

## Session II A

### Advanced Materials and Chemistry

Venue : Room D/E, 3F, Ichō Kaikan

8 October

13:30-13:35

Opening remarks Prof. Tomoyuki Kakeshita (Osaka University)

**Part1** : Chair person: Prof. Shinji Fujimoto (Osaka University)

13:35-13:50

Lecture 1 Prof. Jun WANG (Shanghai Jiao Tong University)  
“Fabrication of magnesia alumina spinel with aluminum dross”

13:50-14:05

Lecture 2 Dr. Takeshi YOSHIKAWA (Osaka University)  
“Fabrication of Low-temperature Foaming Glass by the Hydrothermal Treatment of SiO<sub>2</sub>-Na<sub>2</sub>O-B<sub>2</sub>O<sub>3</sub> Glass”

14:05-14:20

Lecture 3 Prof. Lanting ZHANG (Shanghai Jiao Tong University)  
“Structure and Thermoelectric Properties of Semiconducting Rhenium Silicide with Doping A First-Principles Calculation”

14:20-14:35

Lecture 4 Prof. Yasufumi FUJIWARA (Osaka University)  
“Er,O-codoped GaAs-based 1.5 μm Light-emitting Diodes with Extremely Stable Emission Wavelength”

14:35-14:50

Lecture 5 Prof. Xiang-Yang KONG (Shanghai Jiao Tong University)  
“Novel lithium battery: nanorods inside”

14:50-15:00

Intermission

**Part2** : Chair person: Prof. Xue-jun Jin (Shanghai Jiao Tong University)

15:00-15:15

Lecture 6 Prof. Hidetoshi FUJII (Osaka University)  
“Development of Ultra-deep Penetration TIG Welding Method”

15:15-15:30

Lecture 7 Prof. Zhaoguo ZHANG (Shanghai Jiao Tong University)  
“New Chiral Phosphine Ligands and Asymmetric Hydrogenation”

15:30-15:45

Lecture 8

Prof. Hiromi YAMASHITA (Osaka University)

“Application of Single-site Photocatalysts Designed using Nanoporous Materials”

15:45-16:00

Lecture 9

Prof. Qizhong JIANG (Shanghai Jiao Tong University)

“Preparation of Titania Nanotubes and Its Properties on Photocatalysts and Electrocatalysts”

16:00-16:15

Lecture 10

Dr. Hiroaki TSUCHIYA (Osaka University)

“Electrochemical Formation of Nanotubular TiO<sub>2</sub> Photocatalysts”

16:15-16:20

Closing Remarks

Prof. Di ZHANG (Shanghai Jiao Tong University)

**Part 3 :**

16:30 – 17:30

Discussion for the future collaboration (*Closed meeting*)