

# Hydrogen Nancy 2021

Title: Electrochemical Systems for microgrid applications

Day	July 5 <sup>th</sup>	July 6 <sup>th</sup>	July 7 <sup>th</sup>	July 8 <sup>th</sup>	
8.30 am	Introduction (Dr. J. Mainka, UL)	PEM Fuel Cells - fundamentals (Prof. M. Chatenet, LEPMI) Duration: 8.30 am – 9.30 am (1h)			
8.45 am	Bronkhorst talk				
9 – 10.30 am (1h30)	Hydrogen : a new player at the service of the environment and the economy (Dr. L. Antoni, member of FCH 2 JU governing board, CEA-LITEN)	PEM Fuel Cells – focus on electrocatalysts (Prof. V. Di Noto, UNIPD) Duration: 9.30 – 10.30 am (1h)	Power electronics challenges related to hydrogen technologies (Dr. T. Boileau, UL)	Flow batteries (Dr. M. Cazot, Kemiwatt)	
Coffee break					
11 – 12.30 am (1h30)	Management of electric grids (Prof. Bertrand Cornélusse, ULG)	PEM Electrolyzer (Prof. F. Maillard, LEPMI)	Fuel cell – supercapacitor hybridization (Prof. F. Lopicque, UL)	H <sub>2</sub> microgrid applications for marine technologies (Prof. M. Zadeh, NTNU)	
Lunch break					
1.30 - 3 pm (1h30)	Power electronic management for microgrid applications (Prof. S. Pierfederici, UL)	H <sub>2</sub> and electrochemical storage (Dr. G. Sdanghi, CEA/Dr. M. Urbain, UL)	Workshop - Microgrid and FC management systems (Dr. S. Pang/Dr. S. Benahmed?, UL)	Workshop on numerical study - PEMFC manufacturing, testing and characterization (Dr. J. Dillet, UL)	H <sub>2</sub> microgrid applications for aerospace technologies (Dr. S. Abbou, Safran)
3.30 – 5 pm (1h30)	Poster session I	Poster session II			Quizz (Dr. J. Mainka/Dr. M. Urbain/Dipl. Ing. H. Demaie, UL)