

Fuel Cell and Hydrogen Production Symposium

“Alternative Materials and Devices”

[International Hydrogen Energy Development Forum]

(Organized by Kyushu University, AIST, The SOFC Society of Japan)

Kyushu University Ito Campus (WEST4-910), Fukuoka Japan

Thursday, 2nd February, 2012 (From 10:00 to 17:20)

10:00-10:10 Opening Remarks: Prof. Kazunari Sasaki

Session 1 “Fuel Cell : SOFC Science”

- 10:10-10:30 **“Solid Oxide Fuel Cell Cathodes: New Developments and Insights”**
Prof. Harry L. Tuller
(Department of Materials Science and Engineering, Massachusetts Institute of Technology, USA)
- 10:30-10:50 **“Mechanism for Enhanced Oxygen Reduction Kinetics at the (La,Sr)CoO_{3-δ}/(La,Sr)₂CoO_{4+δ} Hetero-interface”**
Dr. Bilge Yildiz
(Department of Nuclear Science and Engineering, Massachusetts Institute of Technology, USA)
- 10:50-11:10 **“Chemo-mechanical Stress and Its Origin in SOFC Materials”**
Dr. Sean Bishop (International Institute for Carbon-Neutral Energy Research, Kyushu University)
- 11:10-11:30 **“On the Interplay of Strain and Ionic Conductivity in Electroceramic Thin Films”**
Dr. Jennifer L.M. Rupp
(Department of Materials Science and Engineering, Massachusetts Institute of Technology, USA)
- 11:30-11:50 **“The Nanoscale in Pt-electrodes for Fuel Cells”**
Prof. Ludwig Gauckler (ETH Zurich, Switzerland)
- 11:50-13:50 Poster Session (Lunch Break)

Session 2 “Fuel Cell : PEFC and SOFC”

- 13:50-14:10 **“PEM Fuel Cell Program Overview Los Alamos National Laboratory”**
Dr. Rodney L. Borup (Los Alamos National Laboratory, USA)
- 14:10-14:30 **“Electrochemical Oxygen Reduction on Nitrogen-Doped Graphene Powder”**
Dr. Stephen Lyth (International Institute for Carbon-Neutral Energy Research, Kyushu University)
- 14:30-14:50 **“Sulfonated Polyimide Membranes Functionalized by Charge-transfer Complex Formation for Fuel Cells”**
Dr. Masamichi Nishihara
(International Institute for Carbon-Neutral Energy Research, Kyushu University)
- 14:50-15:10 **“Scalable Nanoscale Thin Film Solid Oxide Fuel Cells”**
Dr. Masaru Tsuchiya (School of Engineering and Applied Sciences HARVARD, USA)
- 15:10-15:30 **TBA**
Prof. Enrico Traversa (International Center for Materials Nanoarchitectonics)

15:30-15:50 Break

Session 3 “Hydrogen Production : Electrolysis”

15:50-16:10 **“Ionic Liquid Incorporated Block Copolymers for Proton Exchange Fuel Cells”**
Dr. Moon Jeong Park
(Department of Chemistry, Pohang University of Science and Technology, Korea)

16:10-16:30 **“Alternative Materials for SOFCs, SOEC’s”**
Prof. John A. Kilner (Imperial College London, UK)

16:30-16:50 **“High-temperature Steam Electrolysis in KIER”**
Prof. Sang Kuk Woo (Korea Institute of Energy Research, Korea)

16:50-17:10 **“Development of Direct and Reversible Solid Oxide Fuel Cells for Future Energy Systems”**
Prof. Nguyen Q. Minh (University of California, San Diego, USA)

17:10-17:20 Concluding Remarks: Prof. Tatsumi Ishihara

(Homepage: <http://www.congre.co.jp/hydrogen2012/english/index.html>)

*The program and speakers may be subject to change without prior notice.