

## 2019 MNHMT TECHNICAL SESSIONS AT A GLANCE

	Monday, July 8		Tuesday, July 9		Wednesday, July 10		
	10:30am – 12:00pm	3:35pm – 6:00pm	10:35am – 12:00pm	3:35pm – 5:30pm	10:15am – 12:00pm	1:00pm – 2:30pm	3:30pm – 5:10pm
<b>Mudan Hall</b>	11-1: Micro/Nano Scale Heat Transfer	Poster Presentations	11-3: Gas and Phase Change Flow and Heat Transfer at Small Scales				
<b>Huaihua Hall #1</b>	1-2: Droplets	1-3: Electrokinetics	4-6: Fundamentals of Boiling	4-7: Droplets and Surface Interactions	1-6: Cells	1-4: Particles	1-5: Flows
<b>Huaihua Hall #2</b>	3-1: Transport Phenomena on Solid-solid Interfaces	2-1: Simulation in Nano-fluid	15-1: Heat and Mass Transfer Photogallery	3-2: Droplet Dynamics	3-3: Thin Liquid Film Transport Phenomena	3-4: Transport Phenomena in Confine Domains	5-4: Near – Field Radiation
<b>Huaihua Hall #3</b>	4-1: New Surfaces for Phase Change -1	7-1: Micro/Nano-Thermal Manufacturing and Materials Processing	4-2: New Surfaces for Phase Change -2	4-3: Condensation	4-4: Condensation and Boiling 8-1: Ultrafast Transport and Ultrafast Diagnostics	4-5: Flow Boiling	11-2: Liquid Flow and Heat Transfer at Small Scales
<b>Baihe Hall #1</b>	9-1: Thermal Transport in Nanowires and Nonofibers	6-1: Energy generation and storage devices and systems	9-3: Thermal Transport Through Thin Films and Interfaces	9-4: Molecular Dynamics and Monte Carlo Simulations of Nanoscale Conduction	10-3: Microscale Heat and Mass Transfer - 2	9-5: Theoretical and Numerical Analysis of Nanoscale Heat Conduction	9-6: Nanoscale Heat Conduction in Device Applications
<b>Baihe Hall #2</b>	14-1: Oscillating Heat and Mass Transfer in Capillaries	5-3: Radiation Related Heat/Cooling	5-1: Radiation-Structure Interaction	5-2: Radiation Properties/Measurement	2-2: Experimental Studies in Nanofluids	12-2: Micro/Miniature Two-Phase Devices/Systems II	13-2: Micro/Nanoscale Transport in Cryopreservation
<b>Baihe Hall #3</b>	12-1: Micro/Miniature Two-Phase Devices/Systems 1	10-1: Microscale Heat And Mass Transfer-1	10-2: New Methods In Microscale Study	13-1: Micro/Nanoscale Transport in Medical Applications: Physiology and Hyperthermia	6-2: Thermal Management in Energy Devices and Systems	11-5: Micro Heat Mass Transfer	11-4: Two-Phase and Multi-Phase Flow and Heat Transfer at Small Scales

**PLENARY/KEYNOTES AND SPECIAL SESSIONS**

**Sunday, July 7**

5:00pm – 7:00pm (Global Village Food Park)  
**Opening Reception**

7:00pm – 9:00pm (TBD)  
**Organizing Committee Meeting**

**Monday, July 8**

8:00am – 8:30am (Mudan Hall)  
Welcome Session

8:30am – 9:05am (Mudan Hall)  
**Tailoring Photons from the Sun and terrestrial Sources with Nanostructured for Energy and Water Nexus** by Gang Chen

9:05am – 9:40am (Mudan Hall)  
**Numerical Solutions of Nano/Micro phenomena Coupled with Macroscopic Process** by Li Chen and Wen-Quan Tao

9:40am – 10:15am (Mudan Hall)  
**Adsorbents related to energy, water and air** by Ruzhu Wang

12:00pm – 1:00pm (Global Village Food Park)  
**Attendee LUNCH**

1:00pm – 1:35pm (Mudan Hall)  
**Optimizing Complex Systems with AI Enabled PRS Platform** by Chih-Ming Ho

1:35pm – 2:10pm (Mudan Hall)  
**Coupled Micro/Nanoscale Heat and Mass Transfer in Bio-Manufacture** by Zhanfeng Cui

2:10pm – 2:45pm (Mudan Hall)  
**Transport Processes in the Deposition of Micro/Nanoscale Thin Films** by Yogesh Jaluria

2:45pm – 3:20pm (Mudan Hall)  
**Using Thermo-fluid Science to Tackle the Energy Storage Challenge** by T.S. Zhao

6:00pm – 8:00pm (TBD)  
**Technical Committee Meeting**

6:00pm – 8:00pm (Global Village Food Park)  
**Attendee Dinner**

**Tuesday, July 9**

8:00am – 8:35am (Mudan Hall)  
**Practice Your Scales! Thermal, Energy, and Bio Nanomaterials for Fast Processes** by Timothy S. Fisher

8:35am – 9:10am (Mudan Hall)  
**Micro-biotransport and its great impact on the survival of living cells and tissues during the cryopreservation process** by Dayong Gao

9:10am – 9:45am (Mudan Hall)  
**Nano Liquid Metal as New Generation Electronic Cooling Materials** by Jing Liu

9:45am – 10:20am (Mudan Hall)  
**Nano-Manufacturing for Enhanced Thermal Energy Storage, Cooling & Sensing** by Deb Banerjee

12:00 pm – 1:00pm (Global Village Food Park)  
**Attendee Lunch**

1:00pm – 1:35pm (Mudan Hall)  
**Raman Spectroscopy Method for Measuring the Thermophysical Properties of Individual Nanoscale Materials** by Xing Zhang

1:35pm – 2:10pm (Mudan Hall)  
**Nanoengineered Materials for Enhanced Liquid-Vapor Phase Change** by Evelyn N. Wang

2:10pm – 2:45pm (Mudan Hall)  
**Development of flexible thermal superconductors** by Sung Jin Kim

2:45pm – 3:20pm (Mudan Hall)  
**Microscopic Observation of Mass Transfer Obstruction during Gas Hydrate Formation and Decomposition** by Yongchen Song

6:00pm – 8:00pm (Mudan Hall)  
**Awards Banquet**

**Wednesday, July 10**

8:00am – 8:35am (Huaihua Hall 1-3)  
**Synthesis and solar cell applications of single-walled carbon nanotubes co-axially wrapped with mono- and few-layer boron nitride nanotubes** by Shigeo Maruyama

8:35am – 9:10am (Huaihua Hall 1-3)  
**Recent Advances in Nanoscale Thermal Radiation** by Zhuomin Zhang

9:10am – 9:45am (Huaihua Hall 1-3)  
**Nature inspired solutions help drive research progress – from heat transfer to downhole oil-water separation** by Yuying Yan

12:00pm – 1:00pm (Global Village Food Park)  
**Attendee Lunch**

6:00pm – 8:00pm (Global Village Food Park)  
**Attendee Dinner**