

Japan–China Bilateral Workshop on Science & Technology for Clean Energy
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2007/6/19

Registration

8:30–9:00

Opening Session

9:00–9:10 Opening Remarks by Mr. Kazuki Okimura,
President, JST

9:10–9:20 Greeting by Prof. Yiyu Chen, President, NSFC

Session 1–1: Fuel Cells and Solar Cells (1/2)
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(Chairperson: Prof. Tsukasa Yoshida, Gifu University)

9:20–9:50 "Composite Electrolytes for Dye Sensitized Solar Cells"
(Prof. Qingbo MENG, Chinese Academy of Sciences)

9:50–10:20 "Photovoltaic and Ultrafast Carrier Dynamic Properties of CdSe
Quantum Dot Sensitized Solar Cells Using Inverse Opal TiO₂
Electrodes"
(Prof. Taro Toyoda, University of Electro–Communications)

10:20–10:50 "Biofuel Cells"
(Lanqun Mao, Ph. D, Chinese Academy of Sciences)

Break 10:50–11:00

Session 1–2: Fuel Cells and Solar Cells (2/2)
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(Chairperson: Prof. Qingbo Meng, Chinese Academy of Sciences)

11:10–11:40 "Manganese Oxide Nanoparticles–Electrodeposited Platinum
Catalyst Superior to Platinum for Oxygen Reduction"
(Prof. Takeo Ohsaka, Tokyo Institute of Technology)

11:40–12:10 "Flexible solid state solar cell of ZnO/dye hybrid thin films"
(Prof. Yuan LIN, Chinese Academy of Sciences)

12:10–12:40 "Electrodeposition of Nanostructured ZnO/Dye Hybrid Thin
Films and Their Applications to Plastic Solar Cells"
(Prof. Tsukasa Yoshida, Gifu University)

Lunch 12:40–14:00

Session 2–1: Micro Power System (1/2)
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(Chairperson: Assistant Prof. Koji Okamoto, University of Tokyo)

14:00–14:30 "Study on Combustion of Liquid Hydrocarbon Fuel in Power
MEMS"
(Prof Bei–Jing Zhong, Tsinghua University)

14:30–15:00 "Evaluation of Micro Catalytic Combustor for
Thermophotovoltaic Power Generation System"
(Associate Prof Yuji Suzuki, University of Tokyo)

15:00–15:30 "UMGT/ SOFC Hybrid Micro and High Density Energy System"
(Prof Xi Guang, Xi' an Jiaotong University)

Break 15:30–15:50

Session 2-2: Micro Power System (2/2)

(Chairperson: Prof. Bei-Jing Zhong, Tsinghua University)

15:50-16:20 "UMGT-A perspective for wave rotor augmentation and compact clean energy system"

(Assistant Prof. Koji Okamoto, University of Tokyo)

16:20-16:50 "Flame Stability and Strengthening Combustion Mechanism in Micro Energy System"

(Prof. Daiqing Zhao, The Chinese Academy of Sciences)

16:50-17:20 "Numerical Simulation for Development of Ultra-micro Combustor -Influence of Equivalence Ratio of Mixture, Wall Temperature and Size of Combustor on Combustion Intensity-"

(Prof. Hiroshi Yamashita, Nagoya University)

Reception 17:30-19:30

2007/6/20**Session 3-1: Pollutants Control of Combustion (1/2)**

(Chairperson: Prof. Ken Okazaki, Tokyo Institute of Technology)

8:30-9:00 "Study on Combustion Control for Homogeneous Charge Compression Ignition (HCCI) of Internal Combustion Engine"

(Prof. Zhen HUANG, Shanghai Jiao Tong University)

9:00-9:30 "Advanced Motor Vehicle Technologies for Low Emissions and High Efficiency"

(Prof. Yasuhiro Daisho, Waseda University)

9:30-10:00 "Formation and Control of Multiple Pollutants during Coal Combustion under Oxyfuel conditions"

(Prof. Minghou Xu, Huazhong University of Science and Technology)

Break 10:00-10:20

Session 3-2: Pollutants Control of Combustion (2/2)

(Chairperson: Prof. Zhen Huang, Shanghai Jiao Tong University)

10:20-10:50 "Easy CO₂ Recovery and Mechanisms of Drastic Reduction of NO_x and SO_x in Oxy-firing of Pulverized Coal with/without Heat Recirculation"

(Prof. Ken Okazaki, Tokyo Institute of Technology)

10:50-11:20 "Investigation on Combustion and Pollutant Control of High-Efficient Low-Emission Internal Combustion Engines"

(Prof. Zuohua Huang, Xi'an Jiaotong University)

11:20-11:50 "Strategy to Low NO_x and Smoke Emission Diesel Engines"

(Prof. Keiya Nishida, University of Hiroshima)

Closing Remarks

11:50-12:00 Opening Remarks by Mr. Hiroshi Nagano, Executive Director, JST

Lunch 12:00-13:00

Technical Visit Biomass Utilization Project in Yamada-cho, CHIBA
13:00-19:00