

ANNOUNCEMENTS

TWO-PHASE ANNULAR AND DISPERSED FLOWS

Università di Pisa, Pisa, Italy, 24-29 June 1984

Objectives

The unifying theme of the Symposium will be the understanding of the annular and dispersed patterns that exist for two-phase flows. Both experimental and theoretical papers will be welcome. The types of topics to be covered are as follows:

- (1) Atomization of wall films and the prediction of drop size.
- (2) Dispersion of particles in a turbulent flow and their deposition on boundaries.
- (3) Behavior of a cloud of particles including their effect on fluid turbulence, the prediction of slip velocity and the coalescence of droplets.
- (4) Wave structure on and stability of liquid films.
- (5) Turbulence properties of the liquid layer and the gas in concurrent flows.
- (6) Fundamental aspects of heat, mass and momentum transfer to liquid films and to drops, including dry-out of liquid films.
- (7) Asymmetry effects in horizontal two-phase flows.
- (8) Prediction of the transition to annular flow.
- (9) Prediction of film height, friction factor, pressure drop, entrainment for annular flow; i.e. the development of design equations.
- (10) Fundamental issues in the analysis of systems involving annular and dispersed flows.

Program format

Approximately thirty papers will be given in four morning and two afternoon sessions. Provisions will be made for the showing of films on one evening. Sightseeing excursions will be organized for two afternoons and for a full day on 29 June.

Call for papers

The Organizing Committee is calling for papers in the topical areas listed above. Paper selection will be based on reviewed abstracts of approximately 600 words which should be double spaced. The abstracts should be sent to B. J. Azzopardi, Engineering Science Division, AERE, Harwell, OX11 0RA, U.K.

Deadlines

Final date for receipt of abstract, 31 October 1983.
Notification of acceptance, 29 February 1984.

Publications

A bound volume of the extended abstracts will be available at the Symposium. Authors are invited to submit full length manuscripts by the opening data of the Symposium. Arrangements have been made for the publication of selected papers shortly after the Symposium in a special issue of *PhysicoChemical Hydrodynamics*.

Organizing committee

P. Andreussi	Università di Pisa, Italy
B. J. Azzopardi	Atomic Energy Research Establishment, Harwell, U.K. (Secretary of the Scientific Committee)
M. Cumo	Università di Roma, Italy
J. M. Delhay	Centre D'Etudes Nucléaires de Grenoble, France
A. E. Dukler	University of Houston, U.S.A.
T. J. Hanratty	University of Illinois, U.S.A. (Chairman of the Organizing Committee)
G. F. Hewitt	Atomic Energy Research Establishment, Harwell, U.K.
F. Mayinger	Technische Universität, München, West Germany
S. Zanelli	Università di Pisa, Italy (Symposium Chairman)

Scientific committee

Current members of the Scientific Committee are

S. Banerjee, U.S.A.	M. Silvestri, Italy
F. Durst, West Germany	H. C. Simpson, U.K.
J. M. Fitremann, France	T. Sønvedt, Norway
P. Griffith, U.S.A.	Y. Taitel, Israel
M. Ishii, U.S.A.	T. Ueda, Japan
L. Masbernat, France	B. Wallis, U.S.A.
A. Prosperetti, Italy	P. B. Whalley, U.K.
E. Rhodes, Canada	N. Zuber, U.S.A.
K. Sekoguchi, Japan	

FIFTH INTERNATIONAL HEAT PIPE CONFERENCE

Tsukuba, Japan, 14-17 May 1984

The Fifth International Heat Pipe Conference will be held in Tsukuba, Japan, on 14-17 May 1984. Tsukuba is a newly constructed Science City located about 60 km from Tokyo, with excellent traffic connections to Tokyo and New Tokyo International Airport. The former conferences were held in Stuttgart (Germany) in 1973, Bologna (Italy) in 1976, Palo Alto (U.S.A.) in 1978 and London (U.K.) in 1981.

The Conference addresses scientists and engineers working in the field of heat transfer and thermal engineering. The following topics on heat pipes and closed two-phase heat-transfer systems will be the subject-matter of the Conference.

Basic processes and fundamentals

Evaporation and condensation heat transfer
Vapor flow with suction and injection of mass
Counter-current liquid/vapor flows
Capillary flow

Material problems and heat pipe technology

Working fluid physical and chemical properties
Materials compatibility
Lifetesting
Manufacturing technologies

Heat pipe analysis and experimental performance

Gravity-assisted heat pipes
 Zero-gravity heat pipes
 Gas-loaded heat pipes
 Rotating heat pipes
 Heat pipe thermal switches and diodes
 Osmotic heat pipes
 Electrohydrodynamic heat pipes
 Superfluid heat pipes
 Heat pipe engines

Commercial and scientific applications

Spacecraft thermal control
 Space experiments
 Heat recovery
 Cooling
 Isothermalization
 Temperature control
 De-icing
 Spectroscopy
 Thermophysical properties measurements

The conference language will be English.

Persons interested in attending the conference and submitting a paper should contact:

Prof. K. Oshima
 The Institute of Space and Astronautical Science
 Komaba 4, Meguro-ku, Tokyo 153, Japan
 Tel.: 03-467-1111; Telex: J 24550 SPACETKY

The deadlines for long abstracts of 500 words is planned to be 1 October 1983, notice of acceptance to be 15 December 1983, and full manuscripts to be 1 February 1984.

International heat pipe conference committee

C. A. Busse (Ispra), P. D. Dunn (Reading), M. Groll (Stuttgart), G. M. Grover (Chairman, Los Alamos), K. Oshima (Tokyo), F. Polášek (Prague), J. C. Savage (Noordwijk), C. L. Tien (Berkeley) and L. L. Vasiliev (Minsk).

FOURTH INTERNATIONAL SYMPOSIUM ON TURBULENT SHEAR FLOWS

University of Karlsruhe, West Germany, 12-14 September 1983

The Fourth International Symposium on Turbulent Shear Flows will take place at the University of Karlsruhe in West Germany during 12-14 September 1983. This Symposium follows similar meetings held in 1977, 1979 and 1981 in the United States and in Great Britain. It is again meant to be a meeting of research workers from all over the world actively

involved in turbulent flow studies who can contribute to the meeting in the form of presentations, discussions and exchange of new ideas with people from Universities, Research Institutes and Industry. Participants are expected from all over the world.