Kyoto- Seoul National- Tsinghua University Thermal Engineering Conference, 2003

on   December 16(Tuesday)-18(Thursday), 2003
at   Kyoto University   - Audio-Video Hall, University Central Library -
Chaired by

Makino, Toshiro, Kyoto University   a50141@sakura.kudpc.kyoto-u.ac.jp
Lee, Joon Sik,   Seoul National University jslee123@snu.ac.kr
Li, Zhi-Xin,   Tsinghua University   lizhx@tsinghua.edu.cn

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PROGRAM

December 16 (Tuesday)

9:10- 9:30 *Registration*

9:30- 9:50 **Opening Ceremony**   (chair: Prof. **M. Matsumoto**)
    Opening address, Welcome address, Introduction of Members, Conference guidance
    by Profs. **T. Makino**, **J. Ishikawa**, (**Z.X. Li**, **J.S. Lee**, **H. Yoshida**) and **M. Matsumoto**

10:00-11:40 **Session 1   Turbulent Flows**   (chairs: Profs. **P.X. Jiang** and **Z. Kawara**)
    Kouji Nagata* and Satoru Komori
        Linear Analysis of the Reynolds Number Effects on Turbulence Structure in Shear-Free
        Boundary Layer
    Zhi-Xin Li* and Ji-An Meng
        Heat Transfer Enhancement by Multi-Longitudinal Vortex Based on Principle of Field
        Coordination
    Tae-Choon Park, Woo-Pyung Jeon and **Shin-Hyoung Kang***
        Study of Wake-Induced Boundary-Layer Transition on an Airfoil with Fre-Stream
        Turbulence
    Hang Seok Choi*, Tae Seon Park, Kenjiro Suzuki and Hiroshi Iwai
        Large Eddy Simulation of Turbulent Heat Transfer in a Channel with a Wavy Undulated
        Bottom Wall

    Lunch

13:10-14:50 **Session 2   Miscellaneous 1**   (chairs: Profs. **J.Y. Yoo** and **S. Komori**)
    Sung Tack Ro* and Jeong Lak Sohn
        Mixing, Combined and Hybrid
    Kenjiro Suzuki*
        Energy Flow Renaissance toward Hydrogen Society with SOFC-MGT Hybrid Systems
        as a Distributed Energy Generation Unit
    Sang Hee Won, Junhong Kim, Ki-Jung Hong, Min Suk Cha and **Suk Ho Chung***
        Stabilization Mechanism of Lifted Flame in Near Field of Coflow Jets for Diluted
        Methane
    Atsumasa Yoshida* and Toshiro Makino

Study on Field Measurement of Heat Transfer in Urban Space

Coffee break

15:10-16:50 **Session 3   Miscellaneous 2**   (chairs: Profs. **X.G. Liang** and **H. Iwai**)
Jin-Zhao Wang*, Min Chen, Ji-Wu Shu, Bing Wang and Zeng-Yuan Guo
Homogeneous and Heterogeneous Bubble Nucleation: Large Scale Molecular
Dynamics Simulation
Xiao-Min Wu*, Wang-Fa Xu, Wei-Cheng Wang and Li-Ming Tang
Meso-Scale Investigation on Frost Formation on a Cold Surface
Zensaku Kawara* and John M. Smith
Behavior of a Single Bubble Passing through a Venturi
Hidenobu Wakabayashi* and Toshiro Makino
Spectroscopic Approach to Radiation Characteristics, Radiation Diagnosis and
Radiation Engineering of Surfaces

17:50-18:00 *Photo time*   for our memorial

18:00-19:30 **Welcome Party**   (chair: Prof. **H. Yoshida**)
at Centennial Clock-tower Memorial Hall, Kyoto University
Addresses from Seoul, Tsinghua and Kyoto
by Profs. **H. Yoshida**, **S.T. Ro**, **Z.X. Li** and **K. Suzuki**

December 17 (Wednesday)

 9:30-10:45 **Session 4   Microfluidics**   (chairs: Profs. **S.H. Kang** and **X.M. Wu**)
Jung Yul Yoo*
Some Aspects of Micro/Bio Flow Visualization Studies
Takaji Inamuro*, Kazuaki Kobayashi and Fumimaru Ogino
Numerical Simulation of Advancing Interface in a Micro Heterogeneous Channel
Pei-Xue Jiang*, Yi-Jun Xu, Run-Fu Shi, S. He and J.D. Jackson
Convection Heat Transfer of CO_2 at Super-Critical Pressures in Mini and Porous Tubes

Coffee break

11:00-11:15 *Expense refund*

Lunch

12:45-14:00 **Session 5   Devises**   (chairs: Profs. **S.H. Chuang** and **T. Inamuro**)
Joon Sik Lee* and Seung Ho Park
A Molecular Dynamics Study on Heterogeneous Crystallization of Amorphous Silicon
Expedited by External Force Fields
Xin-Gang Liang*, Ai-Hua Wang and Jian-Xun Ren
Thermal Control of Short-Time Working Power Devices
Yutaka Oda* and Hideo Yoshida
Analysis of Thermoelectric Power Generation with Rectangular-fin Type Module and
Its Applicability in Power MEMS

14:05-14:15 **Closing Ceremony**   (chair: Prof. **M. Matsumoto**)
Closing addresses from Tsinghua, SNU and Kyoto
Addresses of the co-organizers   by Profs. **Z.X. Li**, **J.S. Lee** and **T. Makino**

free for Kyoto seeing

December 18 (Thursday)

11:00-15:00 **Technical Tour   Mitsubishi Electric Corporation**
 (hotel 9:00-18:00 hotel)   (Advanced Technology R & D Center
                and Communication Systems Center)