

Foreword to Special Issue on Micro/Nanoscale Heat and Mass Transfer—Part I

The 5th ASME Micro/Nanoscale Heat and Mass Transfer Conference (MNHMT 2016) was held in Singapore on Jan. 4–6, 2016. The Conference was organized by the School of Mechanical and Aerospace Engineering of Nanyang Technological University and sponsored by the ASME Heat Transfer Division, Xi'an Jiaotong University, Singapore Institute of Manufacturing Technology, Quantum Technology Group (Singapore) Pte. Ltd., and Nanjing Inout E-Business Co. Ltd. This conference series is dedicated to Dr. Chang-Lin Tien (1935–2002), a world renowned scholar and a leader in higher education, whose intellect and unique vision have continued to inspire our efforts in expanding the frontiers of micro/nanoscale heat and mass transfer. The previous four conferences were hosted by the National Cheng Kung University in Tainan (January 2008), Shanghai Jiao Tong University in Shanghai (December 2009), Georgia Institute of Technology in Atlanta (March 2012), and the University of Hong Kong in Hong Kong (December 2013).

Research and education on micro/nanoscale heat and mass transfer have advanced rapidly over the last 25 years through many dedicated individuals and team efforts, with direct impact extending into various fields in science and engineering as well as the advancement of a wide range of technologies. The conference provides a highly interactive forum to bring together researchers, educators, and practitioners around the world with the aim of collecting, exchanging, and promoting the knowledge and new advances on the state-of-the-art research and development in this emerging interdisciplinary field. MNHMT 2016 included 12 plenary speeches and many invited presentations, 150 peer-reviewed proceedings papers, and additional 100 oral presentations and about 30 posters. It was attended by some 300 people from more than 20 countries and regions.

The papers selected from those presented at the conference were reviewed following the criteria set by the ASME *Journal of Heat Transfer* and are published in two special volumes (with more than 40 technical papers and technical briefs). These papers reflect the contemporary research and findings in a broad spectrum

of micro/nanoscale heat and mass transfer with both fundamental and applied research by theoretical, numerical, and experimental methods. It is hoped that these papers will serve as valuable references for fundamentals and applications of thermal and fluid transport phenomena at the micro/nanoscales.

We would like to thank the Board of Conference, International Advisory Committee, Technical Program Committee, Organizing Committee, and all the Track and Session Chairs for promoting and organizing the conference. Thanks are also extended to all of the reviewers who have provided their critical comments. Special thanks are owed to the Journal's Editor Portonovo Ayyaswamy and Editorial Assistant Kayowa Gibson-Tshilenge, who have provided tremendous encouragement and assistance in making this special issue possible.

Zhuomin Zhang
Guest Editor

George W. Woodruff
School of Mechanical Engineering,
Georgia Institute of Technology,
Atlanta, GA 30332

“Charles” Chun Yang
Guest Editor

School of Mechanical
and Aerospace Engineering,
Nanyang Technological University,
Singapore 639798

“Bob” D. Y. Tzou
Guest Editor

Department of Mechanical
and Aerospace Engineering,
University of Missouri,
Columbia, MO 65203