

Workshop on  
**“Advances in Two Phase Flow and Flow  
Boiling Phenomena in Microscale Channels”**

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Applications of microscale channel two phase flow and flow boiling phenomena involved in traditional industries and highly specialized fields such as micro-fabricated fluidic systems, microelectronics, aerospace technology, micro heat pipes, chips cooling and various energy systems etc. have been becoming especially important since the late 20th century. Gas liquid two phase flow and flow boiling heat transfer in microscale channels are quite different from those in conventional channels. Research on the relevant topics has been extensively conducted to understand the very complex transport phenomena of microscale two phase flow and flow boiling over the past decades. New methods have been applied to measure the basic physical parameters at microscale and are continuously under development. New prediction methods and mathematical models have also been developed and are being continuously under investigation. However, there are quite contradictory results in the available research. Furthermore, unified new theories and mechanisms are also urgently needed for two phase flow and flow boiling heat transfer in microscale channels.

To foster the research development of numerous evolving research topics, technologies and applications based on microscale channel two phase flow and flow boiling phenomena. The proposed workshop specially focuses on the frontiers and progress of research on two phase flow and flow boiling phenomena in microscale channels. It covers two phase flow regimes, flow boiling heat transfer, critical heat flux (CHF), two phase pressure drops and the relevant mechanisms and prediction methods in microscale channels. Future research needs and the relevant emerging technology will also be discussed.

For more information about the workshop, email us at [info@mhmtcongress.com](mailto:info@mhmtcongress.com).