

Fuel Cell and Hydrogen Production Symposium “Alternative Materials and Devices”

[International Hydrogen Energy Development Forum 2013]

(第 62 回固体イオニクス研究会)

(Organized by Kyushu University, AIST, The Solid State Ionics Society of Japan, The SOFC Society of Japan)
共催：九州大学、産業技術総合研究所、固体イオニクス学会、SOFC 研究会

Kyushu University Ito Campus, Fukuoka Japan
Monday, 28th January, 2013 (From 10:00 to 19:00)

Registration Fee: Free of charge

Banquet Fee: 2000Yen/person

*Note: Please complete and submit the 'Online Registration Form' below
by January 10, 2013.*

We also welcome your participation in the poster session.

開催場所：九州大学伊都キャンパス 稲盛財団記念館

開催日時：2013年1月28日(月) 10:00~19:00

登録料：無料

交流会参加費：一人 2,000 円 (当日徴収)

シンポジウム及び交流会への参加をご希望の場合は、下記の「申し込みフォーム」から、2013年1月10日(木)までにご登録ください。

また、同日開催のポスター発表への参加も歓迎しております。

【申し込みフォーム / Online Registration Form】

<https://www.sipstool.com/f-suiso/anq/index.php?p=20121026111844>

(Program: Oct. 31st, 2012)

Session 1: SOEC and renewable H₂

10:00-10:20 “Electrode materials of solid oxide electrolysis cell for efficient hydrogen production”
Prof. Tatsumi Ishihara
(Department of Applied Chemistry, Faculty of Engineering / I2CNER
/ Next-Generation Fuel Cell Research Center, Kyushu University)

<Chairperson>

Prof. Hiroshige Matsumoto
(Inamori Frontier Research Center, Kyushu University)

10:20-10:40 “The surface chemistry of oxide electrodes”
Prof. John A. Kilner
(Imperial College London, UK / I2CNER, Kyushu University)

<Chairperson>

Prof. Shintaro Ida
(Department of Applied Chemistry, Faculty of Engineering, Kyushu University)

10:40-11:00 “Simulation and modeling of the Performance of organic photovoltaic devices”
Prof. Angus Rockett
(I2CNER, University of Illinois at Urbana-Champaign, USA)

<Chairperson>

Prof. Aleksandar T. Staykov
(I2CNER, Kyushu University)

11:00-11:20 **“Highly efficient molecular catalysts for water oxidation and hydrogen production”**
Prof. Licheng Sun
(Solar Energy Conversion at Molecular Level Dalian University of Technology (DUT))

<Chairperson>
Prof. Ken Sakai
(Department of Chemistry, Faculty of Sciences, Kyushu University)

11:20-11:40 **“Hydrogen production for fuel cell system”**
Dr. Sumittra Charojrochkul
(National Metal and Materials Technology Center (Mtech), Thailand)

<Chairperson>
Prof. Kohei Ito
(Department of Mechanical Engineering, Faculty of Engineering, Kyushu University)

11:40-13:20 **Lunch Break and Poster Session**

Session 2: SOFC and PEFC

13:20-13:40 **“Fuel cell durability: SOFC vs. PEFC”**
Prof. Kazunari Sasaki
(International Research Center for Hydrogen Energy / I2CNER
/ Next-Generation Fuel Cell Research Center, Kyushu University)

<Chairperson>
Prof. Akari Hayashi
(International Research Center for Hydrogen Energy, Kyushu University)

13:40-14:00 **“Strain-transport interaction for SOFC electrolyte thin films”**
Prof. Jennifer L.M. Rupp
(ETH Zurich, Switzerland)

<Chairperson>
Prof. Ludwig J. Gauckler
(ETH Zurich, Switzerland)

14:00-14:20 **“Ultra-thin film solid-oxide fuel cell technology development:
Status, challenges, and opportunities”**
Dr. Masaru Tsuchiya
(SiEnergy Systems, LLC, USA)

<Chairperson>
Prof. Yusuke Shiratori
(Department of Mechanical Engineering, Faculty of Engineering, Kyushu University)

14:20-14:40 **“Nanocarbon-based advanced catalysts for high-temperature PEFC”**
Prof. Naotoshi Nakashima
(Department of Applied Chemistry, Faculty of Engineering, Kyushu University)

<Chairperson>
Prof. Tsuyohiko Fujigaya

(Department of Applied Chemistry, Faculty of Engineering, Kyushu University)

14:40-15:00 **“New materials and complexes for fuel cell catalysis”**
Prof. Andrew A. Gewirth
(I2CNER, University of Illinois at Urbana-Champaign, USA)

<Chairperson>
Prof. Stephen Lyth
(I2CNER, Kyushu University)

15:00-16:00 **Facility Tour**

Session 3: Perspectives

16:00-16:20 **“Probing electrochemically active thin films by in-situ optical absorption
and impedance spectroscopy measurements”**
Prof. Harry L. Tuller
(Department of Materials Science and Engineering, Massachusetts Institute of Technology, USA
/ I2CNER, Kyushu University)

<Chairperson>
Prof. Sean Bishop
(I2CNER, Kyushu University)

16:20-16:40 **“Engineering Pt electrode interfaces for electrochemistry”**
Prof. Ludwig J. Gauckler
(ETH Zurich, Switzerland / I2CNER, Kyushu University)

<Chairperson>
Prof. Teppei Ogura
(International Research Center for Hydrogen Energy, Kyushu University)

16:40-17:05 **“Towards the in-situ characterization of SOFCs”**
Prof. Nigel Brandon
(Imperial College London, UK)

<Chairperson>
Prof. Tatsumi Ishihara
(Department of Applied Chemistry, Faculty of Engineering / I2CNER
/ Next-Generation Fuel Cell Research Center, Kyushu University)

17:05-17:30 **“Future perspectives for SOFC”**
Prof. Subhash C. Singhal
(Director Emeritus, Pacific Northwest National Laboratory, USA
/ Visiting Prof. Kyushu University)

<Chairperson>
Prof. Kazunari Sasaki
(International Research Center for Hydrogen Energy / I2CNER
/ Next-Generation Fuel Cell Research Center, Kyushu University)

17:40-19:00 **Banquet** (Supported by Solid State Ionics Society of Japan)
Chinese Restaurant “Ten-Ten” in Inamori-Building
Greetings from **Prof. S. Yamaguchi**, President, Solid State Ionics Society of Japan