

# Preface

International conference on Applications of Fluid Dynamics (ICAFD 2016) was organized by Department of Applied Mathematics, Indian Institute of Technology (Indian School of Mines), Dhanbad, Jharkhand, India, in association with Fluid Mechanics Group, Department of Mathematics, Faculty of Science, University of Botswana, Gaborone, Botswana. ICAFD 2016 at IIT(ISM) Dhanbad was third in continuation following the first ICAFD 2012 in University of Botswana and second ICAFD 2014 in S.V. University, Tirupati.

The aim of the conference was to provide a platform for academicians, experts, and researchers in various disciplines of mathematics and its allied areas exclusively in applications of fluid dynamics. This international platform provided opportunities for eminent personnel to interact and suggest various corrective measures for advancement of the subject and its applications in industry, science, engineering and technology, research and development, etc. The deliberations made by an eminent mathematicians, engineers, scientists, and young researchers published in the form of conference proceeding entitled “Applications of Fluid Dynamics” by Springer in Lecture Notes in Mechanical Engineering. This international conference received overwhelming response from academicians, scientists, engineers, researchers, and most importantly research scholars of various institutions of our country such as IITs, IISc Bangalore, R&D Center, IOL, HPCL Mumbai, NITs, Central and State Universities, and foreign countries as well such as USA, New Zealand, West Indies, Botswana, Ostrava, South Africa, Russia. The financial support for organizing this international conference was extended by Jharkhand Council of Science and Technology (JCST), Ranchi, Jharkhand; Department of Science and Technology (DST-SERB), New Delhi; Defense Research Development Organization (DRDO), New Delhi; and Society of Applied Mathematics (SAM) and IIT(ISM), Dhanbad.

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Vijay P. Singh, Guest of Honor of inaugural function and University Distinguished Professor and Caroline and William N. Lehrer Distinguished Chair in Water Engineering at Texas A&M University, USA; Prof. R. Panneer Selvam, James T. Womble Professor of Computational Mechanics and Nanotechnology Modeling, University Professor of Civil Engineering and Director of Computational Mechanics Laboratory, University of Arkansas, USA; Prof. Venkatesh Uddameri, Director, Water Resources Center, Texas Tech University, USA; Prof. Lakshmi Narasimhan, University of Botswana, Botswana; Prof. Elma Annette Hernandez Uddameri, Department of Civil, Environmental, and Construction Engineering, Texas Tech University, USA; Dr. Raj Das, Group Leader, ‘Simulation and Modeling’, Mechanical Engineering Department, University of Auckland, New Zealand; Dr. Sreedhara Rao Gunakala, Lecturer (Tenure track), Department of Mathematics, The University of the West Indies, St. Augustine, West Indies; Prof. J. Prakash, Head, Department of Mathematics, Faculty of Science, University of Botswana, Botswana; Prof. Sergej Hloch, Technical University of Košice in Slovakia; Prof. Alok K. Gupta, Emeritus Professor, National Center of Experimental Mineralogy and Petrology, University of Allahabad; Prof. B.V. Rathish Kumar, Department of Mathematics and Statistics at Indian Institute of Technology, Kanpur; Prof. Mridula Kanoria, Department of Applied Mathematics, University of Calcutta, Kolkata; Prof. Naveen Kumar, Department of Mathematics, Institute of Science, BHU, Varanasi; Dr. Shivendra Nath Rai, Chief Scientist, (CSIR-National Geophysical Research Institute (NGRI)), Hyderabad; Prof. Ashok Mishra, Director, “Center for Fluid Dynamics Research,” CUTM, Paralakhemundi, Odisha; Prof. S.V.K. Varma, S.V. University, Tirupati; Dr. Sachin Saw, School of Mathematics and Statistical Science, Botswana International University of Science and Technology, Botswana.

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 Gaborone, Botswana

Dr. M.K. Singh  
 Dr. B.S. Kushvah  
 Prof. G.S. Seth  
 Prof. J. Prakash

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