiabatic spiral vortex flow by means of cross-wire probes, An 125
 Investigation of adiabatic spiral vortex flow in wide gaps by visualisation and digital analysis, An 39
 Laminar fluid flow in rows of plates in staggered arrangement, Numerical solution of Navier-Stokes equations for 201
 Lifting aerofoil, A double vortex sheet model of the viscous flow near the trailing edge of a 81
 Modelling of turbulent flow in gas turbine blading: achievements and prospects 171
 Numerical solution of Navier-Stokes equations for laminar fluid flow in rows of plates in staggered arrangement 201
 Numerical solution of the turbulent flow of an incompressible fluid in curved planar and axially symmetrical channels 91
 Orifice plates for flow measurement, Progress on international standardisation of 59
 Orifice plate pressure distributions and discharge coefficients, Effects of upstream bends and valves on 135
 Pipe bend, Laser-Doppler measurements of laminar and turbulent flow in a 213
 Prediction of the performance of air-lift pumps 149
 Progress on international standardisation of orifice plates for flow measurement 59
 Radial variation of adiabatic and diabatic spiral vortex flow in a wide annular gap 101
 Radiation in flow between two parallel plates, Simultaneous convection and 207

Relation between evaporator and condenser lengths of a finless heat pipe to achieve a maximum heat flow per unit weight 147

Response of thermal storage units to periodic operating conditions 143

Review of turbomachinery tip gap effects. Part 1: Cascades, A 185

Rows of plates in staggered arrangement, Numerical solution of Navier-Stokes equations for laminar fluid flow in 201

Secondary flow in cascades including effects of Bernoulli surface distortion, Calculation of 73

Simultaneous convection and radiation in flow between two parallel plates 207

Solar collectors under time-varying conditions, Extraction of exergy from 67

Spiral vortex flow, An experimental study of diabatic 31

Spiral vortex flow by means of cross-wire probes, An investigation of diabatic 125

Spiral vortex flow in a wide annular gap, Radial variation of diabatic and diabatic 101

Spiral vortex flow in wide gaps by visualisation and digital analysis, An investigation of diabatic 39

Stagnation point heat transfer, Influence of turbulence intensity and free stream velocity oscillations on 195

Thermal storage units to periodic operating conditions, Response of 143

Tip gap effects. Part 1: Cascades, A review of turbomachinery 185

Trailing edge of a lifting aerofoil, A double vortex sheet model of the viscous flow near the 81

Turbomachines: a review, Fluid mechanics of 3

Turbulence intensity and free stream velocity oscillations on stagnation point heat transfer, Influence of 195

Turbulent flow in gas turbine blading: achievements and prospects, Modelling of 171

Turbulent flow of an incompressible fluid in curved planar and axially symmetrical channels, Numerical solution of the 91

Turbulent wet steam pipe flows, Drop coalescence and deposition in 13

Valves on orifice plate pressure distributions and discharge coefficients, Effects of upstream bends and 135

Viscous flow near the trailing edge of a lifting aerofoil, A double vortex sheet model of the 81

Visualisation and digital analysis, An investigation of adiabatic spiral vortex flow in wide gaps by 39

Key words

Air intakes 225

Bubbles 21

Channel flow 91, 207

Compressors 185

Condensers 147

Convection 207

Design calculations 149

Differential pressure flowmeters 59

Drop coalescence 13

Ducting 221

Efficiency 149

Energy storage 143

Entry effects 45, 53

Evaporators 147

Exergy 67

Flow 81

Flow discharge coefficient 59, 135

Flow measurement 135, 213, 221

Flow transitions 31, 39, 101, 125

Flow visualisation 213

Fluid mechanics 3, 115, 171

Fluid-solid systems 143

Geothermal power 115

Heat pipes 147

Heat transfer 21, 31, 45, 53, 101, 115, 143, 147, 195

Hodograph methods 225

Incompressible flow 91, 225

Laminar flow 45, 53, 201

Navier-Stokes equations 201

Orifice plates 59, 135

Orifices 21

Pipe bends 213

Plates 201

Pumps 149

Radiation 207

Second law analysis 67

Secondary flow 73

Separation 45, 53

Solar collectors 67, 207

Staggered arrangement 201

Stagnation point 195

Steam turbines 13

Tip gap 185

Turbine blades 185

Turbines 3, 171, 185

Turbomachines 73

Turbulence 195, 213, 221

Turbulent flow 31, 39, 91, 101, 125, 171

Two phase flow 13

Unsteady flows 3

Velocity 195

Visualisation 39

Vortices 31, 39, 73, 81, 101, 125

Wakes 81

Book reviews

Applied Heat Transfer 230

Basic Mechanisms in Two Phase Flow and Heat Transfer 100

Centrifugal Pump Clinic 111

Decay Heat Removal and Natural Convection in Fast Breeder Reactors 230

Engineering Calculation Methods for Turbulent Flow 170

Flow Induced Vibration Design Guidelines 170

Fluid Flow: Pumps, Pipes and Channels 124

Fluid Mechanics of Combustion Systems 142

Fluid Mixing 110

Fluid Transients and Structural Interactions in Piping Systems 52

Fundamentals of Heat Transfer 114

Gas Turbines For Autos and Trucks 134

Heat Transfer 51

Implementation of Finite Element Methods for Navier-Stokes Equations 154

Introduction to Thermodynamics, An 11

Prediction of Turbulent Reacting Flows in Practical Systems 11

Proceedings of 7th International Conference on Numerical Methods in Fluid Dynamics 194

Process Level Instrumentation and Control: Vol. 2 Engineering measurements and instrumentation 110

Thermodynamic Principles of Energy Degrading 12

Turbulent Buoyant Jets and Plumes 194

Two-phase Flow Dynamics 229

Conference reports

IMEKO 9th World Congress 154

27th International Gas Turbine Conference 155

Letters to the Editors

Adendum to Marsh, H. and Horlock, J. H. 3(1), pp. 3-11 109

Second law debate—D. F. Moore 219

Dr Kotas replies 220

Treatments of thermodynamics—D. F. Moore 153

Reviewer's reply—T. J. Kotas 153

Reprints

Reprints of all articles in this journal are available in quantities of 100 or more.

Reprints are essential —

- for the company that wants to distribute impartial comment on its activities to potential customers and clients.
- for the company that wants to up-date its technical staff on new techniques and new technologies.

For full details of prices and availability of reprints, please write to:

The Reprint Department Butterworth Scientific Limited — Journals Division
PO Box 63 Westbury House Bury Street Guildford Surrey GU2 5BH England