

**THE 16TH RIES-HOKUDAI  
INTERNATIONAL SYMPOSIUM**

術

“JUTSU”

**NOVEMBER 10(TUE)-11(WED), 2015**

**CHATERAISE GATEAUX KINGDOM SAPPORO, JAPAN**

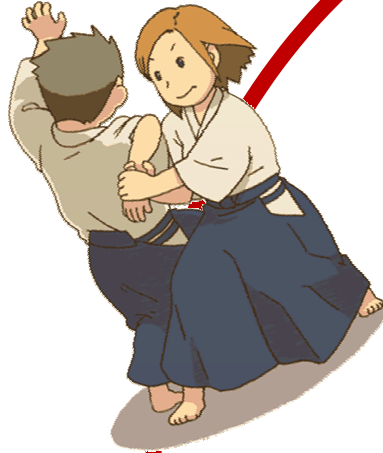
**joined with the 6th International Symposium of  
Nano-Macro Materials, Devices, and System Research Alliance Project**



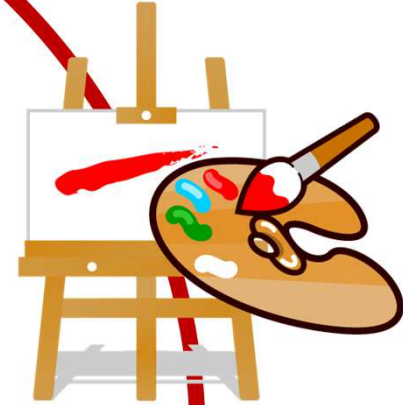
IMGE

**FIVESTAR ASSOCIATION**

技術 [Gi Jutsu]  
technique, technology



芸術 [Gei Jutsu]  
art



学  
Photonics & Optical science  
Materials science  
Biology & Life science  
Mathematical science

魔術 [Ma Jutsu]  
trick, magic



戦術 [Sen Jutsu]  
tactics, strategy



術  
"JUTSU"

# THE 16TH RIES-HOKUDAI INTERNATIONAL SYMPOSIUM 術



## Plenary Lecture 1

**Tomokazu IYODA** (Tokyo Institute of Technology)  
“Nano/micro scale materials templated from block copolymers, algae, and proteins”



## Plenary Lecture 2

**Hideo OHNO** (Tohoku University)  
“Spintronics materials and devices for nonvolatile CMOS VLSIs”



## Session 1: Advanced optical measurement for structural and functional analysis

**Che Alex MA** (Academia Sinica)

“Structural biology in infectious diseases”

**Ken KOJIO** (Kyushu University)

“Molecular aggregation structure analysis of polymer materials based on time-resolved scattering and diffraction measurements with synchrotron radiation x-ray”

**Hiroshi UJI-I** (Hokkaido University)

“Remote excitation of surface enhanced Raman and fluorescence for single cell interrogation”



## Session 2: Engineering of functional materials for electronic devices

**Sung Wng KIM** (Sungkyunkwan University)

“Boundary engineering for high performance bulk thermoelectrics”

**Masataka HIGASHIWAKI** (National Institute of Information and Communications Technology)

“Gallium oxide device technology for future power electronics”

**Kiyoharu TADANAGA** (Hokkaido University)

“Modification of solid interface by sol-gel process”



## Session 3: Strategies on biological science

**Kwanwoo SHIN** (Sogang University)

“Mimicking artificial cellular structures: Liposomes incorporating with extracellular matrix protein, membrane proteins, and cytoskeleton”

**Masaki TANIGUCHI** (Osaka University)

“Single-molecule electrical sequencing technique”

**Takanobu YAMANOBE** (Hokkaido University)

“Transient dynamics of neurons and the information carrier in nervous systems”



## Session 4: Multidisciplinary viewpoints in applied mathematics

**Shin-Ichiro EI** (Hokkaido University)

“Shape-dependent motion of interacting camphor”

**Yoshinobu KAWAHARA** (Osaka University)

“Structured sparse learning with submodular optimization”

**Zin ARAI** (Hokkaido University)

“On combinatorial methods for dynamical systems and fluid mechanics”





# Discussion Time



# Discussion Time



# Discussion Time



# Discussion Time



# Poster Session



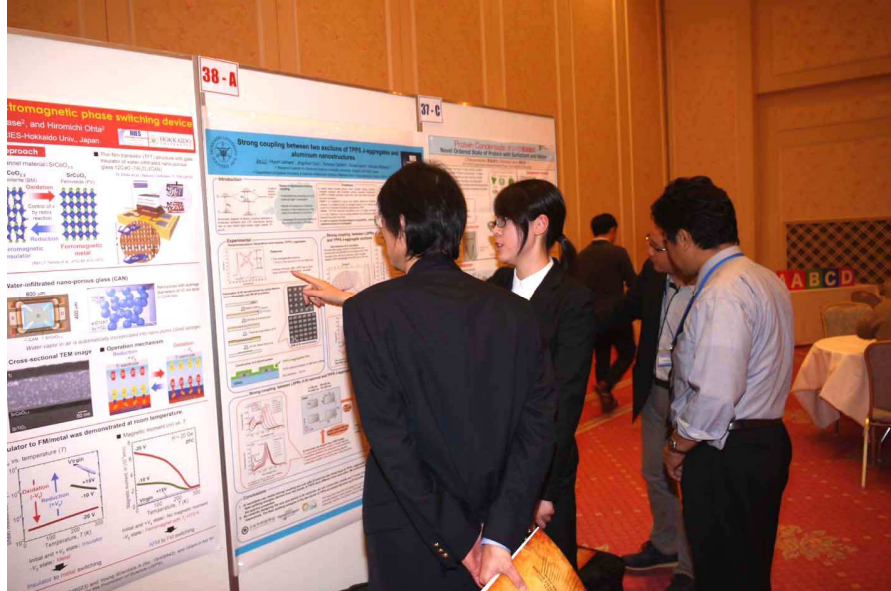
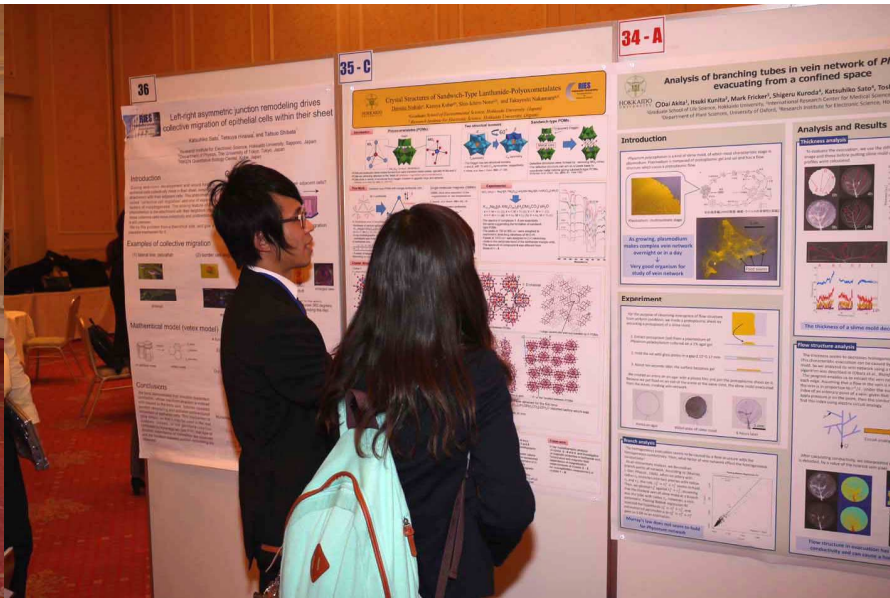
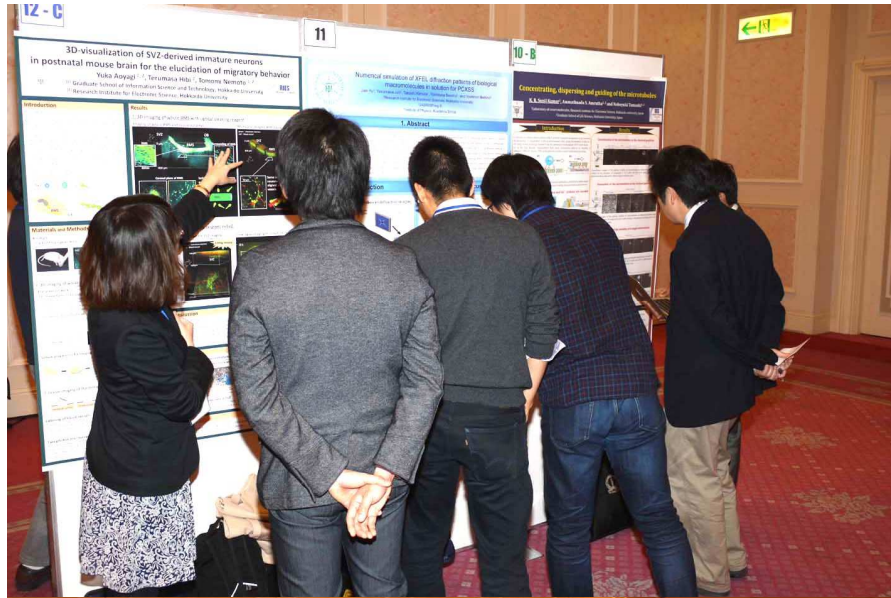
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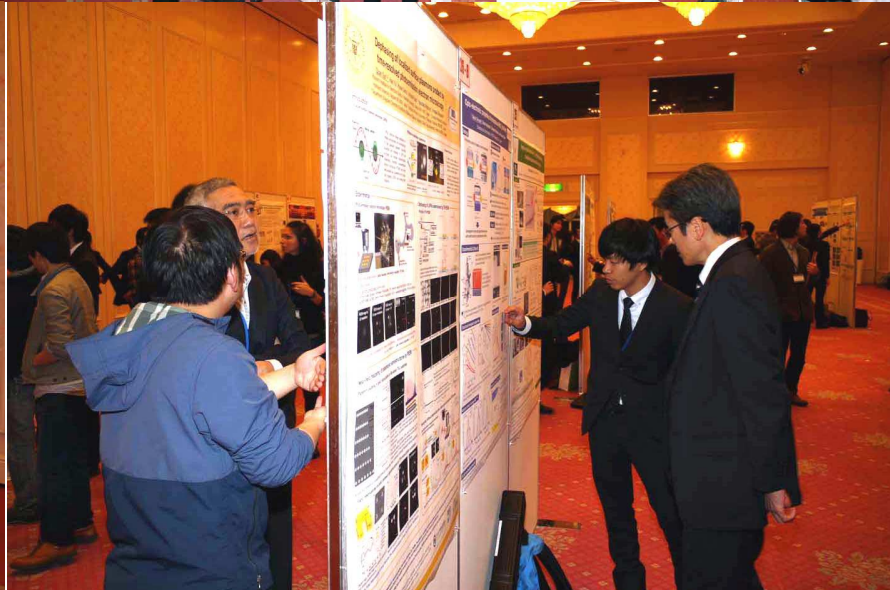
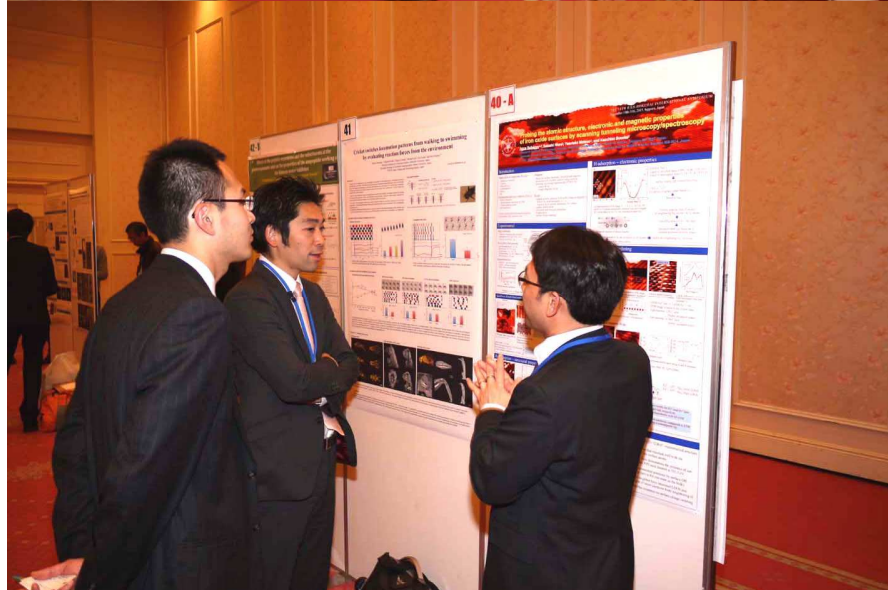


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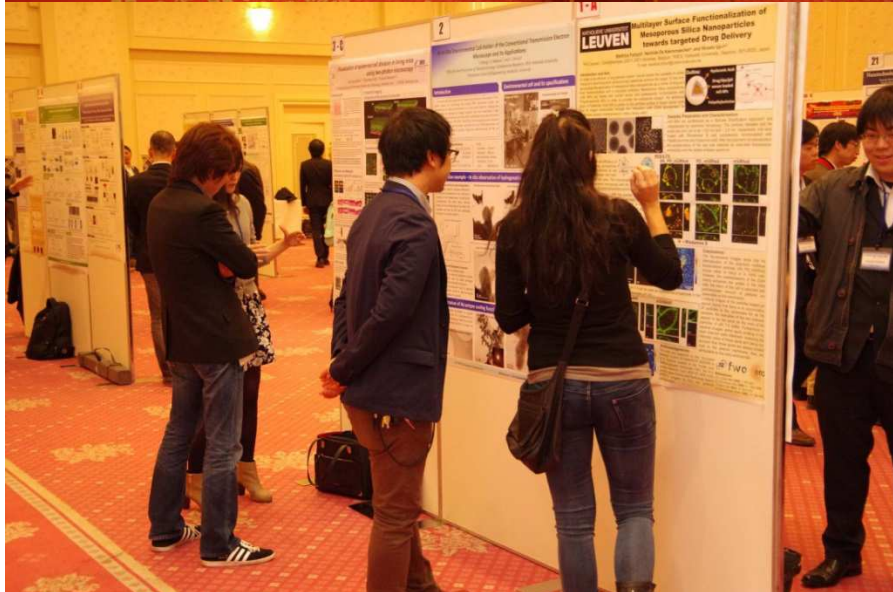
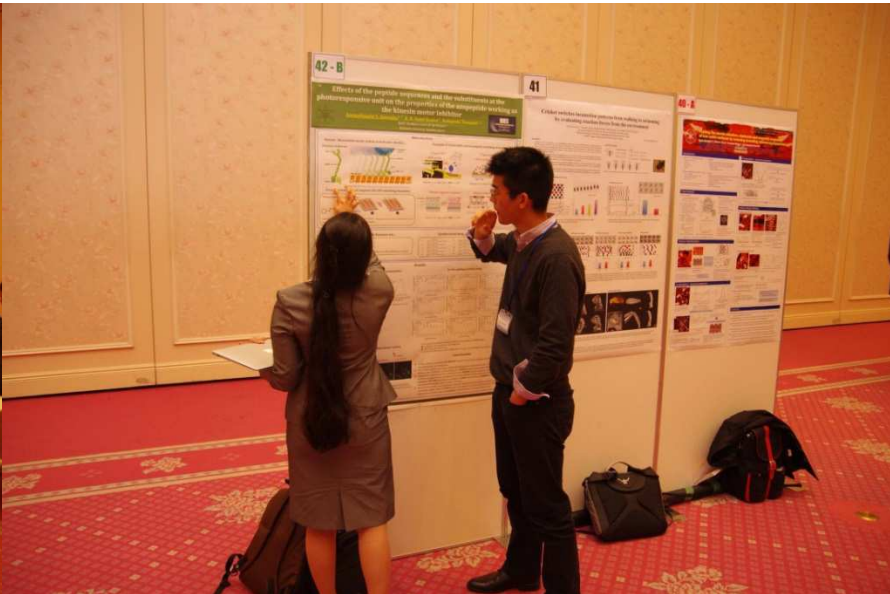




# Poster Session



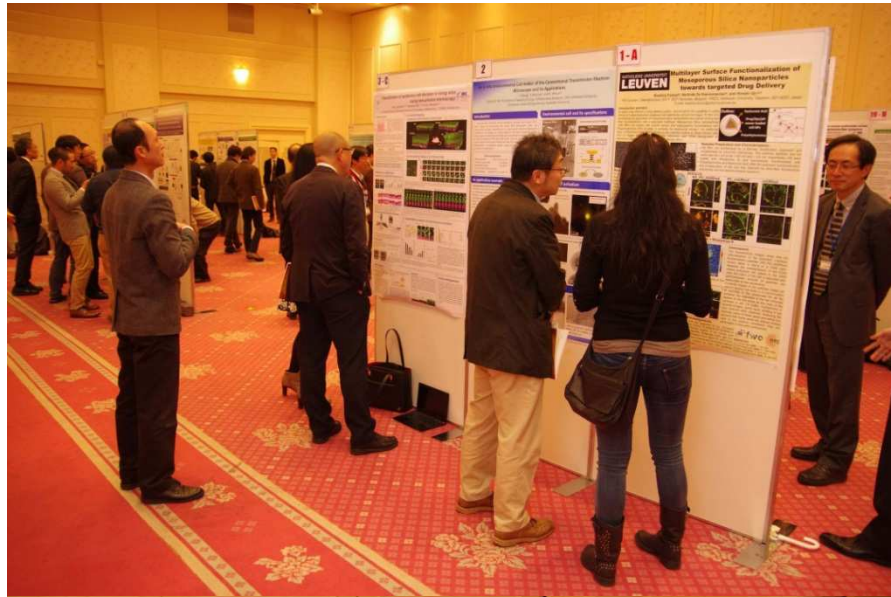
# Poster Session



# Poster Session



# Poster Session



# Poster Award Ceremony



**Best Poster Award**

**No.1A**

Ms. Beatrice Fortuni  
(KU Leuven)



**Poster Award**

**No.12C**

Ms. Yuka Aoyagi  
(Hokkaido University)



**Poster Award**

**No.39B**

Mr. Yuki Suzuki  
(Hokkaido University)

# Banquet



# Banquet



# Banquet





# Banquet



# Other



KARAOKE

**Organizing committee of  
THE 16TH RIES-HOKUDAI  
INTERNATIONAL SYMPOSIUM**



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Prof. Hideo KAIJU

Prof. Michihiko YAMANOUCHI

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**THE 16TH RIES-HOKUDAI**  
**INTERNATIONAL SYMPOSIUM**



Nano-Macro Materials, Device, and System Research Alliance

Institute of Multidisciplinary Research for Advanced Materials, Tohoku University



Chemical Resources Laboratory, Tokyo Institute of Technology



Institute of Scientific and Industrial Research, Osaka University



Institute for Materials Chemistry and Engineering, Kyushu University

