Int. J. Multiphase Flow, Vol. 3, pp. 615–616. Pergamon/Elsevier, 1977. Printed in Great Britain

ANNOUNCEMENT

INTERNATIONAL CENTRE FOR HEAT AND MASS TRANSFER

Beograd, Yugoslavia

Preliminary Announcement
1978—International Seminar on

MOMENTUM, HEAT AND MASS TRANSFER IN TWO-PHASE ENERGY AND CHEMICAL SYSTEMS

(Inter-Phase Phenomena in Two-Phase Flows)

The Dubrovnik Palace Hotel, Dubrovnik, Yugoslavia

4–9 September 1978

The fact that extensive studies are presently being directed towards better understanding of inter-phase phenomena in two-phase flows indicates the practical importance of this problem area. Besides the theoretical interest which aims at a deeper understanding of inter-phase momentum, heat, and mass transfer, there is a strong demand for practical information about two-phase flows; they occur in many industrial and power flow situations and their behaviour must be known to optimize those systems in which two-phase flows occur.

It is the task of the 1978—International Seminar of the ICHMT to bring together research workers and engineers interested in two-phase flows in general and inter-phase phenomena in two-phase flows in particular. The purpose of the Seminar is to provide a forum for exchange of information in the field of the Seminar topic and to enhance discussions on existing problem areas and which relate mainly to heat and mass transfer in energy and chemical systems.

The seminal will comprise:

1. *Review and introductory lectures* in the field of two-phase flows in energy production and chemical industry.
   1.1 Two-phase inter-phase phenomena in power engineering.
   1.2 Two-phase inter-phase phenomena in chemical and process engineering.

and sessions on:

2. *Two-phase flow fundamentals*: Inter-phase phenomena and their treatment in the general equations of two-phase flows, measurements and numerical experiments yielding basic information on inter-phase phenomena

3. *Inter-phase momentum, heat and mass transfer*
   3.1 Two-phase flows of rigid and deformable particles; local fluid and particle velocities; size distribution and concentration; diffusivity and mechanisms of inter-phase transports
   3.2 Non-equilibrium phenomena; liquid superheat temperature distribution in the vicinity of inter-phases, statistical methods in two-phase systems
   3.3 Inter-phase transport in liquid films, modelling of annular flows, influences of waves, influences of slip-velocities on transport properties, droplet separation and entrainment

4. *Applications in energy engineering*
   4.1 Heat transfer and pressure drop in the power generator, entrainment of droplets from liquid film, two-phase flow phenomena related to burn out, systems damage, corrosion, etc.
   4.2 Mist flows in wet stream turbines, nucleation problems, properties of mist flows
   4.3 Unsteady two-phase flow problems, importance of unsteady heat and mass transfer in two-phase flows, definition of transfer coefficients, problems relating to reactor safety

5. *Application in chemical and process engineering*
   5.1 Isothermal two-phase flow systems and transport properties, gas–liquid and liquid–liquid systems, mass transfer in two-phase flows, mass transfer enhancement
   5.2 Heat and mass transfer at inter-phase of solid–liquid and liquid–gas systems.

Organization of the seminar:

The Scientific Secretary of the ICHMT: Professor N. Afgan, P.O. Box 522, 11000 Beograd, Yugoslavia.

Committee of the 1978—International Seminar:

Chairman: Dr. F. Durst, Sonderforschungsbereich 80, Universität Karlsruhe, Kaiserstraße 12, D-7500 Karlsruhe 1, F.R. Germany.

Co-chairman: Dr. G. V. Tsiklauri, Institute of High Temperatures, Academy of Sciences USSR, Krasnokas armenaya, Dom 17A, Moscow, U.S.S.R.

Members consisting at present of:

Dr. J.-M. Delhaye, Commissariat à l'Energie Atomique, Centre d'Etudes Nucléaires, Serive des Transferts Thermiques, Boite Postale 85, F-38041 Grenoble Cedex.

Professor T. J. Hanratty, Chemical Engineering Department, University of Illinois, Urbana Champaign, IL 61801, U.S.A.
Dr. G. F. Hewitt, Heat Transfer and Fluid Flow Service, Building 392, Harwell, Oxfordshire OX11 0RA, England.
Professor Dr.-Ing. F. Mayinger, Institut für Verfahrenstechnik, Technische Universität Hannover, Callinstraße 15F, D-3000 Hannover 1.

Information on seminal sessions:

At each Session, an introductory lecture will be presented by an invited expert who will present a state-of-the-art report on the particular subject of the Session. The lecture will be followed by 20 min presentations of papers which will be printed in advance and will be available for participants at the Seminar.

There will be discussions after each paper. Short contributions within these discussion periods should be arranged with the Chairman of the Sessions in which the contributions are to be made.

Contributions to the seminar, paper selection and deadlines:

Papers are invited on the subject given on the first page of this preliminary announcement. Selection will be from synopsis of not less than 500 words. The abstracts should be in English and should not be handed in later than 31 December 1977. The authors will be notified of the acceptance of their paper by 1 February 1978. Accepted papers will be required by 15 April 1978 and must be in English. All papers will be published and distributed to the participants at the Seminar in Dubrovnik. Additional copies of the Proceedings will be available after the Conference.

In order to help the organizers, notification of intention to submit a paper and/or to participate in the Conference, should be made to: Dr. F. Durst *as soon as possible*, together with an indication of the Session number for which the contribution is intended.

Information about registration and accomodation:

The registration fee for the Seminar is: US $160.

Additional information will be available in the announcement and call for papers around beginning of November 1977. Further information can also be obtained by writing to the Scientific secretary of ICHMT.