

Preface

This special issue is composed of the papers selected from those submitted to the 18th International Symposium on Transport Phenomena (ISTP-18) held in Daejeon, Korea, from 27 to 30 August, 2007.

ISTP-18 was organized by the Korean Society of Mechanical Engineers (KSME) under the auspices of the Pacific Center of Thermal-Fluids Engineering with the purpose to provide a forum for the scientists and engineers to present new information, exchange ideas, and discuss the future directions and priorities in the areas of transport phenomena. Since the launch of the 1st symposium held in Honolulu, 1985, ISTP has been held in various countries all over the world. After the first meeting of ISTP in Seoul, Korea (ISTP-6) held in 1993, ISTP-18 is the second symposium in Korea.

This special issue has been initiated in collaboration between the editorial committee of Journal of Mechanical Science and Technology (JMST) and the organizing committee of the Conference. Among 57 papers submitted by corresponding authors for possible publication in the JMST, 20 papers were finally selected to be included in this special issue based on peer review. Due to the rigorous reviewing process, many outstanding papers must have been withdrawn. Thus, the technical organizing committee welcomes submission of these papers to the JMST via the online system for possible future publication in a regular issue.

The current special issue covers papers on various transport phenomena in fluids flow and heat and mass transfer. The papers also describe the current research trend in related areas of the

multi-disciplinary studies including boiling, evaporation and bubble control in microchannels, enhancement of nanofluid conductance, surface flows such as drop motion, thin film structure, transport between biological cells and environment, and application of fuel cells, to name a few.

We gratefully acknowledge contribution of authors and valuable time and effort of reviewers. The collaboration between the technical organizing committee and the staff of the editorial team of the KSME was very much appreciated. The organizing committee of the Conference propelled by the chairman, Prof. Sang Yong Lee from KAIST and Prof. Joon Sik Lee from the Seoul National University should greatly be acknowledged to get our gratitude for their invaluable contribution to the ISTP-18.

Finally, we express sincere thanks to the technical program chair, Prof. Sung Jin Kim from KAIST for his self-sacrificing work for the successful publication of this issue.

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