

**Professor Alberto Aliseda** is the PACCAR Professor of Mechanical Engineering at the University of Washington in Seattle, WA, USA, where he has been on the faculty since 2006. Prior to the UW, he obtained his Masters and PhD at the University of California, San Diego, working on experimental turbulent multiphase flows, specifically on the interaction of turbulence with inertial particles and bubbles, outlining the effect of inertia on the preferential concentration and gravitational settling of heavy particles and light bubbles. His current research continues to focus on the understanding of inertial particle dynamics in turbulence, applying fundamental physics to understanding cloud droplet coalescence and spray formation, as well as immiscible droplet breakup and dispersion in jets. He has also created a program on biomedical flows involving ultrasound contrast agents (microbubbles) and Lagrangian tracking on platelets on the cardiovascular system. He has received multiple awards for his research including the US- NSF CAREER award, the USGS Director's award and a US-ONR MURI. He has been a visiting professor at Universidad Carlos III de Madrid, Universite Grenoble-Alps and the Ecole Normale Supérieure de Lyon, and lectured at the International Summer School on Multiphase Flows at HUST in Wuhan, China. He has mentored over 20 PhD students, a similar number of Master students and 7 postdocs, who have gone on to work in industry, the US-DOE National Labs and academia, including faculty members in US R1 universities and the French CNRS system. His interest in serving in the ICMF board is to ensure the breadth and depth of the conference continues to thrive, and to include a larger diversity in the individual participants and in the research areas represented, within the rich area of multiphase fluid mechanics.



**Dr. Elias Balaras**  
**Professor of Engineering and**  
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**Washington University**  
**Ph.D. Swiss Federal Institute of Technology, Lausanne, 1995**

**Elias Balaras** is a Professor at the Department of Mechanical and Aerospace Engineering at the George Washington University. Dr. Balaras received his Ph.D. from the Swiss Federal Institute of Technology (EPFL) in Lausanne, Switzerland in 1995. He was formerly a visiting scientist at the National Institute for Standards and Technology and on the Faculty at the University of Maryland. He has been on the Faculty at the George Washington University since January 2011. Dr Balaras's current research program aims at the development of robust numerical techniques for parallel, large-scale simulations of multiscale, multiphysics problems in physical and biological systems. Emphasis is given at large-eddy and direct numerical simulations, multiphase flows and fluid- structure interactions. He has been the recipient of several awards including the Marie-Curie fellowship from the European Commission in 1994 and the CAREER award from the National Science Foundation in 2003. Dr. Balaras has published over 120 papers in refereed journals and conference proceedings. He is currently an associate editor at the ASME J. Fluids Eng. and served as reviewer for numerous government programs related to fluid mechanics, biological flows, high performance computing and turbulence.

**Dr. Mariano Cantero** – is deputy director for Engineering at the Balseiro Institute. He received a Ph.D. in Civil and Environmental Engineering and obtained the highest average of the Nuclear Engineering degree at the Balseiro Institute in 2000. Dr. Cantero then did a specialization, a Master's Degree and the aforementioned Doctorate at the University of Illinois at Urbana-Champaign in 2007.

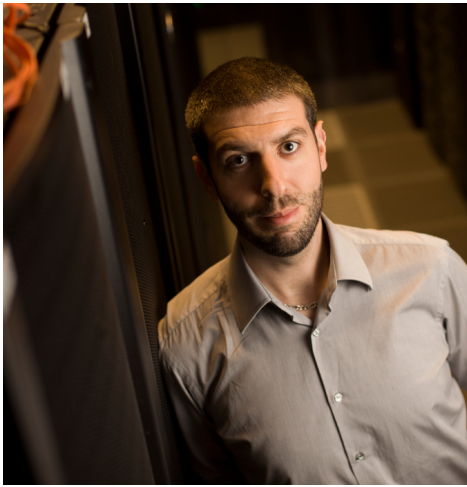
Dr. Cantero is responsible for coordinating the three undergraduate degrees taught at the Balseiro Institute in that area: Engineering (Eng.) Nuclear, Mechanical Engineering and Telecommunications Engineering. Likewise, he must coordinate the Specialization in Applications of Nuclear Technology (CEATEN), the Master's Degree in Engineering, the Doctorate in Nuclear Engineering and the Doctorate in Engineering Sciences.

He is Associate Professor of the Balseiro Institute and Independent Researcher of the National Council of Scientific and Technical Research (CONICET) since 2010 and Researcher of the National Atomic Energy Commission since 2015. His place of work as a researcher is at the Bariloche Atomic Center, in the Department of Computational Mechanics (MECOM) of the Management of Applied Research, Management of Applications Area of Nuclear Technology of the CNEA.

## Short Biography – Tim Colonius

**Tim Colonius** is the Frank and Ora Lee Marble Professor of Mechanical Engineering at the California Institute of Technology. He received his B.S. from the University of Michigan in 1987 and M.S and Ph.D. in Mechanical Engineering from Stanford University in 1988 and 1994, respectively. He and his research team use numerical simulations to study a range of problems in fluid dynamics, including aeroacoustics, flow control, instabilities, shock waves, cavitation, and bubble dynamics. Prof. Colonius also investigates medical applications of ultrasound, and is a member of the Medical Engineering faculty at Caltech. He has published more than 300 journal articles and conference proceedings. He has advised 24 Ph.D. students, many of whom now hold prominent positions in academia. He is a Fellow of the American Physical Society and the Acoustical Society of America, and Editor-in-Chief of the journal Theoretical and Computational Fluid Dynamics. He was the recipient of the 2018 AIAA Aeroacoustics Award. His research has been supported by Airbus, AARC, AFOSR, Boeing, DARPA, JPL, the Gordon and Betty Moore Foundation, NASA, NAVAIR, NIH, NSF, ONR, and the Powell Foundation. In addition to academic work, Prof. Colonius consults widely in aerospace and mechanical engineering communities.

## Biosketch for Prof. Olivier Desjardins



**Olivier Desjardins** is an Associate Professor in the Sibley School of Mechanical and Aerospace Engineering at Cornell University. He joined the Sibley School faculty in 2011 after three years as an Assistant Professor at the University of Colorado Boulder. He received a Master of Science in Aeronautics and Astronautics from ENSAE (Supaero) in Toulouse, France, and a Master of Science in Mechanical Engineering from Stanford University in 2004. He graduated from Stanford University in June 2008 with a Ph.D. in Mechanical Engineering. His doctoral research on numerical methods for accurate simulations of reactive multiphase turbulent flows was performed at the Center for Turbulence Research under the guidance of Prof. Heinz Pitsch. Olivier's current research focuses on predicting turbulent multiphase flows using massively parallel numerical simulations. In 2014, he received an NSF CAREER award to work on turbulence modeling around liquid-gas interfaces. In 2016, he was presented with the Junior Award from the International Conference on Multiphase Flow. His research group has authored over fifty papers presenting innovative numerical methods and new physical models with specific focus on liquid-gas flows and particle-laden flows. Specific recent projects include the advancement of computational and experimental spray control technologies, the modeling of particle clustering dynamics, the efficient simulation of contact line dynamics, and supersonic fuel injection. Olivier has served the atomization and spray community by occupying various positions with the Institute of Liquid Atomization and Spraying Systems, and he is looking forward to the opportunity to serve the multiphase flow community at large through ICMF.



**Theodore (Ted) J. Heindel, PhD**

Director, Center for Multiphase Flow Research and Education (CoMFRE)

Bergles Professor of Thermal Science

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**Biography:**

**Professor Theodore (Ted) Heindel** is the Director of the Center for Multiphase Flow Research and Education (CoMFRE) at Iowa State University (ISU). He also holds the title of Bergles Professor of Thermal Science in the Department of Mechanical Engineering and is a courtesy professor in the Department of Chemical and Biological Engineering at ISU. He directs the Experimental Multiphase Flow Laboratory at ISU, which houses a one-of-a-kind instrument for performing X-ray visualization studies of complex fluid flows. His research currently focuses on multiphase flow hydrodynamics (e.g., mixing in gas-liquid, gas-solid, and particle-particle flows) and multiphase flow visualization and characterization using X-ray imaging technology. His research program has been supported through the NSF, USDA, DOE, ONR, and industrial partners. He has co-authored one book on bioreactor hydrodynamics and gas-liquid mass transfer, and published nearly 90 peer-reviewed journal papers and over 250 conference papers, abstracts, and technical reports, the vast majority in the area of multiphase flows. Ted has been recognized at ISU with a 2018 Regents Award for Faculty Excellence, the College of Engineering's 2006 Superior Engineering Teacher of the Year Award, and was twice selected by graduating seniors as mechanical engineering's Professor of the Year. He is a past associate editor for the *ASME Journal of Fluids Engineering*, and is the past chair of the Fluids Measurement and Instrumentation Technical Committee of ASME. He received his B.S. from the University of Wisconsin – Madison and his M.S. and Ph.D. from Purdue University, all in mechanical engineering with an emphasis in the thermal sciences.

**Marcus Herrmann** is an Associate Professor in the School for Engineering of Matter, Transport and Energy at Arizona State University. He performs research on numerical methods for turbulent liquid/gas interfacial flows in both incompressible and supersonic flow environments. His specific area of interest is in understanding and predicting the primary atomization processes of injected liquids with applications ranging from fuel injection systems to medical sprays. He is the Editor-in-Chief for the Americas of the journal Atomization and Sprays, serves on the board of directors of the Institute of Liquid Atomization and Spray Systems (ILASS) and the program committee of the American Physical Society's Division of Fluid Dynamics (APS-DFD), and is the local chair of the APS-DFD meeting in Phoenix, AZ in 2021. He is the recipient of the 2001 Hendrik Casimir-Karl Ziegler Award of the Royal Dutch Academy of Sciences and the North-Rhine Westphalian Academy of Sciences, the 2009 W.R. Marshall Award of ILASS-Americas, and several local teaching awards. He has published 35 articles in refereed journals, including the Annual Review of Fluid Mechanics, International Journal of Multiphase Flow, Journal of Computational Physics, and Journal of Fluid Mechanics, and has published over 80 conference publications. He has given more than 20 invited presentations at international conferences and meetings. He has attended the ICMF conference since 2013 and it would be an honor, if elected, to serve on the Governing Board representing the Americas to contribute to the continued success of the conference.



**Oscar Rodriguez.** ICMF-2019 Chairman. Professor of Fluid Mechanics, University of São Paulo at São Carlos School of Engineering, Brazil, where he is currently Head of the Mechanical Engineering Department (EESC - USP). Coordinator of the Multiphase Flow Research Center (NAP-EM-USP). Head of the Industrial Multiphase Flow Lab. (LEMI). Former President of the Research Commission of the São Carlos School of Engineering. Fellow of the Brazilian Association of Mechanical Sciences and Engineering (ABCM). Member of the Management Board of the European Research Community On Flow, Turbulence and Combustion (ERCOFTAC). Recipient of the "EMBRAER Award Best PhD Thesis in Mechanics". He has published 143 scientific papers, of which 53 articles in refereed journals (h-index: 14), and one book on Multiphase Flow (in Portuguese). Between 2006 and 2011 he had a paper among the Top 10 Cited of the International Journal of Multiphase Flow. Head of several research projects with the Energy industry. His areas of expertise include measurements and phenomenological modelling of separated liquid-liquid flows, hydrodynamic stability and development of equipment and instrumentation.



**Krishnan Mahesh** is Professor in the Department of Aerospace Engineering and Mechanics at the University of Minnesota. His research focuses on algorithm development, theoretical analysis and modeling of turbulent flows. His present interests include large-eddy simulation, particle-laden flows, cavitation, hydroacoustics, superhydrophobic surfaces, rough wall boundary layers, fluid structure interaction, and the global stability of complex flows. Mahesh received his Bachelor's degree in Mechanical Engineering from the Indian Institute of Technology, Mumbai, and Masters and PhD degrees from Stanford University.

Mahesh is a 2018 Fulbright-Nehru Specialist, Fellow of the American Physical Society, Associate Fellow of the American Institute of Aeronautics and Astronautics, and Fellow of the Minnesota Supercomputing Institute. He is a recipient of the CAREER Award from the National Science Foundation and the Francois N. Frenkiel award from the American Physical Society. He has received the Taylor award for Distinguished Research, McKnight Presidential Fellowship, Guillermo E. Borja award and McKnight Land-Grant Professorship from the University of Minnesota. Mahesh has over 150 publications in journals and refereed conferences, and has advised 20 PhD students.

Mahesh serves on the NATO AVT Committee on Multiphase Flows, and Symposium Scientific Committee for the 10<sup>th</sup> (CAV2018) and 11<sup>th</sup> (CAV 2021) International Symposia on Cavitation. He is PI on a Multi-University Research Initiative titled: "*Predicting turbulent multi-phase flows with high fidelity: a physics-based approach*" funded by the U.S. Office of Naval Research. Mahesh was Chair of the Organizing Committee for the 2009 American Physical Society Division of Fluid Dynamics (APS-DFD) Annual Meeting in Minneapolis.



**Profess Panagiota Angeli**, FIChemE, RAEng, specializes on multiphase flows particularly those involving two liquid phases. She obtained a Diploma in Chemical Engineering from the National Technical University of Athens and a PhD on Multiphase Flows at Imperial College London. She is currently a Professor in Chemical Engineering at University College London (UCL), where she leads the Advanced Multiphase Flow Systems group (ThAMeS). Her research aims to link small scale interactions and interfacial phenomena such as interface breakage and coalescence, to the overall behaviour of multiphase systems, such as flow pattern transitions and pressure drop and to develop predictive models. More recently, studies have expanded to drop coalescence and breakage phenomena in the presence of surfactants and to the effects of non Newtonian rheologies on two-phase flows. The experimental investigations have been enabled by original and advanced sensing and measurement techniques, such as micro- and high speed Particle Image Velocimetry (PIV), 2-colour PIV, tomography and conductivity probes, many of them developed by her group. Prof Angeli's work has been supported by substantial UK Research Council and European Union grants and by industry. She participates and has acted as chair in UK EPSRC and international (Norway, Sweden, Ireland) research funding review panels, and was appointed Visiting Professor for Multiphase Flows in A\* Institute of High Performance Computing, Singapore. She co-chairs the Multiphase Flows Special Interest Group of the EPSRC funded UK Fluids Network. Prof Angeli has published over 175 peer reviewed journal and conference papers.



**Mickael Bourgoïn** got his PhD on dynamo and magnetohydrodynamics studies in Lyon (France, 2003). As a postdoc in Cornell University (USA) he studied Lagrangian approaches of turbulence, before being appointed as a CNRS researcher at LEGI in Grenoble (France, 2004) to investigate the interactions between inertial particles and turbulence. At present, he is a CNRS research director, in the Physics Laboratory at Ecole Normale Supérieure de Lyon, France, where he carries investigations on fundamental turbulence, particle-laden flows, granular media among other topics. He teaches advanced fluid mechanics at Ecole Normale Supérieure de Lyon and Ecole Centrale de Lille. He is also director of the scientific committee of the French National Research Network « Phenomenology of Turbulence » and served as coordinator in numerous national and international collaborative projects, including the research axis on Particles and Fields within the European network EuHIT. He has served as organiser of the 14th edition of the European Turbulence Conference (ETC) in 2013, and as founder (in 2008) of the first edition of the international winter school « New Challenges in Turbulence Research » (NCTR) which has now become a biennial event held every two years in Les Houches (France). In 2009 he was awarded the young scientist Euromech Prize. He gave keynote invited presentations in ETC13 (Warsaw, 2013) and ICMF (Firenze, 2016) and lectured turbulence and particles Transport at CISM in Udine (Italy, 2014 and 2015) and Imperial College (London, 2017).



**Dr. Dirk Lucas** is head of the Computational Fluid Dynamics (CFD) division at the Institute of Fluid Dynamics of the Helmholtz – Zentrum Dresden-Rossendorf (HZDR), Germany. His research focuses on the development and validation of CFD-models for multiphase flows in medium and large scale applications, e.g. in chemical engineering and nuclear reactor safety. In particular he is interested in fundamental phenomena in poly-disperse bubbly flows and in a corresponding modelling in the frame of CFD codes.

Dirk Lucas studied physics at the Technical University of Dresden from 1983 to 1988 and continued with his doctoral thesis at the Technical University of Zittau. He received his PhD in 1991 from the Technical University of Dresden. From 1992 to 2011 he worked as a research fellow at the Research Center Dresden-Rossendorf and became head of the CFD department in 2012. He is vice chair of the Virtual International Research Institute of Two-Phase Flow and Heat Transfer (VIR2AL: <http://2phaseflow.org>), member of the editorial boards of the journals "Multiphase Science and Technology" and "Experimental and Computational Multiphase Flow", member of the Scientific Committee of the CFD4NRS-Workshops and of the Technical Program Committees of the conference series NURETH and NUTHOS. He is the main organizer of the annual Multiphase Flow Conference and Workshop with approximately 150 participants annually. Dirk Lucas is author or co-author of 145 scientific papers in peer-reviewed journals.



**Dominique Legendre** is a Professor of Fluid Mechanics at the Institut National Polytechnique de Toulouse (INPT) and at the Institut de Mécanique des Fluides de Toulouse (IMFT), University of Toulouse, France. He received his PhD from INPT, University of Toulouse in 1996. He is vice-President of the Institut National Polytechnique de Toulouse for information technology since 2013. His main line of research is bubble and drop dynamics, including wetting phenomena, mainly based on the development of numerical methods for direct numerical simulations.



**Omar Matar (OKM), FAPS, FIChemE** is Vice-Dean of Engineering at Imperial College and RAEng/PETRONAS Research Chair in Multiphase Fluid Dynamics. His research interests are in multiphase flows, analytical techniques, numerical modelling, and data-centric methods with applications in oil-and-gas, fast-moving consumer good, and manufacturing. He has published over 245 refereed papers with over 7000 citations and an h-index of 46 (GS). He is co-Editor-in-Chief of *J. Eng. Math.*, and received >£35M in funding from EPSRC, and industry including the £5M EPSRC Programme Grant, MEMPHIS (<http://www.memphis-multiphase.org/>), to develop predictive tools for multiphase flows. OKM is also the Director of Transient Multiphase Flows (TMF, <http://www.tmf-consortium.org>) consortium on flow assurance, and Deputy-Director of an EPSRC CDT in Fluid Dynamics across Scales (<http://www3.imperial.ac.uk/fluidscdt>).



**Cristian Marchioli** is Associate Professor of Fluid Mechanics at the University of Udine and Editor of *Acta Mechanica*.

In 2011-2015 he served as chairman of the COST Action on *Fiber suspension flow modeling* and, in 2016, as scientific secretary of ICMF 2016. In 2018, he co-chaired the IUTAM Symposium on *Motile cells in complex environments*. Currently, Prof. Marchioli is Director of the Dept. of Fluid Mechanics of the International Center of Mechanical Sciences, where he organized 4 advanced schools on particle dynamics in turbulence, and coordinates the MSCA ITN-EID *Next-generation computational methods for enhanced multiphase flow processes*. His research interests involve multiphase flow modelling, from small-scale particle-turbulence interactions to large-scale modeling of gas-solid/ gas-liquid flows. The author of 50+peer-reviewed papers and 100+ conference proceedings, Prof. Marchioli is also editor of the book *Collective dynamics of particles: From viscous to turbulent flows*, and co-author of several book chapters (including ERCOFTAC's Best practice guidelines for computational fluid dynamics of dispersed multiphase flows). He has delivered several invited and keynote lectures in international meetings (including the 5th Int. Conf. Turbulence and Interactions in 2018 and the 3rd Int. Conf. Numerical Methods in Multiphase Flow in 2017).



**Doeg-Hee Doh** obtained his Ph.D. in 1995 at Mechanical Engineering Department, The University of Tokyo. He worked at Korea Maritime and Ocean University since 1995, and became full professor in 2001. During the period, he also worked for POSTECH Advanced Fluid Engineering Research Center, Korea, and Nihon University, Japan as visiting research fellow. He published 181 journal articles in the field of quantitative flow visualization for interfacial flows, solid-liquid multiphase flows, two-phase fluid machineries, and various porous material flows and also for nano-fluids. He is currently President of Korean Society of Visualization, President of Ocean Academy, President of Fluid Engineering Division in Korean Society of Mechanical Engineering, and Chief of Review Board, Korean National Research Foundation. He is in charge of editorial board member for Journal of Thermal Science (Springer), Int. J. Heat and Fluid Flow (Elsevier), and J. of Flow Visualization & Image Processing (SCIE). He received 28 academic awards in total, including 6 international prizes. So far he has organized international conferences more than 12 times as the chairman.



**Professor Graham 'Gus' Nathan**

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**Brief Biography**

Professor Nathan is the founding Director of The University of Adelaide's Centre for Energy Technology and recipient of a Discovery Outstanding Researcher Award from the Australian Research Council. He specialises in the development of innovative technologies for process heat, power and fuels in partnership with industry, particularly those involving multi-phase flows. He leads the Solar Fuels program in the \$87m Australian Solar Thermal Research Initiative, which aims to lower the cost of solar fuels production by gasification of biomass residues, and leads the \$14m ARENA funded project to introduce concentrating solar thermal into the Bayer Alumina process. He has published more than 200 papers in leading international journals, 250 in peer-review conferences, 12 patents and 50 commissioned reports.

Professor Nathan has worked closely with industry throughout his career, with a 13 year industrial lectureship and undertaking more than 50 commissioned reports to industry. His past technology developments include being principal leader of the Chief Design Team for the award winning fuel and combustion system for the Sydney 2000 Olympic Relay Torch and joint leadership of the development of low NO<sub>x</sub> combustion technology in rotary cement kilns. He also specialises in the development of concentrating solar thermal hybrid technologies for applications spanning industrial process heat, solar fuels and power generation, with three platforms of patented technology, two of which employ transported particles as the heat transfer medium.

In the field of multi-phase flows, he has led the establishment of a leading laser diagnostics laboratory that is progressively establishing ever-more detailed measurements within a series of simplified and well-characterised environments that span volumetric loadings of relevance to industrial applications, while also being well suited to the development and validation of numerical models. These include transported jet flows emerging from a long pipe and falling particle curtains, both isothermal and when heated with high flux radiation. These planar measurements of velocity and number density in jets emerging from long pipes have provided new understanding of the influence of Stokes number on the development of multi-phase flows in pipes and the evolution of particle clusters (published in *J. Fluid Mech* and *IJMF*), while the planar measurements of particle and gas phase temperature in radiatively heated flows of up to 38MW/m<sup>2</sup> is beginning to provide new insights of the heat transfer mechanisms in these complex and coupled flows.



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**Keywords:** Nuclear Engineering, Thermal hydraulics, Neutron radiography

## **Description of Research**

### **Interests:**

**Yasushi SAITO** is currently working for Institute for Integrated Radiation and Nuclear Science, Kyoto University, where he is studying mainly multiphase flows in relation to nuclear thermal hydraulics, including severe accident, and also development of measurement technique for multiphase flow research. He gained his doctoral degree from the Department of Chemical Engineering at Kyoto University. His main research interests are nuclear thermal hydraulics, refrigeration system and neutron radiography. His recent research is directed to thermal hydraulics of heavy liquid-metal in relation to development of accelerator driven system (ADS) and measurement technique for liquid-metal flow.



**Kazuyasu Sugiyama** is a Professor in Graduate School of Engineering Science, Osaka University, Japan. He received a doctor degree (Engineering) in 2000 from School of Engineering, the University of Tokyo, Japan. He was a Researcher in National Maritime Research Institute, Japan (2001-2005), a Postdoc in Physics of Fluids group, University of Twente, the Netherlands (2005-2007), a Research Associate Professor in School of Engineering, the University of Tokyo (2008-2012), and a Unit Leader in Advanced Center for Computing and Communication, RIKEN, Japan (2012-2014). Since 2014, he has been working in Osaka University. He served as a plenary speaker at ICMF 2016, a plenary speaker at Int. Symp. of Cavitation and Multiphase Flow 2014, a keynote speaker at 10th Int. Conf. on Computational Heat, Mass and Momentum Transfer, a chairman of technical paper review committee of Japanese Society for Multiphase Flow, a member of local organizing committee of 13th Asian Int. Conf. on Fluid Machinery, and a member of local executive committee of 29th IAHR Symp. on Hydraulic Machinery and Systems. He is currently a member of editorial advisory board of IJMF, and a board member of Turbomachinery Society of Japan. His areas of expertise include fundamental motions of a bubble/particle, multiscale phenomena in bubbly flows, development of numerical methods for fluid- structure/ membrane interaction, biomedical applications, and high performance computing of moving boundary problems. He has published 75 articles in refereed journals and 145 articles in international conferences.



Jun Yao obtained his Ph.D. in Power Engineering and Thermal Physics in 2002 at Zhejiang University (China). He worked at National University of Singapore (Singapore) as a research fellow from 2003 to 2006 in chemical engineering. He moved to University of Leeds (UK) and worked as a research fellow from 2006 to 2010 in particle science and technology. He went to Xiamen University (China) in 2011 to start nuclear multiphase engineering and became a full professor in 2014. He moved to China University of Petroleum-Beijing (China) as a professor in 2016 as the chair of Multiphase Flow Laboratory. He published 66 journal articles and more than 100 international conference proceedings papers in the field of Multiphase Flows including measurement technology of multiphase flow, multi-scale modelling of multiphase flow and particle science and technology. As the principle investigator, he carried out more than 10 projects supported by National Natural Science Foundation of China, China Prosperity Strategic Programme Fund of United Kingdom and so on. He has been in Editorial Board in the International Journal "Advanced Powder Technology" since 2012 and as a senior reviewer for more than 20 international journals. He was awarded as "Excellent Editor for Advanced Powder Technology" (2017), "Young Scientist Award in Particuology" (Chinese Society of Particuology, 2012)", "New Century Excellent Talent (China, 2010)", "HPC Quest Silver Award" (Singapore, 2004) and so on. So far he has organized and chaired international conferences more than 30 times and been invited to present in international conferences more than 20 times.