

The 2nd International Conference on Sodium Batteries

October 7-9, 2015

Sheraton Wild Horse Pass Hotel, Resort & Conference Center
Phoenix, Arizona

<https://www.regonline.com/2ndinternationalconferenceonsodiumbatteries>

Conference Sponsor Organization: Argonne National Laboratory, Lemont, Illinois, USA

Lead Organizer: Dr. Christopher Johnson (Argonne)

Scientific Technical and Advisory Committee:

Prof. Teófilo Rojo, CIC Energigune, Basque Region, Spain

Dr. Gabriel Veith, Oak Ridge National Laboratory

Dr. Marca Doeff, Lawrence Berkeley National Laboratory

Prof. Shirley Meng, University of California at San Diego

ORAL Presentations (30 min; all invited; FINAL)

	<i>Title</i>	<i>Speakers* and Authors</i>
1.	<i>Negative electrode for high energy density Na-ion batteries</i>	Shinichi Komaba* (*Tokyo, Japan)
2.	<i>The commercialization of high energy density Na-ion battery technology</i>	J. Barker*, R.J. Heap, N. Roche, C. Tan, R. Sayers, J. Whitley and Y. Liu (*Faradion Inc., UK)
3.	<i>Sodium-Ion battery for energy storage</i>	Yuhao Lu*, Sean Vail, Xing Zhao, Jie Song, David Evans, Wei Pan and Jong-Jan Lee (*Sharp, USA)
4.	<i>Na₃V₂(PO₄)₃ : crystal chemistry and use in NASICON-based all solid state batteries</i>	C. Masquelier*, F. Lalère, J.N. Chotard, G. Rousse, V. Seznec, R. David, M. Courty, O. Mentré (*U. Picardie, France)

5.	<i>Understanding electrode-electrolyte solution interactions between TiO₂ nanotube electrode and non-aqueous electrolytes for sodium-ion batteries</i>	Hui (Claire) Xiong* (*Boise State U., Idaho, USA)
6.	<i>Solid-state NMR and DFT: powerful tools for the study of the processes occurring upon cycling of sodium transition metal oxides</i>	R. J. Clément*, J. Xu, D. H. Lee, J. Billaud, A. R. Armstrong, G. Singh, D. S. Middlemiss, M. Leskes, A. J. Pell, M. Armand, T. Rojo, Y. S. Meng, P. G. Bruce, C. P. Grey (*Cambridge, UK)
7.	<i>Powerful positive and negative electrode materials for Na-ion batteries</i>	Daniel Buchholz* and Stefano Passerini (*Helmholtz Institute, Germany)
8.	<i>Na_xM_zTi_{1-z}O₂ negative electrode materials for Na-ion batteries</i>	R. Fielden* and M.N. Obrovac (*Dalhousie U., Nova Scotia, Canada)
9.	<i>The importance of SEI formation in Na-ion battery full-cell and comparison to Li-ion battery</i>	Xiaolin Li*, Pengfei Yan, Mark H. Engelhard, Chongmin Wang, Jun Liu, Vincent L. Sprenkle (*Pacific Northwest Natl. Lab, Washington, USA)
10.	<i>New design principles for high energy density intercalation compounds of sodium ion batteries</i>	Xin Li*, Y. Wang, D. Wu, L. Liu, G. Ceder (*Harvard U., Massachusetts, USA)
11.	<i>Novel P2-type layered oxide cathode for high power Na-ion batteries</i>	Chuze Ma*, Judith Alvarado, Kimberly, Nguyen, Moses Kodur, Ying Shirley Meng (*University of California – San Diego, California, USA)
12.	<i>Non-graphitic carbon anodes in Na-ion batteries</i>	David Xiulei Ji* (*Oregon State U., Oregon, USA)

13.	<i>Cell design and key component materials for rechargeable seawater batteries</i>	Youngsik Kim*, Jaekwang Kim, and Soo Min Hwang (*Ulsan (UNIST), Korea)
14.	<i>Aqueous rechargeable sodium-ion batteries for grid-scale energy storage</i>	Mona Shirpour* (*U. of Kentucky, Kentucky, USA)
15.	<i>Prussian blue batteries for high power, long cycle life applications</i>	Colin Wessells* (*Alveo Energy, USA)
16.	<i>Development of practical sodium-ion batteries for large-scale energy storage</i>	Y. Hu* (*Chinese Academy of Sciences, China)
17.	<i>Towards better understanding of Na-O₂ batteries: oxygen reduction and discharge product chemistry</i>	N. Ortiz-Vitoriano*, Thomas Batcho, David G. Kwabi, Binghong Han, Nir Pourl, Koffi Pierre Claver Yao, Carl V. Thompson, and Yang Shao-Horn (*MIT & CIC Energigune, USA & Spain)
18.	<i>Mixed ionic liquid -NaFSI salts with high Na⁺ transference number and improved electrochemical cycling</i>	P. Howlett*, Hyungook Yoon, Douglas R. MacFarlane, Michel Armand and Maria Forsyth (*Deakin U., Australia)
19.	<i>Antimony based compounds: defining the electrochemistry</i>	G. Veith* (*Oak Ridge Natl. Labs, Tennessee, USA)
20.	<i>Novel cathode materials design and preparation for sodium ion batteries use</i>	Hong Wang, Dezhi Yang, Xiao-Zhen Liao, Zi-Feng Ma* (*Shanghai Jiao Tong U. & Shanghai Electrochemical Energy Devices Research Center, China)
21.	<i>Recent advances, present challenges and future trends on sodium batteries</i>	T. Rojo* (*CIC Energigune, Vitoria, Spain)
22.	<i>Chemical and structural quasi-reversibility of Fe³⁺/Fe⁴⁺ in layered</i>	E. Lee*, D. E. Brown, Esen E. Alp, Yang Ren, Jun Lu, Jung-Je Woo and Christopher S. Johnson (*Argonne Natl. Lab, Illinois, USA)

	<i>NaFeO₂</i>	
23.	<i>Ultrafast Na-ion storage on disordered carbon nanosheets</i>	V. Etacheri and Vilas G. Pol* (* Purdue U., USA)

POSTERS (as of August 29, 2015)

<i>Title</i>	<i>Authors (presenter*)</i>
<i>Disordered carbons as negative electrode materials for Na-ion batteries</i>	D. Saurel*, S. Clarke, J. Segalini (* CIC Energigune, Vitoria, Spain)
<i>Sodium-ion battery materials: full cell studies</i>	A.Gutierrez*, D. Zhou, F. Dogan, P. Senguttuvan, V. Pol, M. Ampeer, E. Lee, C. Johnson (* Argonne Natl. Labs, Illinois, USA)
<i>Atomic scale studies of sodium transition layered oxides using STEM and operando methods</i>	L. Gu*, Yong-Sheng Hu, Hong Li and Liquan Chen (*Chinese Academy of Sciences, China)
<i>Tuning the interlayer distance of Na₂Ti₃O₇- effect on structure and electrochemistry</i>	Maria A. Tsiamtsouri*, Tao Liu, Phoebe K. Allan, Gunwoo Kim, Andrew J. Pell, Rachel N. Kerber, David Jefferson, Clare P. Grey (* U. of Cambridge, UK)
<i>Advanced electrolytes for sodium batteries based on NaFSI salts</i>	Vinay V. Bhat , Jerry L. Martin, Rajendra P. Singh (* CoorsTek Specialty Chemicals, Colorado, USA)
<i>Study on crystal polymorphism and electrochemical properties of P2-type Na_{2/3}MnO₂</i>	Shinichi Kumakura*, Yoshiyuki Tahara, Kei Kubota and Shinichi Komaba (*Tokyo, Japan)