

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

[International Hydrogen Energy Development Forum] (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)

Kyushu University Ito Campus, Fukuoka Japan / 九州大学伊都キャンパス、福岡市西区元岡

Monday, 28th January, 2013 (From 10:00 to 19:00) / 2013年1月28日(月) 10:00~19:00

Time	Events	Topics / Title	Lecturer	Chairperson
10:00-10:20 (20min)	Session 1: SOEC and renewable H₂	Electrode materials of solid oxide electrolysis cell for efficient hydrogen production	Prof. Tatsumi Ishihara (Department of Applied Chemistry, Faculty of Engineering / I ² CNER / Next-Generation Fuel Cell Research Center, Kyushu University)	Prof. Hiroshige Matsumoto (Inamori Frontier Research Center, Kyushu University)
10:20-10:40 (20min)		The surface chemistry of oxide electrodes	Prof. John A. Kilner (Imperial College London, UK / I ² CNER, Kyushu University)	Prof. Shintaro Ida (Department of Applied Chemistry, Faculty of Engineering, Kyushu University)
10:40-11:00 (20min)		Simulation and modeling of the Performance of organic photovoltaic devices	Prof. Angus Rockett (I ² CNER, University of Illinois at Urbana-Champaign)	Prof. Aleksandar T. Staykov (I ² CNER, Kyushu University)
11:00-11:20 (20min)		Highly efficient molecular catalysts for water oxidation and hydrogen production	Prof. Licheng Sun (Solar Energy Conversion at Molecular Level Dalian University of Technology (DUT))	Prof. Ken Sakai (Department of Chemistry, Faculty of Sciences, Kyushu University)
11:20-11:40 (20min)		Hydrogen production for fuel cell system	Dr. Sumittra Charojrochkul (National Metal and Materials Technology Center (Mtech), Thailand)	Prof. Kohei Ito (Department of Mechanical Engineering, Faculty of Engineering, Kyushu University)
11:40-13:20 (1h 40min)	Lunch Break and Poster Session	---	---	---
13:20-13:40 (20min)	Session 2: SOFC and PEFC	Fuel cell durability: SOFC vs. PEFC	Prof. Kazunari Sasaki (International Research Center for Hydrogen Energy / I ² CNER / Next-Generation Fuel Cell Research Center, Kyushu University)	Prof. Akari Hayashi (International Research Center for Hydrogen Energy, Kyushu University)
13:40-14:00 (20min)		Strain-transport interaction for SOFC electrolyte thin films	Prof. Jennifer L.M. Rupp (ETH Zurich, Switzerland)	Prof. Ludwig J. Gauckler (ETH Zurich, Switzerland)
14:00-14:20 (20min)		Ultra-thin film solid-oxide fuel cell technology development: Status, challenges, and opportunities	Dr. Masaru Tsuchiya (SiEnergy Systems, LLC, USA)	Prof. Yusuke Shiratori (Department of Mechanical Engineering, Faculty of Engineering, Kyushu University)
14:20-14:40 (20min)		Nanocarbon-based advanced catalysts for high-temperature PEFC	Prof. Naotoshi Nakashima (Department of Applied Chemistry Faculty of Engineering, Kyushu University)	Prof. Tsuyohiko Fujigaya (Department of Applied Chemistry, Faculty of Engineering, Kyushu University)
14:40-15:00 (20min)		New materials and complexes for fuel cell catalysis	Prof. Andrew A. Gewirth (I ² CNER, University of Illinois at Urbana-Champaign)	Prof. Stephen Lyth (I ² CNER, Kyushu University)
15:00-16:00 (1h)	Facility Tour	---	---	---
16:00-16:20 (20min)	Session 3: Perspectives	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 / I ² CNER, Kyushu University)	Prof. Sean Bishop (I ² CNER, Kyushu University)
16:20-16:40 (20min)		Engineering Pt electrode interfaces for electrochemistry	Prof. Ludwig J. Gauckler (ETH Zurich, Switzerland / I ² CNER, Kyushu University)	Prof. T. Ogura (International Research Center for Hydrogen Energy, Kyushu University)
16:40-17:05 (25min)		Towards the in-situ characterization of SOFCs	Prof. Nigel Brandon (Imperial College London, UK)	Prof. Tatsumi Ishihara (Department of Applied Chemistry Faculty of Engineering / I ² CNER / Next-Generation Fuel Cell Research Center, Kyushu University)
17:05-17:30 (25min)		Future perspectives for SOFC	Prof. Subhash C. Singhal (Director Emeritus, Pacific Northwest National Laboratory, USA / Visiting Prof. Kyushu University)	Prof. Kazunari Sasaki (International Research Center for Hydrogen Energy / I ² CNER / Next-Generation Fuel Cell Research Center, Kyushu University)
17:40-19:00 (1h 20min)	Banquet (Restaurant „Ten-Ten“ in Inamori Building)	---	---	---