

**ANNOUNCEMENTS***Call for Papers***THE SECOND INTERNATIONAL SYMPOSIUM ON
MULTIPHASE FLOWS AND HEAT TRANSFER
IN MATERIALS PROCESSING**

The Multiphase Flow Committee of the Fluids Engineering Division and the Committee on Heat Transfer and Materials Processing and Manufacturing (K-15) of the Heat Transfer Division are organizing a symposium on Multiphase Flow and Heat Transfer in Materials Processing. The purpose of the symposium is to provide a forum for the presentation of current activities in current and emerging technologies, novel and promising processes and possible directions of future activities.

The submitted papers should address the significance of multiphase flow and heat transfer in state-of-the-art and new manufacturing and materials processing techniques. Of particular interest is the role multiphase mechanics and heat transfer can play in the optimization of current and emerging technologies. Typical topics may include:

- spray forming and coating
- processing of polymer-fiber composites
- casting of metal matrix composites
- plasma arc cutting
- welding
- jet cutting
- spray cooling
- generating nanocrystalline materials
- plasma and chemical vapor deposition
- thermal processing
- plasma etching
- spin coating
- sputter deposition
- powder metallurgy
- laser processing

For further information please contact:

Clayton Crowe
School of Mech. & Mats Engng
Washington State University
Pullman, WA 99164-2920
U.S.A.
Tel.: (509) 335 3214
Fax: (509) 335 4662
e-mail: crowe@mme.wsu.edu

Dr John Pien
Aluminum Co. of America
100 Technical Drive
Alcoa Center, PA 15069-0001
U.S.A.
Tel.: (412) 337 2467
Fax: (412) 337 2337
e-mail: pien1@ts.atc.alcoa.com

Michael M. Chen
Dept Mech. Engng & Appl. Mech.
University of Michigan
Ann Arbor, MI 48109-2125
U.S.A.
Tel.: (313) 764 5241
Fax: (313) 747 3170
e-mail: mmchen@umich.edu

Masato Ikegawa
Mech. Engng Research Lab.
Hitachi Ltd
502 Kandatsu, Tsuchiura
Ibaraki 300
Japan
Tel.: +81 298 32 4111 ext. 6140
Fax: +81 298 32 2804
e-mail: mtikega@merl.hitachi.co.jp

Dr Udo Fritsching
Verfahrenstechnik
University of Bremen
28359 Bremen
Germany
Tel.: (0421) 218 3663
Fax: (0421) 218 5378
e-mail: ufri@iwt.uni-bremen.de

Announcement for Short Courses
on
MULTIPHASE FLOW AND HEAT TRANSFER

Part I: Bases
Part IIA: Water Reactor Applications
Part IIB: Computational Modelling (Revised)

Zurich, 25–29 March 1996

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

These modular courses feature coordinated, comprehensive series of lectures by experts in their fields. Part I is of interest to practising engineers and to researchers who wish to obtain a condensed and critical view of present fundamental knowledge, modelling and basic numerical techniques in multiphase flow. Part IIA covers multiphase flow phenomena and applications of particular interest to the nuclear industry, with emphasis on severe accidents and on advanced light water reactors. Part IIB covers in depth computational modelling and CFD techniques in relation to multiphase flows. The courses aim at an interdisciplinary transfer of knowledge between the various industries for which two-phase flows are important (nuclear, process, cryogenics, petroleum, etc.).

Lecturers: S. Banerjee, M. L. Corradini, G. Hetsroni, G. F. Hewitt, M. Lance, G. I. Quarini and G. Yadigaroglu.

For further information please contact:

Professor G. Yadigaroglu
ETH-Zentrum/CLT
CH-8092 Zurich
Switzerland
Tel.: +41 1 632 4615
Fax: +41 1 632 1166

FLUID–PARTICLE INTERACTION IV

Davos, Switzerland

12–17 May 1996

The Engineering Foundation announces the fourth conference in its series on fluid–particle interactions. The meeting is co-sponsored by the American Society of Chemical Engineers, the American Society of Mechanical Engineers and industrial sponsors.

General information

The principal goal of this workshop is to provide an informal forum for open discussion of current and novel ideas and findings on fluid–particle interactions.

Particulate flows continue to challenge industry and are central to numerous processes. As the subject is inherently multidisciplinary, the meeting will draw from numerous disciplines that deal with particulate processes: biological, environmental, physics, mechanical, chemical, civil engineering, geophysics, etc. The conference will clarify the present state-of-the-art and extend the frontiers of the subject by fostering a free and informal exchange of ideas. Participants will be encouraged to present up-to-date information on the latest developments, to provoke suggestions concerning underlying theories and suggest possible methods of achieving progress.

A particular objective is to provide an opportunity for representatives from industry to present important practical problems before an audience representing some of the best academic expertise in the field. There will be special emphasis on the ability to make practical predictions, the available methods (including CFD) and sources of error or uncertainty.

Organizing committee

U.S. Academic:	Clayton Crowe, <i>Washington State University</i>
U.S. Government:	Lucia Liljergren, <i>Battelle-Pacific Northwest Laboratory</i>
U.S. Industry:	Herman Bieber, <i>Bieber Enterprises</i> Reg Davies, <i>DuPont</i> H. Philip Hsieh, <i>Alcoa Technical Center</i> Harri Kytomaa, <i>Failure Analysis Associates</i> Peter Runstadler, <i>Fluent Inc.</i>
Canada:	John J. Grace, <i>University of British Columbia</i>
Europe:	Gad Hetsroni, <i>Israel Institute of Technology</i>
U.K.:	John Yates, <i>University College of London</i>
Japan:	Yutaka Tsuji, <i>Osaka University</i>

For further information please contact:

Engineering Foundation
345 East 47th Street, Suite 303
New York
NY 10017
U.S.A.
Tel.: (212) 705 7836
Fax: (212) 705 7441
e-mail: engfnd@aol.com

Call for Nominations

THE MULTIPHASE FLOW INTERNATIONAL PRIZE

This recognizes an individual's significant scientific/technical contributions to the field of multiphase flow research, as well as outstanding leadership in promoting scholarship, research, development and education in this field. The Prize will be announced in March 1997, and the awardee will be invited to deliver a keynote lecture at the International Conference of Multiphase Flow (ICMF'98) in Lyon, France on 8–12 June 1998.

Selection criteria

- Scientific originality and degree of generality (60%)
- Scientific/technological relevance (30%)
- Synergism resulted from international and/or industry collaborations (10%).

A manuscript to be submitted to the *International Journal of Multiphase Flow* is required

Sponsor: IEA of Japan Co. and ICMF'98

Nominations deadline: 1 November 1996

Prize: a plaque, a certificate and a cash award, to be presented at the ICMF'98.

THE YOUNG SCIENTIST MULTIPHASE FLOW BREAKTHROUGH AWARD

This recognizes an individual's significant scientific/technical breakthrough(s) to the field of multiphase flow research, made by a researcher younger than 40 years at the date of the Award presentation. The Prize will be announced in 1997, and the awardee will be invited to deliver a keynote lecture at the International Conference of Multiphase Flow (ICMF'98) in Lyon, France on 8–12 June 1998.

Selection criteria

- Scientific originality and degree of generality of the breakthrough (60%)
- Scientific/technological relevance (30%)
- Overall professional performance, including the quality of Ph. D. thesis, journal publications, education in multiphase flow, professional society activities (25%).

A manuscript to be submitted to the *International Journal of Multiphase Flow* is required

Sponsor: Eastman Kodak Co. and ICMF'98

Nominations deadline: 1 November 1996

Prize: a plaque, a certificate and a cash award, to be presented at the ICMF'98.

International Multiphase Flow Award Committee

Professor M. C. Roco, Head
 Professor M. Bohnet (Germany)
 Dr G.-P. Celata (Italy)
 Dr J.-M. Delhaye (France)
 Professor D. Joseph (U.S.A.)
 Professor S. Savage (Canada)
 Professor T. Theofanous (U.S.A.)
 Dr A. Tsuge (Japan)
 Professor Y. Tsuji (Japan)
 Professor L. Zhou (China)

For nominations please write to:

Professor M. C. Roco
 National Science Foundation
 4201 Wilson Blvd, Suite 525
 Arlington, VA 22230
Tel.: (703) 306 1371
Fax: (703) 306 0319

Nomination Form of the International Multiphase Flow Award Committee for:

THE MULTIPHASE FLOW INTERNATIONAL PRIZE

THE YOUNG SCIENTIST MULTIPHASE FLOW BREAKTHROUGH AWARD

Background data

Name of the award
 Name of the nominee
 Present position
 University education (institution, degree, year)
 Positions held (institution and location, position held, dates)
 Membership in professional organizations
 Honors
 Sponsor's name and address
 Citation (no more than 30 words that reflect specific accomplishments)

Qualifications (identification and evaluation of the accomplishments on a maximum of two double-spaced pages; list of selected references published by the nominee; refer to the award's selection criteria; a resume may be included). Supporting letters (up to three letters to be attached to the nomination; the Award Committee members may not write supporting letters).