ANNOUNCEMENTS

Call for Papers for Symposia to be held at the

1994 ASME FLUIDS ENGINEERING DIVISION SUMMER MEETING

Lake Tahoe, NV, U.S.A. 19-23 June 1994

SYMPOSIUM ON LASER ANEMOMETRY: ADVANCES AND APPLICATIONS

The symposium is organized by the Coordinating Group on Fluid Measurements of the ASME Fluids Engineering Division and co-sponsored by the Fluid Mechanics and Multiphase Flow Technical Committees.

Purpose and scope

The purpose of the symposium is to present laser-based velocity measurements relevant to fluids engineering problems and to communicate the latest advances in laser anemometry. Papers are solicited in all basic and applied areas of laser anemometry. These include laser Doppler anemometry, two-spot velocimetry, particle imaging velocimetry, laser-induced fluorescence and Rayleigh scattering, molecular tagging, holographic imaging and photon correlation techniques. Papers describing alternate signal processing and data presentation techniques as well as diode LDV systems for multi-point measurements are also welcome. The areas of application will include:

| High speed flows | Turbulent shear layers | Separated flows | Multiphase flows |
|------------------|------------------------|-----------------|--------------------|
| Particle sizing | Biomedical flows | Combustion | Rotating machinery |

Selection of papers

Prospective authors are requested to submit a 4-page abstract to one of the organizers below. The full paper, including figures, shall not exceed 6 pages when typed on mats. The symposium papers will be published in a bound volume and will be available at the meeting. All deadlines are listed at the end of this ASME announcement.

Symposium organizers

Dr THOMAS T. HUANGProfessor M. VOLKAN OTUGENDavid Taylor Model BasinAerospace Engineering DeptCarderock Division, NSWCPolytechnic UniversityBethesda, MD 20084-5000Farmingdale, NY 11735Tel. (301)227-1325Tel. (516)755-4385Fax (301)227-4589Fax (516)755-4404

FIFTH INTERNATIONAL SYMPOSIUM ON LIQUID-SOLID FLOWS

Purpose

This symposium is sponsored by the Multiphase Flow Committee of the Fluids Engineering Division. The purpose of the symposium is to provide a forum for the presentation of new developments in particulate two-phase flow research: theory, computational methods, experimental results, fluid machinery, flow visualizations and erosion wear. New concepts and innovative methods of investigation are encouraged. Liquid-solid flows are widely applied in industrial installations and require specific computational methods and experimental techniques. Typical applications are in mechanical, mining and chemical processes, slurry transportation, paper industry processes and nuclear reactors. It is expected that the symposium will consist of 6 sessions with approx. 30 papers.

Scope

Contributed papers are solicited in the following areas:

- Modeling liquid-solid mixture flows, particle dynamics and phase interactions
- Multicomponent flow

The following sessions are tentatively planned:

Liquid-solid flow modeling Flow visualization Numerical simulation

- Experimental results and flow visualization
- Particle-wall interaction
- Two-phase flow in fluid machinery

Slurry flow measurements Surface phenomena Applications

Selection of papers

Three copies of an abstract (200 to 300 words) that states the purpose and conclusions should be provided to the organizers listed below. After notification of acceptance, authors must submit 3 copies of the complete manuscript for review. Manuscripts are to be prepared in accordance with ASME standards (see, for instance, *Journal of Fluids Engineering*) and should not exceed 24 pages, including double-spaced typewritten text, figures and tables. Author prepared papers presented at the symposium will be *bound in a volume* which will be available at the meeting. Papers accepted for the symposium may also be submitted for a journal publication. All deadlines are listed at the end of this ASME announcement.

Abstracts should be addressed to:

| Dr M. C. Roco, Chair | Dr C. T. CROWE | Dr D. D. Joseph | Dr E. E. MICHAELIDES |
|----------------------|------------------------|-------------------------|--------------------------|
| Eng Directorate | Dept of Mechanical and | Dept of Aerospace | School of Engineering |
| NSF, Room 1115 | Materials Engineering | Engineering and | Tulane University |
| Washington, DC 20550 | Washington State | Mechanics | LA 70118-5874 |
| Tel. (202)357-9606 | University | University of Minnesota | Tel. (504)865-5819 |
| Fax (202)357-5184 | Pullman, WA 99164 | Minneapolis, MN 55455 | Fax (504)862-8747 |
| | Tel. (509)335-3214 | Tel. (612)625-0309 | |
| | Fax (509)335-7632 | Fax (612)626-1558 | |

SYMPOSIUM ON EXPERIMENTAL DATA FOR VALIDATION OF MULTIPHASE FLOW CFD CODES

Scope

The Multiphase Flow Committee and the Coordinating Group on Computational Fluid Dynamics are organizing a symposium to gather experimental data sets for validation of multiphase flow CFD computer codes. One objective of the symposium is to increase communication between code developers and experimentalists. The flows of interest include, but are not limited to:

- Gas-solid, liquid-solid, and liquid-gas turbulent flows
- Multiphase flows in engineering equipment and machines
- Multiphase flows in nuclear reactor systems
- Chemically-reactive flows involving more than one phase
- Flows with heat transfer and phase change.

The data of interest include, but are not limited to:

- Velocity and temperature distributions
- Particle size/loading, velocity and temperature distributions
- Phase volume fraction, velocity and temperature distributions
- Species concentration in reactive flows
- Friction factor, drag coefficient and heat transfer coefficient
- Equipment performance characteristics and coefficients.

Special considerations regarding data sets for validation of CFD codes include measurement of boundary conditions, level of detail of measurements and accuracy of measurements (including error analysis). Data collected using more than one measuring technique are strongly encouraged.

Papers presenting results of predictions of multiphase flow data will also be considered for presentation and publication.

Please send 3 copies of a 500-word abstract to any of the following session organizers (deadlines are listed at the end of this ASME announcement):

| Dan Hughes | Ismail Celik | Yassin A. Hassan |
|----------------------------|-------------------------------|-------------------------------|
| INEL/EG&G | West Virginia University | Texas A&M University |
| P.O. Box 1625, Idaho Falls | P.O. Box 6101, Morgantown | College Station |
| ID 83415-2414 | WV 26506-6101 | TX 77483-3133 |
| Tel. (208)526-0477 | Tel. (304)293-3111 | Tel. (409)845-7090 (or 4161) |
| Fax (208)526-6970 | Fax (304)293-6689 | Fax (409)845-6443 |
| e-mail edh@mica.inel.gov | e-mail un026536@wvnvms.bitnet | e-mail y1h4555@rigel.tamu.edu |

MARTIN SOMMERFELD LSTM University of Erlangen Cauerstrasse 4 8520 Erlangen, Germany Tel. 49 9131 85 9507 (or 9502) Fax 49 9131 85 9503 e-mail maso@cnve.rrze.uni-erlangen.dbp.de

RICH JOHNSON INEL/EG&G P.O. Box 1625, Idaho Falls ID 83415-2414 Tel. (208)526-0955 Fax (208)526-6970 e-mail rwj@inel.gov

Please note that 4 copies of the full paper will be required.

DEADLINES FOR ALL THREE SYMPOSIA

Abstracts due to organizers Notification of abstract acceptance Full manuscript due Notification of final acceptance ASME mats due to organizers 16 July 1993 13 August 1993 15 October 1993 15 December 1993 1 March 1994