FOREWORD

Following a very successful meeting on Annular and Dispersed Flows in Pisa in 1984, a Second International Symposium on Annular and Dispersed Flows was held in Oxford on 6-8 September 1988. This produced a significant number of good-quality presentations and led to much interesting and lively discussion. The papers in this issue of the *International Journal of Multiphase Flow* result from some of these presentations. The full list of papers is given below.

A further meeting on the topic of Annular and Dispersed Flows has been proposed for 1992. It will be held in France and organized by Dr J.-M. Delhaye (Centre d'Etudes Nucleaires, BP 85, Avenue des Martyrs, 38041 Grenoble Cedex, France).

> B. J. AZZOPARDI Papers Secretary

- S. SCHADEL, G. LEMON and T. J. HANRATTY (University of Illinois): Measurements of the rate of atomization and deposition.
- *K. SEKOGUCHI and M. TAKEISHI (Osaka University): Interfacial structures in upward huge wave flow and annular flow regimes.
- *A. H. GOVAN, G. F. HEWITT, D. G. OWEN and G. BURNETT (Harwell Laboratory and Imperial College): Wall shear stress measurements in vertical air-water annular two-phase flow.
- *D. M. JEPSON, B. J. AZZOPARDI and P. B. WHALLEY (Harwell Laboratory and University of Oxford): The effect of gas properties on drops in annular flow.
- N. E. TAYALI, C. J. BATES and M. L. YEOMAN (University College, Cardiff and Harwell Laboratory): Large droplets in annular two-phase flow.
- A. N. SKOULOUDIS and S. J. PEERLESS (Ispra and Imperial College): Pressure gradient, void fraction and film dry-out calculations.
- *T. SAWAI, S. YAMAUCHI and S. NAKANISHI (Takamatsu National College of Technology and Himeji Institute of Technology): Behavior of disturbance waves under hydrodynamic non-equilibrium conditions.
- M. SHEINTUCH and A. E. DUKLER (Technion, Haifa and University of Houston): Phase plane analysis and bifurcation phenomena as applied to thin wavy falling films.
- *F. K. WASDEN and A. E. DUKLER (University of Houston): Numerical investigation of large wave interactions on free falling films.
- T. D. KARAPANTSIOS, S. V. PARAS and A. J. KARABELAS (Aristotle University of Thessaloniki): Statistical characteristics of free falling films at high Reynolds number.
- D. BARNEA and Y. TAITEL (Tel-Aviv University): Non-linear stability and dynamic simulation of annular flow.
- *L. A. JURMAN, K. BRUNO and M. J. MCCREADY (University of Notre Dame): Periodic and solitary waves on thin, horizontal, gas-sheared liquid films.
- J. NAHSTOLL (DFVLR): An investigation of annular flow at high evaporation rates in view of liquid film cooling.
- *V. KEFER, W. KÖHLER and W. KASTNER (Siemens AG, KWU Group): Critical heat flux (CHF) and post-CHF heat transfer in horizontal and inclined evaporator tubes.
- *V. I. MILASHENKO, B. I. NIGMATULIN, V. V. PETUKHOV and N. I. TRUBKIN (All-Union Scientific Research Institute for Nuclear Power Plants Operation): Burnout and distribution of liquid in evaporative channels of various lengths.
- *T. FUKANO and A. OUSAKA (Kyushu University and Technical College of the University of Tokushima): Prediction of the circumferential distribution of film thickness in horizontal and near-horizontal gas-liquid annular flows.
- *Y. HAGIWARA, E. ESMAEILZADEH, H. TSUTSUI and K. SUZUKI (Kyoto University and Tabriz University): Simultaneous measurement of liquid film thickness, wall shear stress and gas flow turbulence of horizontal wavy two-phase flow.
- *M. W. REEKS (Berkeley Nuclear Laboratories): On the momentum and energy equations for a dispersed particle flow.

Foreword

- *G. A. KALLIO and M. W. REEKS (Berkeley Nuclear Laboratories): A numerical simulation of particle deposition in turbulent boundary layers.
- R. KOWE, J. C. R. HUNT, K. LUNDE and R. J. PERKINS (University of Cambridge): Numerical simulation of bubbly two-phase channel flow.
- S. L. LEE (National Taiwan University): A study of a turbulent two-phase dilute suspension flow in a vertical pipe.
- A. BERLEMONT, P. DESJONQUERES and G. GOUESBET (INSA de Rouen): Particle Langrangian simulations in turbulent flows.
- K. MISHIMA and I. MICHIYOSHI (Kyoto University): Boundary of horizontal two-phase annular flow and its relation to some flow characteristics.
- D. R. SPENCE, P. L. SPEDDING and J. J. J. CHEN (The Queen's University, Belfast and University of Auckland): The stratified flow regime and its importance in the transition to annular flow.
- R. SPATZ and D. MEWES (University of Hannover): Flooding mechanism in fuel elements with and without heat transfer between steam and water.
- *R. T. LAHEY JR and K. OHKAWA (Rensselaer Polytechnic Institute and Westinghouse Electric Corp., Pittsburgh): An experimental investigation of phase distribution in an eccentric annulus.
- A. BACHIR and J. M. DELHAYE (CEN Grenoble): Theoretical analysis of the flow of a liquid film trickling down a vertical wall and bound by an upward flow of gas.
- F. LUSSEYRAN and G. COGNET (LEMTA): Analysis of the structures of slug flow for the prediction of transition to annular flow.
- S. BANERJEE and M. RASHIDI (University of California): Burst interactions with the gas-liquid interface in liquid layers.
- *M. M. LEE, T. J. HANRATTY and R. J. ADRIAN (University of Illinois): The interpretation of droplet deposition measurements with a diffusion model.
- R. J. PERKINS, K. LUNDE, J. C. R. HUNT and R. KOWE (University of Cambridge): Image processing techniques for measurements in two-phase flows.
- T. DYAKOWSKI (Warsaw Technical University): Optical method of measuring void fraction and particle velocity in dispersed particle-air flow.
- *A. H. GOVAN, G. F. HEWITT and C. F. NGAN (Harwell Laboratory and Imperial College): Particle motion in a turbulent pipe flow.

Papers included in this issue are marked with an asterisk.