

**Draft Agenda
Beyond Lithium Ion VIII
June 2-4, 2015
SNS Auditorium, Oak Ridge National Laboratory**

June 2nd Tuesday

Welcome	Session Chairs	Start	End	Speaker	Institution	Presentation Title
Breakfast/registration		7:00 AM	8:20 AM			
Session 1: Emerging Energy Storage Systems-I	Sreekanth Pannala	8:40 AM	8:50 AM	Sreekanth Pannala/Jason Zhang		Welcome
		8:50 AM	9:25 AM	Tien Duong	DOE/EERE/VTO	Beyond Li-ion Battery Research in Advanced Battery Materials Research program
		9:25 AM	10:00 AM	Hector abruna	Cornell Univ.	Novel Materials, Architectures and Operando Methods in Electrical Energy Storage
		10:00 AM	10:30 AM	Exhibit/break		
Morning break		10:30 AM	11:00 AM			
Session 2: Emerging Energy Storage Systems-II	Jason Zhang	10:30 AM	11:00 AM	Chris Johnson	ANL	Energy Storage Using Na-Ion Batteries
		11:00 AM	11:30 AM	Esther Takeuchi	SUNY Stony Brook	Insights into Battery Function Gained Through Probing Electrode Reactivity
		11:30 AM	12:00 PM	Jun Liu	PNNL	Progress in Na batteries, K batteries and Li-S redox flow batteries
LUNCH		12:00 PM	1:30 PM			
Session 3: Na batteries	Jagit Nanda	1:30 PM	2:00 PM	Yang-Kook Sun	Hanyang University, S. Korea	Advanced Na[Ni _{0.25} Fe _{0.5} Mn _{0.25} O ₂ /C-Fe ₃ O ₄ Sodium-Ion Batteries Using EMS Electrolyte for Energy Storage.
		2:00 PM	2:30 PM	Gabriel Veith	ORNL	Na, It's not another Li-ion talk
		2:30 PM	3:00 PM	Yuhao Lu	Sharp Laboratories of American	Sodium-ion Batteries for Grid Energy Storage
Afternoon break		3:00 PM	3:30 PM			
Session 4: Li air batteries	Winfried Wilcke	3:30 PM	4:00 PM	Philip Stevens	Electricite de France	Aqueous rechargeable lithium-air batteries: breakthroughs and difficulties
		4:00 PM	4:30 PM	Naqaphani Aetukuri	IBM	Solid-State Li-Ion Conducting Membranes for Lithium Air Batteries
		4:30 PM	5:00 PM	Haoshen Zhou	AIST, Japan	Development of Lithium Air Battery Based on Non-aqueous or Solid State Electrolyte
June 3rd Wednesday						
Breakfast/registration		7:00 AM	8:00 AM			
Session 5: Li-S batteries	Ray Bair	8:00 AM	8:30 AM	Yi Cui	Stanford Univ.	Materials Design to Enable Lithium metal, Sulfur and Polysulfide Batteries
		8:30 AM	9:00 AM	Mei Cai	GM	Li-S Batteries for Electric Vehicle Application: Opportunities and Challenges
		9:00 AM	9:30 AM	Shengshui Zhang	ARL	Sulfurized carbon as high performance cathode material of lithium/sulfur batteries
		9:30 AM	10:00 AM	Arumugam Manthiram	UT Austin	Lithium-sulfur batteries: challenges and prospects
Break		10:00 AM	10:30 AM			Exhibit/break
Session 6: Emerging energy storage systems III	Chumei Ban	10:30 AM	11:00 AM	Yongsheng Hu	Institute of Physics Chinese Academy of Science	Recent research progress on room-temperature sodium-ion batteries from IoP-CAS
		11:00 AM	11:30 AM	Jaephil Cho	UNIST, S. Korea	Perspective of Rechargeable Zn-Air Batteries
		11:30 AM	12:00 PM	Yiyi Wu	Ohio State University	Rechargeable K-Air Battery: Addressing Oxygen Reduction/Evolution through Single-Electron Redox Reaction
Lunch		12:00 PM	1:30 PM			
Session 7: Stationary Energy Storage Systems	Venkat Srinivasan & Gao Liu	1:30 PM	2:00 PM	Gary Yang	Uni-Energy Tech	From Molecules to MWs-Commercialization of New Generation Vanadium Redox Flow Battery
		2:00 PM	2:30 PM	Travis M. Anderson	Sandia National Lab	Ionic Liquid Flow Batteries
		2:30 PM	3:00 PM	Sri R. Narayan	University of Southern California	Grid energy storage
		3:00 PM	3:30 PM	Jeremy Neubauer	NREL	Towards the development of liquid organic redox systems for energy storage
Poster session		3:30 PM	7:30 PM	Posters		
June 4th Thursday						
Breakfast/registration		7:00 AM	8:00 AM			
Session 8: Electrolytes for energy storage systems	Nancy Dudney	8:00 AM	8:30 AM	Thom Mason	ORNL Lab Director	Welcome and ORNL Overview
		8:30 AM	9:00 AM	Cody Friesen	Arizona State Univ.	Ionic Liquid electrolyte for energy storage
		9:00 AM	9:30 AM	Kang Xu	ARL	Electrolytes and Interphases Beyond the Horizon of Li Ion
		9:30 AM	10:00 AM	Atsuo Yamada	The University of Tokyo	Superconcentrated Electrolytes
Break		10:00 AM	10:30 AM			
Session 9: Modeling on Energy storage materials	Jack Wells	10:30 AM	11:00 AM	Venkat Srinivasan	LBNL	Understanding limitations in the Li-S system using macro-modeling and experimentation
		11:00 AM	11:30 AM	Larry Curtiss	ANL	New insights into the role of lithium superoxide in lithium-oxygen batteries
		11:30 AM	12:00 PM	Paul Kent	ORNL	Energy storage properties of MXenes
Lunch		12:00 PM	1:30 PM			
Session 10: In situ Characterization of energy storage materials	Larry Curtis	1:30 PM	2:00 PM	Clare Grey	Cambridge	NMR Beyond Li: Studies of Lithium-Air, Na and Mg batteries
		2:00 PM	2:30 PM	Chongmin Wang	PNNL	Direct multi-scale probing of structural and chemical evolution of energy storage materials
		2:30 PM	3:00 PM	Ashfia Huq	SNS/ORNL	Following the 'Light Atoms' in Energy Storage Devices Using Neutron Powder Diffraction
ORNL Tours		3:00 PM	5:30 PM	Tour of ORNL Facilities 1) Battery Manufacturing Facility and Manufacturing Demonstration Facility 2) Center for Nanophase Materials 3) Spallation Neutron Source 4) Super Computing: Titan and Everest Computational Facility		