

12TH INTERNATIONAL SUMMER SCHOOL ON ADVANCED STUDIES OF POLYMER ELECTROLYTE FUEL CELLS

29-Aug-19

Date: 26th Aug.- 31th Aug. 2018

Organization
Prof. Shigenori Mitsushima
Prof. Yohiyuki Kuroda
Misa Kimura, Department of Chemical and
Energy Engineering
Yokohama National University

Place: Building of Energy Engineering (N8-3)
Yokohama National University,
79-5 Tokiwadai, Yokohama

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	2019/8/26	2019/8/27	2019/8/28	2019/8/29	2019/8/30	2019/8/31
09:00- 10:00	Registration	Fundamentals of electrode processes(2) Prof. Bernhard Gollas	Environmental impact factor for hydrogen energy Prof. Ken-Ichiro Ota	Thermodynamics for hydrogen production Prof. Angelo Basile	Heat and mass transport Prof. Takuto Araki	Social Event Sarushima beach & BBQ
10:15 - 11:15	10:30 Welcome Prof. Shigenori Mitsushima	Electrocatalyst Preparation Methods Dr. Teko Napporn	Single cell PEFC testing: MEA preparation Prof. Gaetano Squadrito	Ultra pure hydrogen production using Pd-based membrane reactors Prof. Angelo Basile	Carbon support corrosion and membrane degradation Prof. Viktor Hacker	
11:30 - 12:30	Principle and technical challenges of PEFCs Prof. Viktor Hacker	Electrocatalyst Preparation Methods Dr. Teko Napporn	Single cell PEFC testing: Testing procedures Prof. Gaetano Squadrito	Fuel cell applications and market introduction Prof. Shigenori Mitsushim	Practical training Prof. Viktor Hacker Prof. Shigenori Mitsushima	
12:30 - 13:30	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	
13:30- 14:30	Modeling of Fuel cell (1) Dr. Uwe Reimer	Step by step determination of the kinetic parameters of the ORR on carbon supported nanocatalysts (1) Prof. Boniface Kokoh	Technical tour Isogo Fuel Cell Center, Toshiba Energy Systems & Solutions corporation	Work shop(Open session) Lecture of cutting edge <i>XPS: From Theory to the electrocatalysts characterization</i> , Dr. Christine Canaff, CNRS University of Poitiers	Closing Ceremony	
14:45 - 15:45	Modeling of Fuel cell (2) Dr. Uwe Reimer	Step by step determination of the kinetic parameters of the ORR on carbon supported nanocatalysts (2) Prof. Boniface Kokoh		<i>Reginal energy management with renewable energy using hydrogen</i> , Prof. Tatsuoki Kono, IMR/MaSC Tohoku University		
16:00 - 17:00	Fundamentals of electrode processes(1) Prof. Bernhard Gollas	Basics of the electrochemical measurements Prof. Yoshiyuki Kuroda		Students poster session (Sushi party)		