

## 10TH INTERNATIONAL SUMMER SCHOOL ON ADVANCED STUDIES OF POLYMER ELECTROLYTE FUEL CELLS

**Date:** 20th Aug.- 25th Aug. 2017  
Building of Energy Engineering (N8-8)  
Yokohama National University,  
79-5 Tokiwadai, Yokohama

**Place:**

	Sunday 2017/8/20	Monday 2017/8/21	Tuesday 2017/8/22	Wednesday 2017/8/23	Thursday 2017/8/24	Friday 2017/8/25
09:00- 10:00		<b>Fundamentals of electrode processes</b> Prof. Bernhard Gollas	<b>Ultra pure hydrogen production using Pd-based membrane reactors</b> Prof. Angelo Basile	<b>Step by step determination of the kinetic parameters of the ORR on carbon supported nanocatalysts (1)</b> Prof. Boniface Kokoh	<b>Modeling of Fuel cell (1)</b> Dr. Uwe Reimer	Social Event  Excursion Mt. Fuji!!
10:15 - 11:15		<b>Basics of the electrochemical measurements</b> Dr. Teko Napporn	<b>Clean hydrogen production by water electrolysis</b> Dr. Teko Napporn	<b>Step by step determination of the kinetic parameters of the ORR on carbon supported nanocatalysts (2)</b> Prof. Boniface Kokoh	<b>Modeling of Fuel cell (2)</b> Dr. Uwe Reimer	
11:30 - 12:30		<b>Single cell test: setup preparation</b> Prof. Gaetano Squadrito	<b>Electrochemical impedance spectroscopy and harmonic distortion analysis</b> Prof. Bernd Eichberger	<b>Carbon support corrosion and membrane degradation</b> Prof. Viktor Hacker	<b>Heat and mass transport</b> Prof. Takuto Araki	
12:30 - 13:30	Welcome	Lunch Break	Lunch Break	Lunch Break	Lunch Break	
13:30- 14:30	<b>Basics of fuel cells</b> Prof. Viktor Hacker	<b>Single cell test: common experiment procedures.</b> Prof. Gaetano Squadrito	<b>Technical tour</b> Research park of Chiyoda co.	<b>Work shop(Open session)</b> Lecture of cutting edge <b>Chemical design of nanomaterials for energy and environmental applications</b> Prof. Yoshiyuki Kuroda Yokohama National University	<b>Practical training</b> Prof. Viktor Hacker Prof. Shigenori Mitsushima	
14:45 - 15:45	<b>Environmental impact factor for hydrogen energy</b> Prof. Ken-Ichiro Ota	<b>Thermodynamics for hydrogen production</b> Prof. Angelo Basile	<b>Water electrolysis plant (AsahiKASEI)</b> Spera hydrogen plant (Chiyoda)	<b>Insights from X-ray photoelectron spectroscopy data on electrocatalysts behaviour</b> Dr. Christine Canaff CNRS University of Poitiers	Experiment	
16:00 - 17:00		<b>Hydrogen storage and transportation</b> Prof. Shigenori Mitsushima		<b>HTPEM development in South Africa</b> Dr. Cordellia Sita University of the Western Cape <b>Students poster session</b> Sushi party	<b>Closing Ceremony</b>  <b>Group Photograph</b>	