

Fluids Engineering



The Fluids Engineering Division is involved in all areas of fluid mechanics, encompassing both fundamental as well as applications.

Message from the Division Chair



by Stathis Michaelides

I am delighted to report to you that the Fluids Engineering division of the ASME has had an excellent year. In June 2005, we had a very successful meeting in Houston, TX. Even though our Division was the only participant, we had an attendance of more than 350 engineers and scientists. There were numerous excellent presentations and good camaraderie. Among the

highlights were six well-attended tutorial sessions. In the last fifteen years, our summer annual meetings have attracted a great number of attendees, were the venues for hundreds of challenging symposia and saw the presentations of thousands of excellent scientific and engineering papers. Our summer annual meeting is now recognized as one of the premier world events in the area of Fluid Mechanics applications and, every year, attracts a great number of papers and attendees. This was accomplished without losing any ground in our presence at the ASME winter meeting, the International Mechanical Engineering Conference and Exhibition: in the last Conference, which took place in Orlando, FL, during the third week of November 2005, the Fluid Dynamics Division contributed more than thirty sessions with more than one hundred papers. This is another indication that our events are of high quality and continue to attract scientists and engineers who work with all aspects of Fluids Engineering.

Our next big event is the Summer Meeting of 2006, to be held in Miami, FL, from July 16 to July 20, 2006. The meeting is going to be held jointly with the Nuclear Engineering Division of the ASME and the European Associations of Mechanics. We expect that we will have more than one thousand attendees representing all the continents of the world. Also in this Summer Meeting will hold activities in memory of the past chairman of the Division, Dr. Sankaraiyer Gopalakrishnan, who passed away in the Fall of 2005.

In the past couple of years the ASME has undergone significant administrative changes. With Virgil R. Carter being appointed as the new Executive Director, the ASME is looking more closely at its administrative structure and the role of the

divisions. Presentations about the proposed administrative structures were made to the membership at our 2004 Summer Meeting. You will be able to find news on this subject at the website of the ASME's Council of Engineering: <http://www.asme.org/coe/> The position of the FED executive committee on this subject is, in any future re-organization, to remain close with the other Divisions of the Basic Engineering Group, where we have belonged for years and with

whom we have collaborated extensively. Regardless of the administrative changes, the Division will continue to support our excellent meetings and bring forth scientific events that are valuable to the scientist as well as the practicing engineer. Our future plans include the meeting in the summer of 2006 in Miami, FL and a joint American-Japanese meeting in the summer of 2007 in San Diego, CA.

Among the other activities underway, Dr. Sam Martin's "FED Magazine" is coming to completion and will soon be available to all of us. Sam has captured the history of our Division and the accomplishments and contribution of our members to the profession and the society. The *Journal of Fluids Engineering (JFE)* continues to grow in the number of Papers submitted and accepted and in the number of pages, while its price to the members of the Division remains the same. It is a Journal that provides a unique forum for the Fluid Engineers to

Spring 2006 Newsletter Dr. James C. S. Meng, Editor	
Chair's Message	1
Fluids Engineering Honors and Award Committees:	
Fluids Engineering Award	2
Robert T. Knapp Award	2
Lewis F. Moody Award	2
Calvin W. Rice	3
Fluids Engineering Technical Committee's Report:	
Fluid Applications and Systems	3
MNFDTFC FED Report	3
Computational Fluid Dynamics	4
Webmaster's Report	4
Conference Announcements	5
ASME Government Relations Update	5
Executive Committee Roster	6
Technical Committee Roster	6
Administrative Committee Roster	6

(continued on page 2)

Fluids Engineering Honors and Award Committee

by *Mohammad H. Hosni, Chair*

Fluids Engineering Award

The Fluids Engineering Award is conferred upon an individual for outstanding contributions over a period of years to the engineering profession and in particular to the field of fluids engineering through research, practice or teaching. The recipient of the **2005 Fluids Engineering Award** is **Andrea Prosperetti**, Charles A. Miller Jr. Chair and Professor of Mechanical Engineering, at the Johns Hopkins University.

Prosperetti has worked in several areas of fluid mechanics and acoustics. Bubble dynamics in acoustic, flow, and thermal fields has been an important research theme for him for many years. Among several applications, are his studies of the bubble-related natural sources of oceanic under-water noise and of the use of bubbles in microflu-

idics. He has also devoted a considerable effort to the study of disperse multiphase flow focusing on averaged equations models, their systematic closure, and the development of computational methods for their simulation.

Prosperetti has authored or co-authored over 150 journal papers. He is an associate editor for the *International Journal of Multiphase Flow* and responsible for the Letters section of the *Physics of Fluids*. He has received many recognitions including Fellow of ASME, American Physical Society, Acoustical Society of America; Senior Award, International Conference on Multiphase Flow (2004); Otto Laporte Award, American Physical Society (2002); Lifetime Achievement Award, Japanese Society of Multiphase Flow (2001); Foreign Member, Royal Academy of Arts and Sciences of the Netherlands (2000).

The 2005 Fluids Engineering Award was presented to Professor Prosperetti at the ASME Fluids Engineering Summer Conference Award Luncheon on June 21, 2005 in Houston, Texas. ■

Matthias Heinrichs received his diploma degree in 2005 from the IMTEK, University of Freiburg. His research topic is the development of peripheral driver electronics.

Frank Goldschmidtboeing is leader of the microfluidics group of the Laboratory "Design of Microsystems" at the IMTEK. He received a diploma in physics at the RWTH Aachen in 1998 and the PhD in Microsystem Engineering at the University of Freiburg in 2004. His research concentrates on modelling and fabrication of microfluidic devices.

Hans-Juergen Schrag, MD and surgeon at the Department of General and Visceral Surgery, Albert-Ludwigs-University of Freiburg, is leader of the artificial sphincter study group. He received the award of medical technology 2003 from the German Ministry of Education and Research for his research "German Artificial Sphincter System", a novel artificial sphincter for the therapy of major fecal incontinence.

Ulrich T. Hopt was the director of the Surgical Clinics of the University of Rostock. Since 2001 he is the director of the Department of General and Visceral Surgery of the Albert-Ludwigs-University of Freiburg. As an expert in the field of fecal incontinence treatment he founded this research group to develop a novel artificial sphincter system.

Peter Woias is professor at the IMTEK at the University of Freiburg, Germany. He received his PhD in 1995 from the Technical University of Munich, Institute of Integrated Circuits. Later on he worked at the Fraunhofer Research Institute in Munich as a group leader on microfluidics. Since 2000 he is the head of the Laboratory for "Design of Microsystems". His research fields are microfluidics, micro rapid prototyping, mechanical actuators, CAD and simulation in microsystem design. ■

Message from the Division Chair (continued from page 1)

communicate new findings, techniques, and applications. All authors of papers presented at the FED meetings are strongly encouraged to submit their contributions to this Journal.

If you have not participated in the activities of the Division, I would like to invite you to do so. You may wish to become involved in the program planning of the FED. There are a number of opportunities to do so and to contribute by participating in the activities of the Technical Committees (they are open to all the members of the Division) or by helping organize future Symposia and Fora. The ASME is your professional society, and the FED is the Division that is closest to your professional interests. Come to the meetings and see all the other folks who share the same professional interests with you. I sincerely hope to see you in Miami in July.

With best wishes,
Stathis Michaelides
Chair, Fluids Engineering Division ■

Robert T. Knapp Award

This award is given for the best paper presented at the Fluids Engineering Division sponsored sessions dealing with analytical, numerical and laboratory research. The **2005 Knapp Award** was awarded to Doll, F. Goldschmidtboeing, M. Heinrichs, and P. Woias of Albert-Ludwigs-University of Freiburg, and H. J. Schrag and U.T. Hopt of University Hospital Freiburg in Germany for their paper entitled "A Piezoelectric Bidirectional Micropump for a Medical Application." This paper is published in the Proceedings of the 2004 ASME International Mechanical Engineering Congress and Exposition (IMECE2004-61083)

Alexander F. Doll is PhD student at the Laboratory for "Design of Microsystems", Institute for Microsystem Technologies (IMTEK) at the Albert-Ludwigs-University of Freiburg, Germany. He received his diploma degree in Microsystem Engineering in 2003 from the University of Freiburg. His research topics are the development of micropumps and the system integration of MEMS into medical implants.

Lewis F. Moody Award

The Lewis F. Moody Award is given for the best paper presented at the Fluids Engineering Division sponsored sessions dealing with a topic useful in mechanical engineering practice. The **2005 Moody Award** was presented to Evert-Jan

Fluids Engineering Honors and Award Committee (continued)

Foeth of the Technical University of Delft and Gert Kuiper of the Maritime Research Institute of the Netherlands for their paper entitled "Exploratory Experiments to Determine Flow and Structure Borne Noise of Erosive Cavity Implosions." This paper is published in the Proceedings of the 2004 ASME Heat Transfer/Fluids Engineering Summer Conference (HT-FED04-56789).

Evert-Jan Foeth studied Naval Architecture at Delft Technical University. In 2000 he completed his research on sheet cavitation and graduated at the ship hydromechanics section supervised by Professor Gert Kuiper, based on experimental work carried out at the University of Michigan. He joined Wärtsilä Propulsion Netherlands (formerly Lips) as a propeller designer and in 2003 he worked for six months at the Maritime Research Institute Netherlands on cavitation erosion. He currently works on his thesis at the University of Delft with Professor Tom van Terwisga, focusing on the structure of sheet cavitation on three-dimensional hydrofoils in gusts.

Gert Kuiper studied Naval Architecture at Delft University of Technology, where he received his MSc in 1968. In 1967 he joined the Maritime Research Institute Netherlands (Marin) as a researcher. He carried out a range of functions within Marin, but returned to research every time. In 1970-1975 he was the head of the new Depressurized Towing Tank, which had to be developed into a research tool. In 1976 he was a visiting researcher at the David Taylor Model Basin in Washington D.C. From 1977-1981 he did his thesis work on cavitation inception and received his Ph.D. (cum laude) at Delft University in 1981. From 1988-2000 he was part-time professor at Delft University. He was involved in many large research projects, among others some projects with the US Navy on propeller design and cavitation. Presently he is coordinating research on propulsors at Marin. ■

Calvin W. Rice Award

The Calvin W. Rice Award was to **Yoichiro Matsumo**. Someone needs to write about this award as I have no information on it. I only know that it was resented. ■

Fluids Engineering Technical Committee's Report

Fluid Applications and Systems Technical Committee (FASTC)

by *Jinkook Lee, Chair, FASTC*

The Fluid Applications and Systems Technical Committee (FASTC) is charged with the responsibility of promoting advancement of fluid engineering technologies related to fluid mechanics applications. The committee's primary function is to organize quality technical programs and provide a forum for presentation and exposure to recent advances in the area of fluid machinery, fluid transients, and industry & environmental applications for the semi-annual meetings of the Fluids Engineering Division. In addition, we seek to provide an interface between designers, developers, and researchers. These activities also include programs focused on learning and discussion including tutorial lectures and panel discussions. Therefore, the committee cordially invites authors and members to the FASTC meeting during Conference.

The major activities of the Committee occur during the semi-annual meetings of the Fluids Engineering Division. Specially, FASTC meetings occur at the IMECE (November) and at the FED Summer Meeting (June or July). At the Committee meetings, the primary activity is the planning of future technical programs. FASTC members cooperate to organize symposia and forums in these areas. The FASTC occasionally cooperates with other technical committee and coordinating groups to promote activities of mutual interest. The FASTC cordially invites your participation in committee activities such as planning, organization, and presentation of symposia and forums at the ASME Fluids Engineering Division. We are very interested in new ideas to further improve our programs. Like most of ASME, the committee operates because of the efforts of volunteers. To become a member of FASTC, an individual should have a strong interest in fluid mechanics, be willing to perform volunteer activities

like paper reviewing, and be willing to attend Committee meetings at least once every several years. If you would like to volunteer, or if you have any questions or suggestions for the committee, please contact the Chair, Dr. Jinkook Lee of the Argo-Tech Corporation at Cleveland, Ohio [phone: (216) 692-5084 or email: leej@argo-tech.com] or the Vice Chair, Dr. Yu-Tai Lee of Naval Surface Warfare Center [phone: (301) 227-1328 or email: yu.lee@navy.mil] ■

MNFDTC FED Report

The Micro and Nano Fluid Dynamics Technical Committee (MNFDTC) continues to prosper, serving the fluids engineering division by promoting and coordinating activities associated with fluid dynamics at the micron and nanometer scale. Examples of activities include fluid transport based on phenomena useful in small-scale devices such as electrokinetic forces and microbubbles, devices utilized to control fluid transport in microdevices such as pumps, valves and sensors, and fundamental phenomena of fluids in micro- and nano-scale domains, such as mixing, viscous damping and filtering and manipulation of particles such as those used in bead chemistry or individual cells. Our most important activity has historically been the organization of forums and symposia at the annual Fluids Engineering Division Summer Meeting (FEDSM) and the International Mechanical Engineering Congress and Exposition (IMECE), the latter meeting seeing significant activity in this area since 1994 due to its highly interdisciplinary nature and the close collaboration we enjoy with other division of ASME such as the MEMS subdivision and the Nanotechnology track. In the November 2005 IMECE meeting in November in Orlando FL, over 80 papers and two Keynote lectures were presented in 20 sessions, including a poster session (not all of these were directly organized by MNFDTC). This meeting was expertly organized by

(continued on page 4)

Fluids Engineering Technical Committee's Report

(continued from page 3)

Kendra Sharp of Pennsylvania State University and Steve Wereley of Purdue. They were ably assisted by a broad group of researchers in both academia and industry from around the world, who helped with the paper reviews and selection of the schedule. The IMECE 2005 in Orlando will be chaired by Steve Wereley (Purdue), Jeff Allen (Michigan Tech) and Derek Tretheway (Portland State), and should continue to highlight the exciting research areas in this rapidly growing technical area.

The committee maintains a web site <http://microfluidics.engin.brown.edu/ASME> which contains the current call for papers as well as the programs from previous MNFDTC symposia. There is also an email list that you can join to be informed of upcoming conferences and other important announcements in the micron and nanometer scale fluid dynamics community. You can also contact the current chair, Kenny Breuer at Brown University (kbreuer@brown.edu), or the vice chair, Channy Wong at Sandia National Laboratories (ccwong@sandia.gov). In June 2006, Channy Wong will take over the Chair of the MNFDTC, and Steve Wereley was elected vice-chair. ■

Computational Fluid Dynamics Technical Committee

(by Ayodeji Demuren CFDTTC Chair, and Ismael Celik CFDTTC Vice-Chair)

The Computational Fluid Dynamics Technical Committee (CFDTTC) is the ASME Fluids Engineering Division committee devoted to computational methods for solving various fluid flow problems. Of interest are algorithmic development, software development, and application of advanced computer architectures to solve topical fluid flow problems of theoretical, academic or industrial interest. The activities of the committee include development and organization of short courses, seminars, workshops, tutorials, discussion panels and technical sessions at ASME Conferences. It also nominates candidates for consideration for many of the division's honors and awards. The committee has also been very active in establishing benchmarks for the evaluation of public domain and commercially available CFD software, and has organized workshops in which performance of different software are

compared. The CFD Standards sub-committee of the CFDTTC was responsible for establishing the policy for estimation of numerical uncertainty in computational results in articles submitted for publication in the Journal of Fluids Engineering.

At the Summer Meeting in Houston, Texas in June 2005, the CFDTTC co-sponsored a seminar on the computational needs for advanced gas-cooled nuclear reactors. It also approved a proposal for the formation of a CFD Standards Problem Oversight Committee for New Generation Reactors. The latter will work with the US Department of Energy in establishing suitable benchmark problems for this new technology. The CFDTTC nominated one of its members to serve on the committee.

The committee currently has about 50 active members, and meets twice a year, at the Summer Meeting and, at the IMECE. New members are always

welcomed. Just attend the committee business meeting at one of the conferences and volunteer for some of the activities. New officers are elected in even years at the Summer Meeting. For additional information or to volunteer for any activity please contact the Chair, Deji Demuren at ademuren@odu.edu 757 683-3727. ■

Webmaster's Report

The FED homepage, with the URL <http://divisions.asme.org/fed/index.html> is the focal point for communication between members of the division. It is a repository of current and historical information about division activities, such as conferences, honors and awards, technical committees, newsletters, etc. Topical issues of interest to members of the FED are discussed in various Technical Briefs. Members who wish to contribute articles to the Technical Briefs can contact the editor via a link under the Newsletter section. It is planned to make the website more

informative and a repository of last resort for all division activities. A new feature under development is to provide an interactive system for dealing with announcements and approvals of "Call for Papers" for all symposia and forums organized by the division.

Below is a screenshot of the homepage. The various navigation buttons lead to content, which pertain solely to division affairs, as well as to the ASME at large. For further information or comments, please contact the webmaster: Deji Demuren, Tel: (757) 683-3727, Email: ademuren@odu.edu.

ASME HOME SEARCH JOIN SHOP HELP

FLUIDS ENGINEERING DIVISION

ABOUT FED COMMITTEES MEMBERSHIP DIVISION ADMIN.

About FED **NEWS**

The Fluids Engineering Division is involved in all areas of fluid mechanics, encompassing both fundamental as well as applications, to all types of devices, processes and machines involving fluid flow, including pumps, turbines, compressors, pipelines, fluidic systems, biological fluid elements and hydraulic structures.

Photo Gallery

Related ASME Products
PUBLICATIONS
CONTINUING EDUCATION
CODES & STANDARDS

LINKS
CONTACT US

Copyright © 1996-2001 ASME International. All Rights Reserved. Contact Information

CONFERENCE ANNOUNCEMENT

**2006 ASME Fluids Engineering Division Summer Meeting
July 17 – 20, 2006**

<http://www.asmeconferences.org/FEDSM06/index.cfm>

CONFERENCE ANNOUNCEMENT

5th JOINT ASME/JSME FLUIDS ENGINEERING CONFERENCE

July 29 – August 2, 2007

**Sheraton San Diego Hotel & Marina
San Diego, California**

Mark your calendar for the summer of 2007! The Fluids Engineering Divisions of ASME and JSME will be holding their 5th Joint ASME/JSME Fluids Engineering Conference in beautiful San Diego, California. The Fluids Engineering Conference is a great place to present your ideas and to meet colleagues, as we all work to develop and advance fluids engineering technology and its application to solving real world problems.

Various forums, workshops, seminars, and social events are planned, following the tradition of excellence of previous Fluids Engineering conferences. These give participants the opportunity to exchange ideas, network, and explore new perspectives with fellow engineers from universities, research labs and industry.

This is the first announcement for the 5th Joint ASME/JSME Fluids Engineering Conference. More information will be forthcoming. Check the ASME website (www.asme.org) in early fall of 2006 for more details.



ASME GOVERNMENT RELATIONS UPDATE

A fundamental mission of ASME is to provide government policy-makers with technical information needed to make the most informed decisions on technical and related issues. ASME's government relations activities prepare and enable the Society's members to provide all levels of government with this essential guidance. Under the direction of the Board on Government Relations, ASME conducts programs to facilitate participation in the public policy process through presentation of non-partisan analysis, study, or research; informal briefings for government personnel; formal comment on proposed legislation and regulations; and testimony before legislative and regulatory bodies. An online link is now provided to enable members to view weekly summaries of public policy issues relevant to ASME at <http://www.asme.org/NewsPublicPolicy/GovRelations/>

ASME currently needs your help to determine its 2007-2008 public policy priorities. ASME's Public Policy Agenda Survey is now available online, giving all Society members the opportunity to participate in formulating the Public Policy Agenda. The Public Policy Agenda is a compendium of federal issues of concern to the Society put together from the results of a survey done every two years by the ASME's Government Relations department.

All ASME members can vote on the issues that they believe are having the biggest impact on ASME and engineers in general, by visiting the ASME Government Relations Web site, <http://www.asme.org/NewsPublicPolicy/GovRelations/> and completing the policy survey online at <https://secure.asme.org/PPAS/policysurvey.cfm>.

The deadline for survey responses is June 2, 2006. Government Relations will then compile the data collected from all the surveys, write its 2007-2008 Public Policy Agenda document and formally release it at the ASME International Mechanical Engineering Congress and Exposition in Chicago.

Executive Committee Roster

2005-2006

Chair

Stathis Michaelides, Ph.D., P.E.
Leo S. Weil Professor and Director, Southcentral
Regional Center of the National Institute for
Global Environmental Change
605 Lindy Boggs building
Tulane University
New Orleans LA 70118
Tel: 504-865-5250
Fax: 504-865-6745
Email: emichael@unt.edu

Past Chair

Ali Ogut, Ph.D.
Professor, Department of Mechanical Engineering
Rochester Institute of Technology
76 Lomb Memorial Drive
Rochester, NY 14623-5604
Ph: 585-475-2542 or 585-475-2162 (ME Office)
Fx: 585-475-7710
Email: adoeme@rit.edu

FEDSM06 Committee Chair

Urmila Ghia
Professor of Mechanical Engineering
Department of Mechanical, Industrial and Nuclear
Engineering
683 Rhodes Hall, Mail Location 72
University of Cincinnati
P.O. Box 210072
Cincinnati OH, 45221-0072
Tel: 513-556-4612
Fax: 513-556-3390
Co-Director, Computational Fluid Dynamics
Research Laboratory (CFDRL)
Room 637 ERC, phone: (513) 556-1927
Email: urmila.ghia@uc.edu

Secretary

James Liburdy
310 Rogers Hall
Department of Mechanical Engineering
Oregon State University
Corvallis, OR 97331
Tel: 541-737-7017
Fax: 541-737-2600
Email: liburdy@enr.orst.edu

IMECE06 Conference Program Chair

George Papadopoulos, Ph.D.
Program Manager
ATK GASL - New York Operations
Technology Development
77 Raynor Avenue
Ronkonkoma, NY 11779
Tel: 631-737-6100 x195
Fax: 631-737-6121
Email: George.Papadopoulos@ATK.com

ASME Staff

Richard Ulvila
Manager, Knowledge & Community
Three Park Avenue, M/S 22W3
New York, NY 10016
Tel : 212-591-7863
Fax: 212-591-7671
Email: ulvilar@asme.org

ASME Staff

Jacinta McComie-Cates
Administrator, Unit Support,
Knowledge & Community
Three Park Avenue, M/S 22W3
New York, NY 10016
Tel : 212-591-7052
Fax: 212-591-7671
Email: mccomiej@asme.org

Technical Committee

Fluid Mechanics

David O Davis, Ph.D., Chair
Inlet Branch, M/S 86-7
NASA Glenn Research Center
2100 Brookpark Road
Cleveland, OH 44135
Tel : (216) 433-8116
Fax : (216) 977-7500
Email : David.O.Davis@grc.nasa.gov

Multiphase Flow

S. Balachandar, Chair
Dept. of Theoretical & Applied Mechanics
216 Talbot Lab 104 S. Wright St
University of Illinois
Urbana, IL 61801
Tel: 217-244-4371
Fax: 217-244-5707
Email: s-bala@uiuc.edu

Fluid Applications & Systems

Dr. Jinkook Lee, Chair
Argo-Tech Corporation
M/S 700B 23555 Euclid Ave.
Cleveland, OH 44177-1795
Tel: 216-692-5084
Fax: 216-692-6639
Email: leej@argo-tech.com

Micro and Nano Fluid Dynamics

Prof. Ken S. Breuer, Chair
Division of Engineering
182 Hope Street
Brown University
Providence, RI 02912
Tel : 401-863-2870
Fax: 401-863-9028
Email: kbreuer@brown.edu

Computational Fluid Dynamics

Ayodeji O. Demuren, Ph.D., Chair
Old Dominion University
Dept. of Mechanical Engineering
Norfolk, VA 23529
Tel : 757-683-6363
Fax: 757-683-5344
Email: demuren@mem.odu.edu

Fluid Measurements and Instrumentation

Judith A. Bamberger, PE Chair
Battelle Pacific NW National Lab
Fluids & Computational Engin
P. O. Box 999, MS K7-15
Richland, WA 99352-0999
Tel: 509-375-3898
Fax: 509-375-3641
Email: Judith.Bamberger@pnl.gov

Administrative Committees

Honors & Awards

Mo Hosni, Ph.D.
Kansas State University Mech & Nuclear Engrg
Dept. 302 Rathbone Hall
Manhattan, KS 66506-5205
Tel : 785-532-2321
Fax: 785-532-7057
Email : hosni@ksu.edu

Membership

Richard R. Schultz
Idaho National Engrg Lab
MS 3895 PO Box 1625
Idaho Falls, ID 83415-0001
Tel : 208-526-9508
Fax: 208-526-6971
Email : srr@inel.gov

Newsletter Editor

James C. Meng, Ph.D.
Warfare Systems Engineering
Naval Sea Systems Command, US Navy
1333 Isaac Hull Ave SE, Washington Navy Yard,
Washington DC 20376-2001
Phone: 202 781 1366
Email : mengjc@kpt.nuwc.navy.mil

Professional Development

Philip A. Pfund, Ph.D.
Fermilab
PO Box 500 MS 343
Batavia, IL 60510-0500
Tel : 630-840-4784
Fax: 630-840-8032
Email : pfund@cannet.com

Technical Editor of the Journal of Fluids Engineering

Joseph Katz, Ph.D.
Johns Hopkins Univ
122 Latrobe Hall
3400 N Charles St
Baltimore, MD 21218-2680
Tel : 410-516-5470
Fax: 410-516-7254
Email : katz@titan.me.jhu.edu

Webmaster

Ayodeji O. Demuren, Ph.D.
Old Dominion University
Dept. of Mechanical Engineering
Norfolk, VA 23529
Tel : 757-683-6363
Fax: 757-683-5344
Email : demuren@mem.odu.edu

Communications Committee

George Papadopoulos, Ph.D.
Dantec Dynamics Inc.
777 Corporate Drive
Mahwah, NJ 07439
Tel : (201) 512-0037 Ext.121
Fax : (201) 512-0120
Email : george.papadopoulos@dantecdynamics.com

Professional Development Committee Chair

Philip A. Pfund
Fermilab
P. O. Box 500 MS-343 Batavia, IL 60510-0500
Tel: 630-840-4784
Fax: 630-840-8032
Email: pfund@cannet.com

Publications Committee

Joseph Katz
Journal of Fluids Engineering
Department of Mechanical Engineering
The Johns Hopkins University
3400 North Charles Street
Baltimore, MD 21218-2686
Email: katz@titan.me.jhu.edu

Industry Relations Committee Chair

David Halt
DSc Visteon Climate Control Systems
45000 Helm St.
Plymouth, MI 48170
Tel: 734-451-9181
Fax: 734-416-6908
Email: dhalt@visteon.com

Government Relations Committee Chair

Richard S. Meyer, Ph.D.
Fluids Research Department Applied Research
Laboratory
The Pennsylvania State University State College, PA
Tel: (814) 865-1741
Email: richardmeyer@psu.edu

Advisory Board Chair

Christopher J. Freitas, Ph.D.
Computational Fluid Dynamics Department of Engi-
neering Dynamics Southwest Research Institute
San Antonio, Texas
Tel: 210-522-2137
Fax: 210-522-6290
Email: cfreitas@swri.edu