

International Summer School on:

PEM FUEL CELLS APPLICATIONS and INTEGRATION

July 19-23
Istanbul, Turkey

Summer School Objective

The Summer School is organised by the European Commission Joint Research Centre (JRC), Institute for Energy (IE), in cooperation with the UNIDO International Centre for Hydrogen Energy Technologies (ICHET)

The Summer School, as part of the JRC Enlargement and Integration Action, has strategic objectives of:

- Helping the Candidate Countries and Potential Candidate Countries in dealing faster with the “EU acquis” in areas of JRC competence
- Contributing to the development of the European Research Area (ERA)

The technical objective is to provide researchers and engineers with the required knowledge of theoretical and application aspects related to Proton Exchange Membrane Fuel Cell (PEMFC).

Topics

The summer school will address science and fundamentals of material science and electrochemistry applied to PEM fuel cells. Particular attention will be given to applications and system integration.

Target audience

This is a lecture series addressing researchers, PhD students and research fellows working in the fuel cell research and applications.

Lectures

A selection of international experts from Academia, Industry and Research Centres will provide the audience with technical lectures.

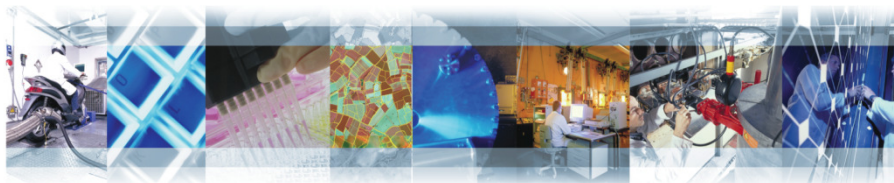
Venue

Istanbul Technical University (ITU)
The official language will be English

Contacts

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	Monday July 19,2010	Tuesday July 20,2010	Wednesday July 21,2010	Thursday July 22,2010	Friday July 23,2010
9:15-9:30	Registration & Welcome	Gas Diffusion Layers & Bipolar Plates (Torsten Berning)	Fuel Cell Test Methodologies (Georgios Tsotridis)	Thermodynamics (Wolfgang Winkler)	Application based system integration (Wolfgang Winkler)
9:30-10:00	JRC & Fuel Cells (Georgios Tsotridis)				
10:00-10:45	Electrochemistry and Fuel Cell Basics (Claude Lamy)	Water Management (Torsten Berning)	Fuel Cell Degradation (Andreas Friedrich)	Fuel Cell Stack Design (Frano Barbir)	Fuel Cell Vehicles (Alexander Kabza)
11:00-12:00	Fuel Cell Catalysts (Anthony Kucernak)	Heat Management (Eden Mamut)	FC Diagnostics and Testing (Andreas Friedrich)	Fuel Cell System Integration (Frano Barbir)	Market Analysis (Kerry-Ann Adamson)
12:00-13:30	Lunch	Lunch	Lunch	Lunch	Lunch
13:30-14:15	Non-precious Catalysts (Anthony Kucernak)	Fuel Cell Modeling (M.Fazil Serincan)	Single Fuel Cell Testing (Laurent Antoni)	TUBITAK Fuel Cell Research	Codes and Regulations (Wolfgang Winkler)
14:15-15:00	Fuel Cell Membranes (Ludwig Jorissen)	Fuel Cell Modeling (Case Study) (M. Fazil Serincan)	Single Fuel Cell Testing Laboratory Demonstration	TUBITAK Fuel Cell Research	Discussions on Lectures
15:30-16:15	High Temperature Membranes (Ludwig Jorissen)		Fuel Cell System Integration Demonstration	TUBITAK Fuel Cell Research	Closing Remarks (G. Tsotridis & S. Yazici)
16:15-17:00	Discussions on Lectures	Discussions on Lectures	Fuel Cell System Integration Demonstration		