

Editorial

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This special issue presents a selection of papers from the 12th Asian Thermophysical Properties Conference (ATPC 2019) which was successfully held at Xi'an, China on October 2–6, 2019. ATPC 2019 was organized by Xi'an Jiaotong University as well as Thermophysical Property Division of Chinese Society for Measurement. More than 200 participants from 24 countries around the world made 184 oral or poster presentations during the conference. Most participants are from China, followed by Japan, Germany, Korea, Portugal and other countries.

ATPC is one of the three world-wide conferences on thermophysical properties held every three years, and the other two are the European Conference on Thermophysical Properties and the Symposium on Thermophysical Properties. Aiming to promote the development of experimental, theoretical, and applied research on thermophysical properties, ATPC provides a forum to share and exchange knowledge, experience and ideas on the latest progress in the field of thermophysical properties of materials, including but not limited to viscosity, thermal conductivity, diffusivity, heat capacity, solubility, phase equilibrium, speed of sound, density and surface tension. Besides, the development and application of new materials and other properties such as optical and electrical properties are also within the scope of ATPC.

This special issue of *High Temperatures – High Pressures* comprises ten excellent papers selected from the proceeding of ATPC 2019. We believe that these papers will contribute to the development in the characterization methods of thermophysical properties and new materials in the future.

We would express our appreciations all the participants who share their knowledge, especially the plenary speakers: Prof. Mikhail A. Anisimov, Prof. Yasuyuki Takata, Prof. Xing Zhang, Prof. Agilio Padua. Special thanks are directed to the International Scientific Committee, the International Organizing Committee and the National Executive Committee of ATPC 2019 for their efforts in organizing this conference. Special thanks are directed to Prof. Ivan Egry for his work on this special issue. Finally, we want to thank to the financial support from National Natural Science Foundation of China (No. 51942608).

Chairman of ATPC 2019: Maogang He

Secretary of ATPC 2019: Xiangyang Liu