Int. J. Heat Mass Transfer. Vol. 35, No. 2, pp. 591–592, 1992
Pergamon Press plc. Printed in Great Britain

ANNOUNCEMENTS

SHORT COURSES on

Multiphase Flow and Heat Transfer: Bases, Modelling and Applications in: A, The Nuclear Power Industry; B, The Process Industries

Zurich, 23–27 March 1992

Hosted by the Swiss Federal Institute of Technology (ETH), Zurich, Switzerland

THE MODULAR courses feature coordinated, comprehensive series of lectures by experts and are of interest to practising engineers and to researchers who wish to obtain a condensed and critical view of present basic knowledge (Part I) or information on the state of the art regarding applications in specialized industries (Parts IIA and IIB).

The courses aim at an interdisciplinary transfer of knowledge. Applications cover nuclear and chemical plant safety (with an emphasis on severe accidents), steam generators, pipelines, etc.

For further information contact

Prof. G. Yadigaroglu, ETH-Zentrum, CH-8092 Zurich, Switzerland (tel.: +41-1-256.4615, telefax: +41-1-262.2158).

THE LECTURERS

Sanjoy Banerjee, Professor at the Dept. of Chemical and Nuclear Engineering, Univ. of California–Santa Barbara.

Michael L. Corradini, Professor of Nuclear Engineering and Engineering Physics at the Univ. of Wisconsin–Madison.

Gad Hetsroni, Danciger Professor of Engineering at Technion–Israel Institute of Technology.

Geoffrey F. Hewitt, Professor of Chemical Engineering at Imperial College, London.

George Yadigaroglu, Professor of Nuclear Engineering at the Swiss Federal Institute of Technology in Zurich (ETHZ) and Head of the Thermal-Hydraulics Laboratory at the Paul-Scherrer Institute.

CONTENTS OF LECTURES

Part I. *Bases*
1. Introduction and basics
2. Basic equations
3. Flow regimes, pressure drop and void fraction
4. Two-phase flow in vertical pipes
5. Two-phase flow in horizontal and inclined pipes
6. Closure relationships
7. Two-phase heat transfer
8. Post-dryout heat transfer
9. Numerical methods
10. Multidimensional modelling
11. Computer codes
12. Instabilities in two-phase flow

Part IIA. *Water reactor applications*
13A. LOCA phenomena
14A. Severe accidents
15A. Codes for transient and accident analysis
16A. Severe accident codes
17A. Steam generators
18A. Vapor explosions

Part IIB. *Process and petroleum industry applications*
13B. Multicomponent heat and mass transfer
14B. Emergency relief system vent sizing
15B. Two-phase flow in pipelines
16B. Dense gas and mist dispersions
17B. Oil/water/gas flows: characteristics and measurement
18B. Vapor-cloud explosions

JOINT WORKSHOP OF EUROTHERM & ERCOFTAC

Benchmark Computation and Experiment for Turbulent Natural Convection in a Square Cavity

Delft, The Netherlands, 25–27 March 1992

Hosted by the J. M. Burgers Centre for Fluid Mechanics

SCOPE

THE AIM of this workshop is to obtain both computational and experimental benchmark results for the turbulent natural-convection flow of fluid in the square cavity with differentially heated vertical side walls. It is an extension of the earlier laminar benchmark by De Vahl Davis and Jones. A standard two-dimensional case, including a k–ε turbulence model, is defined for the computations. Also experiments preferably have to be performed for the standard configuration. In addition to the standard case, participants are requested to extend their calculations and/or experiments to