

The 3rd International Symposium of Cavitation and Multiphase Flow

Plenary Speakers

Direct Numerical Simulation of Turbulent Flows Laden with Droplets or Bubbles



Said Elghobashi Distinguished Professor

the Department of Mechanical and Aerospace Engineering, University of California, Irvine.

Member of the National Academy of Engineering

Fellow of the American Physical Society, the American Association for the Advancement of Science, and the American Society of Mechanical Engineers.

Received the 2016 Senior Award of the International Conference on Multiphase Flow.

Modelling and Computation of Interfaces in Turbulent Multiphase Flows



Alfredo Soldati Professor

Technische Universitat Wien, Wien, Austria

Chairman of the 9th International Conference on Multiphase Flows, 2013-2016, Firenze, Italy.

Lewis F. Moody Award, 2015, ASME – American Soc. of Mechanical Engineers, Fluids Engineering Divis.

Fellow of the American Physical Society (Elected 2013).

Chairman, Working Party Multiphase Flow, European Federation of Chemical Engineering (2011 – 2017).

Vice Secretary General, International Center for Mechanical Sciences, CISM, Udine (2010 – 2017).

Robert T. Knapp Award, 2007, ASME – American Soc. of Mechanical Engineers, Fluids Engineering Divis.

Progress in understanding the physics of liquid atomisation



Yannis Hardalupas Professor

Faculty of Engineering, Department of Mechanical Engineering, Imperial College London

Awarded an industrial secondment to Ricardo Consulting Engineers in 1999, sponsored by the Royal Academy

Fellow of the Institute of Physics and Associate Fellow and member of the technical committee of Propellants and

Combustion of the American Institute of Aeronautics and Astronautics (AIAA).

Chairman of the Combustion Physics Group of the Institute of Physics,

Editor of Experimental Thermal and Fluid Science and serves at the editorial board of Experiments in Fluids and Int. J. of

Spray and Combustion Dynamics and at the advisory committees of several international conferences.

Drop impact on a solid surface: a self-similar problem at short time



Pierre-Yves Lagrée Ph.D. Professor

French National Centre for Scientific Research, Paris 6, French

the new head of the « Institut Jean le Rond d'Alembert » in Sorbonne University (former University Pierre et Marie Curie),

invited professor at Clarmont University California, in Africa (Tunis Engineering University, Lomé Togo and Abidjan Ivory

Coast departments of Mathematics) and in Switzerland (Ecole Polytechnique Fédérale de Lausanne).

Cavitation Dynamics Due to the Formation and Propagation of Shock Waves in Bubbly Flows



Steven Ceccio Professor

Steven L. Ceccio is the Vincent T. and Gloria M. Gorguze Professor of Engineering and the Associate Dean for Research

of the University of Michigan College of Engineering. He has appointments in Naval Architecture and Marine

Engineering, Mechanical Engineering, and Applied Mechanics. He served as an Associate Vice President for Research at

the University of Michigan from 2004 to 2009 and as the Director of the Naval Engineering Education Center from 2010

to 2015. He was the Chair of the Department of Naval Architecture and Marine Engineering at the University of

Michigan from 2011 to 2016 and the inaugural ABS Professor of Marine and Offshore Design and Performance. He has

served as an Associate Editor of the Journal of Fluids Engineering. He has also acted as a consultant to government and industry. He is a fellow

of the American Society of Mechanical Engineers and of the American Physical Society, and he was named the 2014 Freeman Scholar by A.S.M.E.

An overview of EPFL research on cavitation phenomenon



Mohamed Farhat Ph.D.; Lecturer;

PhD Director. EPFL-LMH, Switzerland

Head of Research Group on Cavitation and Interface Phenomena

Member of EPFL Doctoral Committee (Mechanics)

EPFL Representative at CLUSER association

Coordinator at "Société Hydrotechnique de France (SHF)"

Recent advances in computational cavitation erosion assessment



Rickard Bensow Professor

Chalmers University of Technology, Sweden

Prof R.E. Bensow is since 2011 professor in hydrodynamics at the department of Mechanics and Maritime Sciences, heading Chalmers research on ship resistance and propulsion. He is the director of the Rolls-Royce University Technology Centre in Computational Hydrodynamics since 2010.

Free Surface Effect on Cloud Cavitating Flow over the High-Speed Hydrofoil



Khoo Boo Cheong Professor

Director, Teamsek Laboratories, National University of Singapore (NUS);

Professor, Department of Mechanical Engineering, Faculty of Engineering, NUS

BC Khoo serves on numerous organizing and advisory committees for International Conferences/Symposiums held in USA, China, India, Singapore, Taiwan, Malaysia, Indonesia and others. He is a member of the Steering Committee, HPC (High Performance Computing) Asia. He has received a Defence Technology Team Prize (1998, Singapore) and the prestigious Royal Aeronautical Prize (1980, UK). Among other numerous and academic and professional duties, he is the Associate Editor of Communications in Computational Physics (CiCP) and Advances in Applied Mathematics and Mechanics (AAMM), and is on the Editorial Board of American Journal of Heat and Mass Transfer, Ocean Systems

Engineering (IJOSE), International Journal of Intelligent Unmanned Systems (IJUS), The Open Mechanical Engineering Journal (OME) and The Open Ocean Engineering Journal.

On the interaction between power-law fluid and particle



Jianzhong Lin Professor

Zhejiang University, China

Specialities and research directions are multiphase flow, fiber suspension flow, microfluidics, turbulence and coherent structure, fluid machinery. He is responsible for more than 30 scientific research projects, such as the National Outstanding Youth Fund, the National Natural Science Foundation's key projects, ordinary projects and national key research projects. Published 8 books and 1 manual. In collaboration with team members and students, more than 600 papers were published, of which more than 240 papers were included in SCI. It has won one first prize for national scientific and technological progress, one second prize for national excellent scientific and technological books, one first prize for outstanding achievements in scientific research in Institutions of higher learning of the Ministry of Education, three first prizes for scientific and technological progress in Zhejiang Province, three second prizes for scientific and technological progress in

Zhejiang Province and three third prizes for science and technology at provincial and ministerial levels. He was awarded the first prize of Zhejiang Natural Science Excellent Papers Award and 14 patents were granted.

Recent research on formation and evolution of tip vortex cavitation



Xiaoxing Peng Researcher; PhD Director.

China Ship Scientific Research Center, China.

he has hosted several research projects including the National Natural Science Key Fund, and mainly carried out research on the development of cavitation mechanism. Significant progress has been made in cloud cavitation and vortexization research. He won one first prize of provincial and ministerial level scientific and technological progress, three third prizes, etc.; published one academic monograph (co-author), published more than 80 academic papers; and directed the training of many master and doctoral students. He is currently the deputy head of the hydrodynamics group of the Fluid Mechanics Committee of the Chinese Society of Mechanics, the executive editor of the Hydrodynamics Research and Progress, and the member of the International Cavitation Conference.

Numerical simulation of condensation heat transfer on micro/nano structured surfaces



Jinliang Xu Ph.D.; Professor

Beijing Key Laboratory of Multiphase Flow and Heat Transfer for Low Grade Energy Utilization

North China Electric Power University, China

Dean of School of Energy Power and Mechanical Engineering, North China Electric Power University.

Founded the Beijing Key Laboratory of Multiphase Flow and Heat Transfer for Low Grade Energy Utilizations.

Published more than 200 international journal papers as the corresponding author and co-authored two books.

He has been the chair or co-chair for a set of academic conferences and the editor of the journals of Energies, Thermal Science and Engineering Progress, Frontiers in Heat pipe, Alternative Energy. He is the guest editor for the special issue of Applied Thermal Engineering and Energy.