

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

[International Hydrogen Energy Development Forum]

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

Kyushu University Ito Campus, Fukuoka Japan

Monday, 28th January, 2013 (From 10:00 to 19:00)

Time	Events	Topics / Title	Lecturer	Chairperson
10:00-10:20 (20min)	Session: 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 for hydrogen production	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)		Towards solar fuels From highly efficient molecular catalysts to functional devices for light driven water splitting	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: 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)		Ultra-thin film solid oxide fuel cells: Status, challenges, and opportunities	Dr. Masaru Tsuchiya (SiEnergy Systems, LLC, USA)	Prof. Yusuke Shiratori (Department of Mechanical Engineering, Faculty of Engineering, Kyushu University)
14:00-14:20 (20min)		Nanocarbon-based novel fuel cell catalysts with very high performance	Prof. Naotoshi Nakashima (Department of Applied Chemistry Faculty of Engineering, Kyushu University)	Prof. Tsuyohiko Fujigaya (Department of Applied Chemistry, Faculty of Engineering, Kyushu University)
14:20-14:40 (20min)		Bio-inspired molecular electrocatalysts for PEFCs	Prof. Andrew A. Gewirth (I ² CNER, University of Illinois at Urbana-Champaign)	Prof. Stephen Lyth (I ² CNER, Kyushu University)
14:40-15:40 (1h)	Facility Tour	---	---	---
15:40-16:00 (20min)	Session: Perspectives	DOE's vision on fuel cells and hydrogen technologies	Dr. Monterey Gardiner (Technology Manager of the Office of Hydrogen Fuel Cells and Infrastructure Technologies of the U. S. DOE)	Prof. Petros Sofronis (I ² CNER, Kyushu University / University of Illinois at Urbana-Champaign)
16:00-16:20 (20min)		Probing electrochemically active thin films: 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)		Micro-solid oxide fuel cells as power supply for small portable electronic equipment	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 characterisation of SOFC electrodes	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 solid oxide fuel cells	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)	Reception	---	---	---