8th International Symposium on Heat Transfer

ISHT-8

Oct 21-24, 2012 Beijing, China

About ISHT-8

Contents

Topics

Plenary Reports

Organizer:
Institute of Engineering Thermophysics,
Beijing Key Laboratory of CO2 Utilization and
Reduction Technology, Tsinghua University

Co-Organizers:
Chinese Society of Engineering Thermophysics
Lanpec Technologies Limited Science and
Technology on Scramjet Laboratory

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Tsinghua University

NSFC
Papers are solicited on all aspects of heat transfer, including:

- Theories and technological applications related to fundamental transport phenomena
- Micro/Nano heat transfer in space and time
- Two-phase and multi-phase flow and heat transfer
- Heat and mass transfer in porous or dispersed media
- Radiation heat transfer and combined heat transfer modes
- Heat transfer enhancement
- Solidification and melting
- Industrial heat transfer and heat exchangers
- Mathematical analyses and numerical simulations of all modes of heat transfer
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**ISHT8-08-16**  Numerically analysis of heat transfer and fluid flow for the cooling process of sintered bed  
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| ISHT8-11-04 | Study of the subcooling phenomenon of phase change material with different nanoparticle additives for energy storage | Wei Gong, Hongyi Xiao, Zhen Yang, Yuanyuan Duan |
| ISHT8-11-05 | Recent developments on nanostructure-enhanced phase change materials | Mahdi Nabil, J. M. Khodadadi and Liwu Fan |
| ISHT8-11-06 | Experimental investigation of convection heat transfer of n-decane at supercritical pressures in a vertical tube | Bo Liu, Xi Wang, Yin-Hia Zhu, Pei-Xue Jiang |

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| ISHT8-12-02 | CO₂ long term diffusive leakage into Biosphere in geological carbon storage | Qinyi Li and Xing Zhang |
| ISHT8-12-03 | Effect of height and spacing of pin-fin array in perforated laminate plate | Kyeong Hwan Ahn, Jun-Su Park, Eui-Yeop Jung, Ki-Young Hwang, Minchan Kwon and Hyung-Hee Cho |
| ISHT8-12-04 | Numerical simulations and experimental studies on continuously-helical baffled heat exchangers shell side heat transfer and fluid flow performance | Wenjing Du, Shuji and Lin Cheng |
| ISHT8-12-06 | Entropy generation and entransy loss of Rankine cycles applied in power plants – keynote speaker: Xingang Liang | Chen Sun, Xuetao Cheng and Xingang Liang |
| ISHT8-12-07 | Heat transfer analysis of silica glass fiber drawing process in a draw furnace of optical fiber manufacturing system | Kyoungjin Kim |
| ISHT8-12-08 | Effects of heat sink geometry on the heat transfer performance of high-power LED modules | Shie-Chen Yang, Tsuo-Fei Mao, Tzer-Ming Jeng, Sheng-Chung Tzeng, Ling-Yu Huang and Chih-Liang Chen |
| ISHT8-12-09 | A synthesis method for preparing superparamagnetic iron oxide nanofluid with high thermal conductivity | Bo Li, Wenning Zhou, Yuying Yan |
| ISHT8-12-12 | Analysis of particulate fouling in corrugated plate heat exchangers | Guanmin Zhang, Guanqiu Li, Xueli Leng, Wei Li |
| ISHT8-12-14 | Performance analysis of a compressor-driven adsorption system with a gas cooler under the time-delay cycle | Yanhua Lai, Zhen Dong, Mingxin Lv and Jihong Pan |
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| ISHT8-13-03 | Molecular Dynamics Simulations of the effects of external factors on NPs translocation across | Qingchun Lei, Kai Yue, Xiaoxing Lv and Xinxin Zhang |
| ISHT8-13-04 | A phase field model for heat transfer in a metal foam-embedded latent thermal energy storage (LTES) system | Xiao Xiao Han, Yuan Tian and Changying Zhao |
| ISHT8-13-05 | Numerical investigation of the solidification Process of n-Octadecane nanofluid | Yousef M. F. El Hasadi and J. M. Khodadadi |
| ISHT8-13-06 | Marangoni flow and heat transfer in non-Newtonian nanofluid with suction and injection | Yanhai Lin, Liancun Zheng and Xinxin Zhang |
| ISHT8-13-08 | Mathematical modeling of sorption/desorption processes in metal-hydride systems for hydrogen storage and purification | Konstantin Minko, Valerij Artemov and Georgij Yan’kov |
| ISHT8-13-09 | Numerical study of harnessing waste heat in the gaseous pipe flow using CFD | X.F. Zheng and Y.Y. Yan |
| ISHT8-13-10 | Thermal analyses of LiFePO4/graphite battery processes | Peng Peng, Fangming Jiang and Xiong Zhu |
| ISHT8-13-11 | Numerical study on laminar free convection heat transfer between sphere particle and high pressure water in pseudo-critical zone | Liping Wei, Youjun Lu and Jinjia Wei |
| ISHT8-13-12 | Lumped models for one-dimensional phase-change heat conduction problems– keynote speaker: Jian Su | Chen An, Felippe C. Moreira and Jian Su |
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| ISHT8-13-14 | Numerical study on the heat transfer performance of the heat sink with pillar fin and jet array | Zhi-qiang Zhou, Xianghua Xu and Xingang Liang |
| ISHT8-13-15 | Thermal and hydraulic performance of water/glycol mixture and the application on power electronics cooling | Jiahui Zhang, Kevin Sippel, Kai Zhang, Xiaoze Du and Lijun Yang |
| ISHT8-13-16 | Effect of secondary injection into supersonic crossflow on heat transfer near injection hole | Ji-Yeul Bae, Jiwoon Song, Taehwan Kim, Yoon-Goo Kang, Ju-Chan Bae and Hyung-Hee Cho |
Rapid advances in energy power technologies, aviation and aerospace science and technology, MEMS/NEMS, environmental protection and biomedical engineering require that the heat transfer community achieve significant improvements in heat transfer and energy utilization to facilitate these applications of advanced technologies in nearly all fields. The seven previous ISHTs, which began in 1985, enhanced the international dissemination of recent advances in heat transfer research. A large number of papers were presented describing significant advances in heat transfer research from around the world. The papers of the first three symposiums were published as the Hemisphere Publishing series Heat Transfer Science & Technology (edited by Prof. B.X. Wang) while the papers in the last four symposiums were published in Heat transfer Science & Technology, (edited by Prof. B.X. Wang) by Chinese Press. The International Organizing Committee seeks to continue the valuable international exchange of new information and ideas in the heat transfer field for the 21st century by organizing the ISHT in Beijing every four years.