

ANNOUNCEMENTS

SHORT COURSES

on

MULTIPHASE FLOW AND HEAT TRANSFER: BASES, MODELLING AND APPLICATIONS IN (A) THE NUCLEAR POWER INDUSTRY AND (B) THE PROCESS INDUSTRIES

Hosted by

Swiss Federal Institute of Technology (ETH), Zurich, Switzerland

23–27 March 1992

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, steam generators, pipelines etc. Emphasis this year is on numerical methods and codes, nuclear and non-nuclear severe accident phenomena and oil-gas transport.

The lecturers

Sanjoy Banerjee, Professor at the Department of Chemical and Nuclear Engineering, University of California, Santa Barbara, U.S.A.

Michael L. Corradini, Professor of Nuclear Engineering and Engineering Physics at the University of Wisconsin, Madison, U.S.A.

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

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

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

For further information contact:

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Call for Papers

THE 24th ISRAEL CONFERENCE ON MECHANICAL ENGINEERING

Technion City, Haifa, Israel

18-19 May 1992

Sponsored by

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Ben-Gurion University of the Negev
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The conference covers all the theoretical and applied aspects of mechanical engineering. Scientists and engineers are invited to submit papers on recent scientific or technological advances in the various fields of mechanical engineering. Papers and the extended abstracts will be published in the conference proceedings.

Timetable for submission

- 31 December 1991:** Deadline for submission of two copies of an abstract (800-1000 words). The manuscripts should be addressed to the Chairman of the Editorial Committee.
- 31 January 1992:** Notice to authors of acceptance of papers, together with instructions and repro masters for typing the paper or the extended abstract (of about 2000 words).
- 15 March 1992:** Deadline for receipt of the papers or extended abstracts typed on the repro masters.

For any further information please contact the Conference Chairman, or the Chairman of the Editorial Committee:

Conference Chairman

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