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Particle Aspect of Thermal Science and Engineering

Particles, such as solids, droplets and bubbles, are fundamental to most of the thermal science and engineering applications, including heat exchangers, fluidized beds, chemical refineries and coal-fired power plants. This special issue of *Applied Thermal Engineering* contains 14 selected papers presented at the Joint conference of the 5th UK-China and 13th UK Particle Technology Forum, held in Leeds, U.K, 12-15 July 2015.

This conference was organized by the School of Chemical and Process Engineering, University of Leeds, and supported by the Institute of Chemical Engineer (IChemE), the Chinese Particology Society and the Chinese Multiphase Flow Society. More than 200 researchers participated and 140 papers were presented, representative of the main topics presented in 20 sessions and 14 plenary /keynote lectures. As in the previous editions of the conference, the papers focus on the fundamentals and applications of particle science and engineering. Some of the best heat related papers were invited to this special issue, following the rigorous peer review process of the *Applied Thermal Engineering*. The papers represent a broad spectrum of research in the field, covering topics such as liquid droplet evaporation and coalescence, single nanoparticle behavior and nanoparticle-liquid dispersions, bubbles and multiphase flow, and modeling and simulation of gas-solids systems. It ranges from fundamental single particle behaviors to bulk particle systems under the framework of thermal science and engineering. As such, this special issue reflects the breadth and depth of particle aspects of thermal science and engineering, and acts as a focal point for further integration of particle science and technology into thermal engineering.

We would like to thank the Elsevier editors, particularly the Editor-in-Chief of the *Applied Thermal Engineering*, Professor T.S. Zhao, and the former Editor-in-Chief, Professor David Reay, for recognizing the importance of particle technology to thermal engineering and graciously agreeing to publish this special issue. We sincerely thank all contributors for their overwhelming response to the call for papers for this special issue, and all reviewers for devoting their precious time to review the papers. Finally, we deeply appreciate the strong and consistent help from all members of the organizing committee of this joint conference.

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