

# Towards Futuristic Energy Storage; paving its way through Supercapacitors, Li-ion batteries and beyond

## PROGRAMME

DAY 1: Wednesday, 22 <sup>nd</sup> January 2020	
9:00 am – 9:45 am	Welcome coffee & registration
9:45 am – 10:00 am	Official opening
10:00 am – 10:45 am (Keynote speech)	<b>Prof. Khalil Amine</b> <i>Title: Advanced lithium-ion and beyond for electric vehicle applications</i>
10:45 am – 11:30 am (Keynote speech)	<b>Prof. Kristina Edström</b> <i>Title: Some insights paving the way for new battery chemistries</i>
11:30 am – 11:45 am (Oral presentation)	<b>Dr. John Abou-Rjeily</b> <i>Title: Facile solid-state synthesis technique using natural manganese dioxide (<math>\beta</math>-MnO<sub>2</sub>) as a precursor for several cathode materials synthesis implemented in LIBs and NIBs.</i>
11:45 am – 12: 00 pm (Oral presentation)	<b>Seongkoo Kang</b> <i>Title: Evidence for protons stabilized in layered-type structure: Application to aqueous proton batteries</i>
<b>12:00 pm – 1:30 pm</b>	<b>Lunch</b>
1:30 pm – 2:10 pm (Keynote speech)	<b>Prof. Laure Monconduit</b> <i>Title: The ways to make Si an effective electrode material for Li-ion batteries</i>
2:10 pm - 2:30 pm (Oral presentation)	<b>Ms. Jianhan Xiong,</b> <i>Title: Optimization of Si/Gr based anode formulation for high energy density Li-ion batteries</i>
2:30 pm – 3:10 pm (Keynote speech)	<b>Dr. Alexandre Ponrouch</b> <i>Title: Ca metal anode-based battery: On the impact of passivation layer and cation solvation structure</i>
3:10 pm - 3:30 pm (Oral presentation)	<b>Mr. Antonio Scafuri</b> <i>Title: A non-nucleophilic fluorinated alkoxyborate based electrolyte for rechargeable Ca batteries.</i>
3:30 pm - 3:50 pm (Oral presentation)	<b>Prof. Mouad Dahbi</b> <i>Title: Facile Synthesis of Nanoparticles Titanium Oxide as High-Capacity and High-Capability Electrode for Lithium-ion Batteries</i>

<b>3:50 pm - 4:15 pm</b>	<b>Coffee Break + Poster session</b>
<b>4:15 pm - 4:35 pm</b> (Invited talk)	<b>Prof. Ismael Saadoune</b> <i>Title: Electrochemical behavior of Na<sub>2/3</sub>Co<sub>1-y</sub>MyO<sub>2</sub> (M: Ti, Ni, Mn) electrode materials for sodium-ion batteries.</i>
<b>4:35 pm to 4:55 pm</b> (Oral presentation)	<b>Ms. Laura Caggiu</b> <i>Title: Na-based systems as potential candidates Na-Ion-Conductors for Sodium secondary batteries</i>
<b>4:55 pm - 5:15 pm</b> (Oral presentation)	<b>Dr. Alexey Kopusov</b> <i>Title: Microscaled crystalline silicon: the challenge for Li-ion batteries</i>
<b>5:15 pm - 5:30 pm</b> (Oral presentation)	<b>Mr. Abdelwahed CHARI</b> <i>Title: A High Energy Density New Phosphate-Based Material for Sodium Ion Batteries</i>
<b>5:30 pm - 6:10 pm</b> (Keynote speech)	<b>Prof. Teófilo Rojo</b> <i>Title: Developments in Na technologies: pathways to progress</i>
<b>6:30 pm – 7:30 pm</b>	<b>Prof. Dominique Guyomard, Public lecture (in French)</b> <i>Le stockage de l'énergie électrique. Applications, technologies et challenges</i>
<b>8:00 pm – 10:00 pm</b>	<b>Wine &amp; cheese cocktail – Tours City Hall</b>

DAY 2: Thursday, 23<sup>rd</sup> January 2020

<b>08:15 am – 8:30 am</b>	<b>Welcome coffee</b>
<b>8:30 am - 9:10 am</b> (Keynote speech)	<b>Prof. Petr Novak</b> <i>Title: In Situ and Operando Techniques for Characterization of Interfaces and Interphases in Lithium-Ion Batteries</i>
<b>9:10 am - 9:50 am</b> (Keynote speech)	<b>Dr Gwenaëlle Rouse</b> <i>Title: Li-ion batteries materials: the use of powder diffraction</i>
<b>9:50 am - 10:05 am</b> (Oral presentation)	<b>Ms. Ludivine Afonso de Araujo;</b> <i>Title: Lithium plating in Li-ion batteries by operando <sup>7</sup>Li Nuclear Magnetic Resonance</i>
<b>10:05 am - 10:45 am</b> (Keynote speech)	<b>Dr. Bernard Lestriez</b> <i>Title: Binder based on coordination chemistry to improve the electrochemical performance of Si electrodes</i>
<b>10:45 am - 11:05 am</b>	<b>Coffee Break</b>
<b>11:05 am - 11:45pm</b> (Keynote speech)	<b>Prof. Shinichi Komaba</b> <i>Title: High-energy design of Na- and K-ion batteries as "Beyond Li-ion"</i>
<b>11:45 am – 12:00 pm</b>	<b>Mr. Gabriele Lingua</b>

(Oral presentation)	<i>Title: Innovative single-ion conducting solid electrolytes for safe, high performing energy storage devices</i>
12:00 pm - 12:15 pm (Oral presentation)	<b>Dr. Pierre Alexandre Martin</b> <i>Title: Structure and interactions in localized highly concentrated electrolytes for rechargeable calcium batteries</i>
<b>12:15 pm - 1:30 pm</b>	<b>Lunch</b>
1:30 pm - 2:10 pm (Keynote speech)	<b>Prof. François Béguin</b> <i>Title: Internal hybridization of electrodes: an elegant way to enhance the energy stored in electrochemical capacitors</i>
2:10 pm - 2:25 pm (Oral presentation)	<b>Mr. Guillaume Ah-lung</b> <i>Title: Optimization and synthesis of manganese dioxide with different morphologies and structures for aqueous supercapacitors operating at high voltage</i>
2:25 pm - 2:45 pm (Invited talk)	<b>Dr. Alain Pénicaud;</b> <i>Title: From Food Waste to Supercapacitors and Non Precious Metal Electrocatalysts for the Oxygen Reduction &amp; Evolution Reactions.</i>
2:45 pm - 3:00 pm (Oral presentation)	<b>Mr. Mathieu Deschanel</b> <i>Title: Electrochemical evidence of the modification of carbon materials with anthraquinone moiety by a Diels Alder process.</i>
3:00 pm - 3:40 pm (Keynote speech)	<b>Prof. Patrik Johanson</b> <i>Title: Pure, Hybrid and Polymerized Ionic Liquid Based Electrolytes: From Fundamentals to Application</i>
<b>3:40 pm - 4:20 pm</b>	<b>Coffee Break + Poster session</b>
4:20 pm - 5:00 pm (Keynote speech)	<b>Prof. Robert Dominko</b> <i>Title: Multivalent organic batteries</i>
5:00 pm - 5:40 pm (Keynote speech)	<b>Dr. Rongying Lin</b> <i>Title: Ionic liquids-based electrolytes for next generation energy storage devices</i>
6:00 pm – 7:30 pm	<b>Guided visit of the city centre – Departure from the City Hall</b>
7:30 pm	<b>Social dinner – Restaurant La Cave</b> <i>Departure by bus from the Municipal Library (André Malraux Avenue)</i> <i>Please make sure you have registered</i>

DAY 3: Friday, 24<sup>th</sup> January 2020

08:15 am – 8:30 am	Welcome coffee
8:30 am - 9:10 am (Keynote speech)	<b>Prof. Elżbieta Frąckowiak</b> <i>Title: Key role of electrolyte in electrochemical capacitors</i>
9:10 am – 9:35 am (Invited talk)	<b>Prof. Thierry Brousse</b> <i>Title: Pseudocapacitive multicationic oxides</i>
9:35 am - 10:00 am (Invited talk)	<b>Dr. Camélia Ghimbeu</b> <i>Title: Any match between the carbon pore size induced by salt template and the electrolyte size in electrochemical capacitors?</i>
<b>10:00 am - 10:30 am</b>	<b>Coffee Break</b>
10:30 am - 10:45 am (Oral presentation)	<b>Dr. M<sup>a</sup> Ángeles Moreno Fernández</b> <i>Title: Flat-shaped carbon-graphene microcomposites for high energy supercapacitors.</i>
10:45 am - 11:00 am (Oral presentation)	<b>Dr. Ahed Abouserie</b> <i>Title: Hybrid Electrolyte for all Solid-State Fluoride-Ion Batteries</i>
11:00 am - 11:15 am (Oral presentation)	<b>Dr. Chandra Sekhar Bongu;</b> <i>Title: A new class of Organic Solvent-in-Salt Electrolyte for electrochemical energy storage applications</i>
11:00 am – 11:40 am (Keynote speech)	<b>Prof. Claudio Gerbaldi</b> <i>Title: Hybrid polymer electrolytes based on UV cross-linked polymer matrixes for solid-state batteries operating at ambient temperature</i>
11:40 am – 12:20 am (Keynote speech)	<b>Dr. Philippe Azais</b> <i>Title: A Critical Overview of electrochemical energy storage for automotive industry: state of the art to main future trends</i>
<b>12:20 am</b>	<b>Poster award and conclusive remarks</b>
	Lunch box distribution (please make sur you have order one)