
Editorial

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Biographical notes: Yongxiang Yang received his BSc and MSc Degrees at Northeastern University in Extractive Metallurgy (China, 1982 and 1988), and the degrees of Licentiate and Dr. of Tech. at Helsinki University of Technology in Materials Processing (Finland, 1992 and 1996). He has worked as Design Engineer, Researcher and Lecturer in Metallurgical Engineering. Since 1998 he has been working at Delft University Technology (The Netherlands) as an Assistant Professor in Process Metallurgy. His main interests include metallurgical and materials processing, transport phenomena, and applications of CFD in process simulation. He has published over 70 papers in international journals, conferences proceedings and book chapters.

Ivan Milo is a Deputy Marketing Director of Veolia Environnement. He received his BSc in Mechanical Engineering from Belgrade University (Serbia) and an MSc and PhD in Chemical Engineering from Brown University (USA). His latest positions were in the R&D and Technical Center of Air Liquide (enriched oxygen combustion, secondary iron smelting) and in the R&D of Veolia Environnement (physical-chemical and biological treatment of hazardous waste and different aspects of thermal treatment of wastes – MSW and hazardous).

Markus A. Reuter: Chief Executive Technologist Ausmelt Ltd. Australia. Degrees: B.Eng. (Chemical Engineering 1981), M.Eng. (1985), PhD (1991), D.Eng. (2006) all University of Stellenbosch (South Africa) and Dr. Habil. (1995) Aachen University of Technology (Germany). Industry: Manager in the Measurement and Control Division, Mintek, Metallurgist at Anglo American Corporation (both South Africa) and registered Professional Engineer (South Africa). Academic: 1996–2005 Professor at the Delft University of Technology (Netherlands) and since July 2005 Professor at University Melbourne (Australia). He has ca. 300 publications (journal and conference proceedings) and has written a book 'Metrics of Material and Metal Ecology' Elsevier (Amsterdam).

Dr. Themelis obtained his B.Eng. and PhD Degrees from McGill University (Montreal, Canada) in Chemical Engineering. He has worked as Director of the Engineering Division of the Noranda Research Center. In 1972–1980, he was Vice President of Technology of Kennecott Corp. In 1980 he was appointed as Professor by Columbia University (New York City, USA) and was elected to Stanley-Thompson Chair of Chemical Metallurgy in 1988. He was Chairman of the Henry Krumb School of Mines and founded Columbia's Earth Engineering Center in 1996. He is Founder and Chairman of the Waste to Energy Research and Technology Council.

This special issue PCFD focuses on the recent research and development in the application of CFD to the thermal waste processing technologies. Waste-to-energy and thermal waste processing have become a very important global issue and solutions to protect our environment and to preserve our earth resources. The demand on energy has never been so great, while the environmental regulations have never been so strict. People around the globe have never been so concerned with our natural resources, and social and environmental impact from the waste-to-energy and incineration processes.

Along with the industrial and technology evolution of thermal waste processing, CFD plays more and more

important role in assisting process modifications and new process development, as well as in-depth process understanding. For nearly two decades, CFD has been used in the research for waste incineration and thermal treatment technologies. Scattered publications are found in various environment and energy related journals and conferences. It is the main aim of this special issue to bring the world leading experts and researchers together and to create a platform in addressing the most relevant issues for the waste incineration and thermal treatment processes and the great benefits of using CFD to understand the processes better and to eventually assist in improving the technological development and industrial operations.