Program

Monday, the 30th of May

11:00 Registration
12:00 Lunch Buffet.
13:45 Welcome

Batteries 1. Chairman tbd.
14:00 Keynote. Jean-Marie Tarascon (UPMC-Collège de France, Paris, France)
« Structure/property relationships of advanced electrode materials for better Li(Na)-ion batteries. »
14:40 Invited. Martin Mansson (KTH, Stockholm, Sweden)
« Towards Sodium-based Solid State Energy Storage »
15:10 Oral. Laurence Croguennec (ICMCB, Bordeaux, France)
« Key Insights into Mechanisms Involved in Li and Na Batteries using Operando X-ray and Neutron Diffraction »
15:30 Coffee Break

Gas storage. Chairman tbd.
16:10 Keynote. Hervé Jobic (IRCELYON, CRNS Lyon, France)
« Diffusion in porous materials»
16:50 Invited. Nabil Sultan (IFREMER, Brest, France)
« Gas hydrate-bearing sediments and its potential associated hazards: from in situ observations to numerical modelling »
17:20 Invited. Bertrand Chazallon (PhLAM, Univ. Lille 1, France)
« Gas storage in clathrate hydrates: CO2 separation from a binary gas mixture investigated by in-situ Raman spectroscopy »
17:50 Oral. Orsolya Czakkel (ILL, Grenoble, France)
« Carbon gels for future hydrogen storage systems »
18:10 Oral. Umberto Luca Ranieri (EPFL, Lausanne, Switzerland)
« Guest dynamics in methane and hydrogen hydrates under high pressure »
18:30 Oral. Claire Petuya (ISM, Bordeaux, France)
« Revealing preferential CO encapsulation in mixed CO/N2 clathrate hydrate »
18:50 End of session

19:30 Welcome aperitif
20:00 Welcome buffet and posters session
Tuesday, the 31st of May

Solar energy. Chairman tbd.
08:30 Keynote. Jacky Even (FOTON, INSA Rennes, France)
   « Plastic crystal behavior, molecular relaxations and low energy phonon spectroscopy in hybrid perovskites crystals. »
09:10 Invited. Lars Kloo (KTH Royal Institute of Technology, Stockholm, Sweden)
   « Title to be announced – solar energy »
09:40 Invited. Guillaume Fleury (LCPO, Bordeaux, France)
   « Structurally-driven Enhancement of Photovoltaic and Thermoelectric Properties within Semi-conducting Polymer thin Films »
10:10 Coffee Break

Energy-related materials. Chairman tbd.
10:50 Invited. Marc De Boissieu (SIMaP, Grenoble, France)
   « Lattice dynamics and thermal conductivity of the Ba₄Ge₄₀₆Au₅₂₅ clathrate. »
11:20 Oral. Frédéric Ott (LLB, Saclay, France)
   «IMAGINE: A new cold neutron imaging station at the Laboratoire Léon Brillouin »
11:40 Oral. Xueying Hai (Institut Néed, Grenoble, France).
   « Hydrogen sorption kinetics investigation with in-situ neutron powder diffraction for magnetocaloric alloy (La,Ce)(Fe,Si)13Hx »
12:00 Lunch

Batteries 2. Chairman tbd.
13:20 Keynote. Teofilo Rojo (CIC-Energigune, Spain)
   « Sodium-ion batteries: An emerging technology »
14:00 Invited. Claire Villevielle (PSI, Villigen, Switzerland)
   « Advances in operando neutron diffraction measurements applied to batteries »
14:30 Oral. Filippo Ferdeghini (LLB, Saclay, France)
   « Ionic liquids under nanometric unidimensional confinement: a route for a better electrolyte? »
14:50 Oral. Coraline Millot (CEA/SPrAM, Grenoble, France)
   « Ex-Situ SANS Investigation Of Core-Shell Carbon-Coated Silicon Nanoparticles For Lithium-Ion Anodes »
15:10 Oral. Charles Munson (GATECH, Atlanta, USA)
   « Development of a High-Efficiency, GaN-based Betavoltaic Battery »
15:30 End of session

15:45 Departure to Saint-Emilion
17:00 Guided visit of Saint-Emilion
19:00 Vineyard visit, wine tasting and conference dinner at the château « La Couspaude »

Wednesday, the 1st of June

Fuel cells and Electrolysers. Chairman tbd.
09:00 Keynote. Gérard Gebel (LITEN/DTNM, CEA Grenoble, France)
   « Proton exchange membrane fuel cells and neutron scattering »
09:40 Oral. Malgorzata Makowska (DTU, Risø, Denmark)
   « In-situ neutron imaging of the coupling between creep and redox behavior in Ni-YSZ for solid oxide cells »
10:00 Oral. Sourav Marik (ICMGB, Bordeaux, France)
   « SrCo1-xFexO3-d: Structure Property Relation »
10:20 Coffee Break
11:00  Invited. Neal Sullivan (Colorado School of Mines, USA).
   « Proton-Conducting Ceramics for Energy Generation, Energy Storage, and Fuels Synthesis »
11:30  Oral. Marina Khaneft (JCNS at MLZ, Garching, Germany)
   « Proton dynamics of phosphoric acid in the catalytic layer for HT-PEFC »
11:50  End of session

12:00  Lunch

14:00  End of Workshop

Posters

Fuel cells and Electrolysers
  •  « Polymer Electrolyte Membranes for Fuel Cells: Structural Properties »
     Oxana Ivanova, Bernhard Hopfenmüller, Marina Khaneft, Kirill Nemkovski, Noemi K.
     Szekely, Vitaliy Pipich, Wim Pyckout-Hitzen, Marie-Sousai Appavou, Wiebke Lücke, Michael
     Monkenbusch, Reiner Zorn, Werner Lehner and Olaf Holderer
  •  « Structural investigation of a strong acid clathrate hydrate by Raman spectroscopy : toward fuel
     cell application »
     Sarah Desplanche, David Talaga, Arnaud Desmedt, Lydie Bourgeois

Gas Storage
  •  « Neutron diffraction investigation of hydrogen storage alloy TiFe0.7Mn0.3 + 4wt.% Zr »
     Volatiana Razafindramanana, Pragya Jain, Jacques HUOT, Jean-Louis BOBET
  •  « Characterization of HKUST-1 metal organic framework for methane storage »
     Orsolya Czakkel, Lionel Porcar, Dániel Abrahám, Geissler Erik, Krisztina László

Batteries
  •  « Development of in-situ neutron cells to investigate fundamental structural mechanisms involved in
     Li-ion (Na-ion) batteries »
     Tatiana Renzi, Matteo Bianchini, Christian Masquelier, Laurence Croguennec,
     Emmanuelle Suard
  •  « Structural and Electrochemical Study of a New Tavorite Compound LiVPO4OH »
     Edouard Boivin, Jean-Noël Chotard, Michel Menetrier, Lydie Bourgeois, Dany Carlier, Tahya
     Bamine, François Fauth, Emmanuelle Suard, Christian Masquelier, Laurence Croguennec