

ミニ国際シンポジウム

**電極溶液界面における表面増強赤外分光法の新しい展開**

**New Challenges of the Surface-enhanced Infrared Spectroscopy (SEIRAS)  
at the Electrode / Solution Interface**

**Date:** 14:00~20:00, March 17, 2016

**Venue:** Meeting Room BC, 4<sup>th</sup> Floor, SOUSEI Hall

Hokkaido University, North 21 West 10, Sapporo, Japan

(北海道大学・創成科学研究棟四階セミナー室 BC)

**Contact:** [ye@cat.hokudai.ac.jp](mailto:ye@cat.hokudai.ac.jp) / Tel:011-706-9126



## March 17

14:00~14:10 **Asakura Kiyotaka** (Director, Institute for Catalysis, Hokkaido University)

Opening Remarks

**Chair: Ye Shen** (Hokkaido University)

14:10~14:30

**Cai Wenbin** (Fudan University, China)

Boron doped palladium as the efficient catalyst for dehydrogenation of formic acid: what may interfacial infrared spectroscopy tell?

14:30~14:50

**Kunimatsu Keiji** (Yamanashi University, Japan)

Polarization modulated ATR-FTIR analysis of the hydration/dehydration processes of polymer electrolyte membranes at the gold surface

14:50~15:10

**Morita Shigeaki** (Osaka Electro-Communication University, Japan)

In Situ ATR-IR Spectroscopic Studies on Hydrated Polymers

15:10~15:30

**Wei Zidong** (Chongqing University, China), Advancement of Pt-fee catalysts for PEMFCs

15:30~15:50

**Motobayashi Kenta** (Nagoya Institute of Technology, Japan)

Interfacial Structure of Ionic Liquids near Metal Electrodes Affected by Potential and Additives: What Can Be Learned from SEIRAS?

15:50~16:10

Coffee Break

**Chair, Motobayashi Kenta** (Nagoya Institute of Technology, Japan)

16:10~16:30

**Jiang Yanxia** (Xiamen University, China)

Tuning Pt-skin to Ni-rich surface of Pt<sub>3</sub>Ni catalysts supported on porous carbon for enhanced oxygen reduction reaction and formic electrooxidation

16:30~16:50

**Yamanaka Toshiro** (Kyoto University, Japan)

Concentration change of ions in electrolyte in lithium ion batteries studied by in-situ microprobe Raman spectroscopy

16:50~17:10

**Inomata Tomohiko** (Nagoya Institute of Technology, Japan)

Sensing Microorganisms using Artificial Siderophore Complexes-modified Au Substrates

17:10~17:30

**Ye Shen** (Hokkaido University, Japan)

Nonlinear vibrational spectroscopy study on the interface.

17:30~17:50

**Ataka Kenichi** (Freie Universität Berlin, German)

Surface Enhanced Infrared Absorption Spectroscopy for biological studies

17:50

**Osawa Masatoshi** (Hokkaido University, Japan)

Closing Remarks

18:00~20:00

Poster session