16th International Summer School on Advanced Studies of Polymer Electrolyte Fuel Cells and Hydrogen

Date: 2 - 7 September 2024
Place: Yokohama National University, Energy Eng. Bldg., Room 501
79-5 Tokiwadai, Hodogaya-ku, Yokohama 240-8501 JAPAN
Tel. +81-45-339-4040

Organization
Prof. Shigenori Mitsushima
Prof. Yoshiyuki Kuroda
Misa Kimura
Chemical Energy Laboratory

	Monday 02. Sept 2024	Tuesday 03. Sept 2024	Wednesday 04. Sept 2024	Thursday 05. Sept 2024	Friday 06. Sept 2024	Saturday 07. Sept 2024
09:00 - 10:00	**Welcome**	**Determination of kinetic parameters** Boniface Kokoh	**PEFC testing protocols** Gaetano Squadrito	**Mass transport in PEFC** Takuto Araki	**[Special lecture] Multiphysics modelling and AI-enable fuel cell and hydrogen research** Lei Xing	**Social Event**
10:15 – 11:15	**Principle and technical challenges of PEFCs** Viktor Hacker	**Synthesis methods for designing electrocatalysts** Têko Napporn	**Fuel cell lifetime and degradation** Merit Bodner	**Characterization of electrocatalysts with X-ray diffraction** Aurélien Habrioux	**Thermodynamics - Exercise Practical Training**	
11:30 – 12:30	**Fuel cell applications and market introduction** Shigenori Mitsushima	**Measurement techniques** Yoshiyuki Kuroda	**Modelling of fuel cell degradation** Tomaž Katrašnik	**Hydrogen production by water electrolysis** Yoshiyuki Kuroda	**Closing Ceremony**	
	Lunch Break					
14:00 – 15:00	**Fundamentals of electrode processes** Bernhard Gollas	**Technical Tour** **De Nora Permelec Ltd** https://japan.denora.com/en/ - R&D laboratory for Water electrolysis - R&D laboratory for Direct MCH® with ENEOS - Industrial electrode fabrication process	**Workshop** **Integration of hydrogen technologies into polygeneration energy systems** Antonio Atienza-Márquez **The Italian AdP-PNRR Hydrogen** Gaetano Squadrito **&Poster session**	**Thermochemical hydrogen production and purification** Viktor Hacker		
15:15 – 16:15	**Modeling of PEFC** Uwe Reimer			**Green hydrogen for our future sustainable growth** Shigenori Mitsushima		
16:30 – 17:30			**Get-together** / Catering			
17:30 – 18:30						