5th International Conference on Sodium Batteries
ICNaB-2018

Hôtel Le Nouveau Monde, St Malo, France

Monday, November 12, 2018

5:00 PM - 8:00 PM		**Registration & display of the posters**	
7:00 PM - 9:00 PM		**Welcome reception**	

Tuesday, November 13, 2018

	Presentation No.		**Chair**
7:30 AM		**Registration**	
8:30 AM		**Welcome Address**	
SESSION		**POSITIVES**	
8:45 AM	**IN-01**	**Prof. Shinichi Komaba (Tokyo University of Science)** $NaMeO_2$ (Me = 3d metal) for Na-ion batteries	
9:10 AM	**IN-02**	**Dr. Montse Casas-Cabanas (CIC energiGUNE)** Crystal-chemistry and electrochemical activity of phosphate and nitridophosphate Na-ion electrode materials	
9:35 AM	**O-01**	**Dr. Premkumar Senguttuvan (Jawaharlal Nehru Centre)** Topochemical Synthesis of Sodium Iron Fluoride Cathodes for Sodium-ion Batteries	
9:50 AM	**O-02**	**Dr. Oleg A. Drozhzhin (Lomonosov Moscow State University)** Relation between phase transition behavior and crystal structure peculiarities in selected phosphate and fluoride phosphate cathode materials for Na-ion batteries	
10:05 AM	**O-03**	**Dr. Anti Liivat (Uppsala University)** Pyrosilicates as Electrode Materials	
10:20 AM	**O-04**	**Ananta Sarkar (Indian Institute of Technology Bombay)** Improvement of Nominal Potential of $NH_4V_4O_{10}$ Cathode and Sodium-ion Full-Cell Study	
10:35 AM		*Coffee break + Poster session*	
SESSION		**ELECTROLYTES**	

11:05 AM	**IN-03**	**Prof. Patrik Johansson (Chalmers University of Technology)** Sodium-Ion Battery Electrolytes: A Complete Case Study on Diglyme as Solvent	
11:30 AM	**IN-04**	**Dr. Cristina Pozo-Gonzalo (Deakin University)** Advanced electrolytes for High Performance Sodium Batteries	
11:55 AM	**O-05**	**Dr. Marek Marcinek (Warsaw University of Technology)** Chances of Hückel-type salts based electrolytes for application in sodium batteries	
12:10 PM	**O-06**	**Dr. Kazuhiko Matsumoto (Kyoto University)** Enhanced electrode performance of sodium secondary batteries by intermediate temperature operation using ionic liquid electrolytes	
12:25 PM		*Lunch*	
2:00 PM		*Poster session*	
SESSION		**REAL SYSTEMS**	
3:00 PM	**IN-05**	**Dr. Jerry Barker (Faradion Limited)** The Commercialization of Faradion's Na-ion Battery Technology	
3:25 PM	**IN-06**	**Dr. Colin D. Wessells (Natron Energy)** Progress Towards a Practical Sodium-Ion Battery Based on Prussian Blue Electrodes	
3:50 PM	**O-07**	**Dr. Joël Gaubicher (CNRS-University of Nantes)** Aqueous organic batteries: toward low cost grid storage	
4:05 PM	**O-08**	**Dr. Loïc Simonin (University of Grenoble Alpes)** Study of Na-ion overdischarge to improve the safety of transportation applications, comparison with Li-ion technology	
4:20 PM	**O-09**	**Dr. D.L. Danilov (Eindhoven University of Technology)** Electrochemical Modeling of Sodium-ion batteries	
4:35 PM		*Coffee break + Poster session*	
SESSION		**NEGATIVES/SEI**	
5:05 PM	**IN-16**	**Prof. Palani Balaya (National University of Singapore)** The Non-flammable Ether-Based Electrolyte and Related SEI Studies using Different Anodes for Sodium-ion Battery	
5:30 PM	**O-10**	**Prof. Lorenzo Stievano (University of Montpellier)** New insights on sodiation-desodiation mechanism of SnSb from operando spectroscopy	
5:45 PM	**O-11**	**Dr. Yaxiang Lu (Chinese Academy of Sciences)** Disordered carbon anodes for Na-ion battery and their sodium storage mechanism	
6:00 PM	**O-13**	**Dr. Reza Younesi (Uppsala University)** The Formation and Stability of the Solid Electrolyte Interphase (SEI) in Sodium-Based Electrolytes	
6:15 PM		*Poster session*	

Wednesday, November 14, 2018

	Presentation No.		Chair
SESSION		**NEGATIVES**	
8:30 AM	**IN-07**	**Dr. Christopher Johnson (Argonne National Laboratory)** Electrochemical Performance Survey of Various Anodes for Sodium-ion Batteries	
8:55 AM	**IN-08**	**Prof. Naoaki Yabuuchi (Tokyo Denki University)** Ti-based Negative Electrodes for Sodium Batteries	
9:20 AM	**O-14**	**Prof. Philipp Adelhelm (Jena University)** Anode materials for SIBs: Examples on graphite/carbon and sulfides in cells with liquid and solid electrolyte	
9:35 AM	**O-15**	**Dr. Camélia Ghimbeu (University of Strasbourg)** Insights on the Na^+ ion storage mechanism in hard carbon	
9:50 AM	**O-16**	**Dr. Kei Kubota (Tokyo University of Science)** Electrochemical Alkali-Metal Insertion/Extraction in Hard Carbon	
10:05 AM	**O-17**	**Nour Daher (University of Picardie Jules Verne)** Synthesis and characterization of marketable hard carbons used as negative electrodes for sodium-ion batteries	
10:20 AM		*Coffee break + Poster session*	
SESSION		**POSITIVES**	
10:50 AM	**IN-09**	**Prof. Atsuo Yamada (The University of Tokyo)** Defect-induced Oxygen Redox Chemistry	
11:15 AM	**IN-10**	**Prof. Yong-Sheng Hu (Chinese Academy of Sciences)** The first demonstration of mini-EV powered by Na-ion batteries	
11:40 AM	**O-27**	**Dr. Valérie Pralong (CRISMAT – ENSICAEN)** Sodium reactivity with $Na_2M_3O_7$ (with M = Mn, V)	
11:55 AM	**O-19**	**Jean Vergnet (Collège de France)** Vizualizing path hysteresis of anionic redox via energy landscape sampling	
12:10 PM	**O-20**	**Dr. A. Robert Armstrong (University of St Andrews)** P3 structure sodium manganese oxides for sodium-ion batteries	
12:25 PM		*Lunch*	
2:00 PM		*Poster session*	

SESSION		POSITIVES/MULTIVALENTS	
3:00 PM	**IN-11**	**Prof. Teofilo Rojo (CIC energiGUNE)** Na layered oxides as cathodes: key descriptors to enhance electrochemical performance	
3:25 PM	**IN-12**	**Dr. Alexandre Ponrouch (ICMAB-CSIC)** The challenging path towards Ca metal anode based batteries	
3:50 PM	**O-28**	**Dr. Rita Baddour-Hadjean (ICMPE - CNRS, University of Paris Est)** Recent research progress on V_2O_5-based materials as new competitive cathodes for sodium-ion batteries	
4:05 PM	**O-22**	**Dr. Yafei Zhang (Deakin University) (Canceled)** Elucidating the Impact of Sodium Salt Concentration on the Cathode-Electrolyte Interface of Na-Air Batteries with Ionic Liquids Electrolyte	
4:20 PM		*Visit of the old city*	
7:00 PM		*Banquet*	

Thursday, November 15, 2018

	Presentation No.		**Chair**
SESSION		**POSITIVES**	
8:30 AM	**IN-13**	**Dr. Claude Delmas (ICMCB-CNRS, University of Bordeaux)** Ordering Phenomena in Sodium Layered Oxides	
8:55 AM	**IN-14**	**Prof. Zi-Feng Ma (Shanghai Jiao Tong University)** Design and Development of Sodium-ion Batteries Based on Layered Transition Metal Oxide Cathode Material	
9:20 AM	**O-23**	**Dr. Matteo Bianchini (University of California)** Investigating the synthesis of layered Na electrode materials by in situ XRD	
9:35 AM	**O-24**	**Dr. Maxim Shishkin (Kyoto University)** Selective stabilization of $NaMnO_2$ polymorphs by dopants: insights from theoretical study	
9:50 AM	**O-25**	**Dr. James W. Somerville (University of Oxford)** High Voltage Phase Transitions in P2-type Na-ion Battery Cathodes	
10:05 AM	**O-26**	**Conrad Guhl (TU-Darmstadt)** Hybridisation and covalent bonding effects in $NaxCoO_2$: electronic structure evolution during charging and consequences for electrode potential and stability	
10:20 AM	**O-18**	**Dr. Patrick Rozier (CIRIMAT, University of Toulouse III Paul Sabatier)** Anionic redox activation in layered compound as positive electrode materials for Na-ion batteries	

10:35 AM		*Coffee break + Poster session*	
SESSION		**CHARACTERIZATIONS**	
11:05 AM	**IN-15**	**Dr. Claire Villevieille (Paul Scherrer Institute)** Electrode materials, electrolyte or the engineering – what is the key to successful development of Na-ion batteries?	
11:30 AM	**O-21**	**Dr. Damien Dambournet (University Pierre and Marie Curie)** Prototype structures enabling reversible electrochemical Al^{3+} intercalation	
11:45 AM	**O-29**	**Dr. Neeraj Sharma (The University of New South Wales (UNSW) Sydney)** Tuning the Mn:Fe ratio in P2 $Na_{2/3}Fe_{1-y}Mn_yO_2$: Electrochemical performance and structural evolution	
12:00 PM	**O-30**	**Dr. Phoebe K. Allan (University of Birmingham)** Alloying anodes for sodium-ion batteries: insights from pair distribution function analysis and solid-state NMR	
12:15 PM	**O-31**	**Prof. Dany Carlier (ICMCB - CNRS, University of Bordeaux)** Solid-State NMR of positive electrode materials for Na-ion batteries: a key probe to characterize local structures, electronic structures and defects	
12:30 PM		*Lunch*	
SESSION		**NEGATIVES and ELECTROLYTES**	
2:00 PM	**O-12**	**Carolina del Mar Saavedra Rios (University of Grenoble Alpes)** Biomass based hard carbon for Na-ion battery: a systematic study	
2:25 PM	**O-32**	**Dr. Masaki Okoshi (Waseda University)** Theoretical Analysis on Solution Structure and Ion Conduction Mechanism in Superconcentrated Electrolyte Solution for Na-ion Battery	
2:40 PM	**O-33**	**Dr. Damien Monti (ICMAB-CSIC)** Sodium-Ion Battery Electrolytes: A Closer Look on Solvation and Ionic Association	
2:55 PM		*Concluding remarks and announcement of the 6th International Conference on Sodium batteries*	