October 2015 Battery Seminar

Day 1 – Morning: Session 1	Stationary and Grid Energy Storage OEM Updates
Day 1 – Afternoon: Session 2A (Parallel Track)	Role of Software Analytics in Energy Storage
Day 1 – Afternoon: Session 2B (Parallel Track)	Recent Materials Science and R&D Advancements
Day 1 – Evening	Cocktail Reception – Facility Tour & Networking Mixer
Day 2 – Morning: Session 3	Automotive Energy Storage System OEM Updates
Day 2 – Afternoon: Session 4A (Parallel Track)	Automotive Tier 1 System Developments
Day 2 – Afternoon: Session 4B (Parallel Track)	Recent Battery Manufacturer Updates

Day 1: Tuesday, October 27, 2015

8:00 am – 5:30 pm	**Registration Open**	
8:30 am – 8:55 am	Coffee with Networking & Poster Presentations	
	Session 1	
8:55 am – 9:00 am	Welcome Note/Introduction	
9:00 am – 9:30 am	DTE Energy 1 MW Distributed Storage Case Study Hauk Asgeirsson – DTE Energy	
9:30 am – 10:00 am	Energy Storage: A Regulated Utility Perspective Thomas Golden – Duke Energy	
10:00 am – 10:30 am	Energy Storage Across the Grid Kevin Fok – LG Chem	
10:30 am – 11:00 am	Coffee with Networking & Poster Presentations	
11:00 am – 11:30 am	Advanced Grid Energy Storage Options Roger Lin – NEC Energy Solutions (formerly A123 Systems)	
11:30 am – 12:00 pm	Rechargeable Zinc Manganese Batteries – A Path To Sub $100/kWh Energy Storage Goal Alexander Couzis – Urban Electric Power	
12:00 pm – 12:30 pm	Liquid Metal Batteries for Grid Scale Energy Storage Phil Giudice – Ambri	
12:30 pm – 2:30 pm	Lunch with Networking & Poster Presentations	
	Session 2A	**Session 2B**
2:30 pm – 3:00 pm	System Level Modeling and Simulation of Battery Performances for Controller Design and System Integration Paul Weal – Siemens	Advanced Battery Material Developments Steve Pekarcik – BASF Battery Materials
3:00 pm – 3:30 pm	Leveraging Real-World Data to Choose the Right Battery for Your Deployment John Jung – Greensmith EMS Inc.	Challenges in Development of Lithium Ion Battery Materials for Grid Applications Dee Strand – Wildcat Discovery
3:30 pm – 4:00 pm	Predict Battery Lifetime and Optimize Performance Using Big Data Tal Sholklapper – Voltaiq	Progress Toward High Energy Solid-State Batteries Josh Garrett – Solid Power Battery
4:00 pm – 4:30 pm	Coffee with Networking & Poster Presentations	
4:30 pm – 5:00 pm	Compliance Analysis for Energy Storage Systems Zoe Jin – JCI Power Solutions	Recent Progress with Ceramic Solid Electrolytes for Advanced Battery Concepts Travis Thompson – University of Michigan

5:00 pm – 5:30 pm	Multi-Scale Modeling for Performance and Safety of Lithium Ion Batteries Srikanth Allu – Oak Ridge National Labs	New Materials and Processes for High Energy and Power Density 3-Dimensionally Mesostructured Li-Ion Batteries Paul Braun – Xerion Advanced Battery & University of Illinois Urbana Champaign
5:30 pm – 6:30 pm	NextEnergy Presentation and Facility Tours	
6:30 pm – 8:00 pm	Evening Cocktail Reception & Networking Mixer	

**Agenda subject to change without notice*

Day 2: Wednesday, October 28, 2015

8:00 am – 5:30 pm	**Registration Open**	
8:30 am – 8:55 am	Coffee with Networking & Poster Presentations	
	Session 3	
8:55 am – 9:00 am	Welcome Note/Introduction	
9:00 am – 9:30 am	Automotive Energy Storage Forecast Sam Abuelsamid – Navigant Research	
9:30 am – 10:00 am	TBA	
10:00 am – 10:30 am	Light Electrification – Market Opportunity and Architecture George Shaska – Ford	
10:30 am – 11:00 am	Coffee with Networking & Poster Presentations	
11:00 am – 11:30 am	Recent Trends in Automotive Battery Applications Oliver Gross – Fiat Chrysler Automobiles	
11:30 am – 12:00 pm	Ultrasonic Welding for Multi-layer, Thin and Dissimilar Lithium-ion Battery Tabs Wayne Cai – General Motors	
12:00 pm – 12:30 pm	In-Situ Stress Diagnosis of Si Contained Anode Xiaoguang Hao – Nissan North America	
12:30 pm – 2:30 pm	Lunch with Networking & Poster Presentations	
	Session 4A	**Session 4B**
2:30 pm – 3:00 pm	High Voltage Inverter System Solutions Raj Puttaiah – Valeo North America	Recent Developments on Low Voltage Battery Solutions Angela Duren – A123 Systems
3:00 pm – 3:30 pm	Title TBA Nick Karditsas – Bosch Battery Systems	Scaling up U.S. Battery Manufacturing: Challenges and Opportunities John Warner – Xalt Energy
3:30 pm – 4:00 pm	Coffee with Networking & Poster Presentations	
4:00 pm – 4:30 pm	EV Battery Benchmarking Scott Ellsworth – Ricardo	Unsubsidized Storage: High Throughput Production of Solid State Cells Ann Marie Sastry – Sakti3
4:30 pm – 5:00 pm	Updates in EV/Infrastructure Interoperability Rich Byczek – Intertek	Introducing Boston-Power's Next-Generation Cell for Electric Vehicles Darren Bischoff – Boston Power
5:00 pm – 5:15 pm	Closing Comments / End of Seminar	

**Agenda subject to change without notice*

Poster Presentations (more TBA)

- **Intertek** – Intertek xEV Battery Modeling & Test Capabilities – Jeff Wishart
- **Wildcat Discovery Technologies** – Challenges in Development of Lithium Ion Battery Materials for Grid Applications – Dr. Dee Strand
- **Babcock & Wilcox MEGTEC** – Coating & Drying of Battery Electrodes - Roadmap from Laboratory to Industrial Production – David Ventola

Location

Seminar
NextEnergy
461 Burroughs St.
Detroit, MI 48202 U.S.A.
NextEnergy is a proud Supporting Organization for this event

Limited rooms are reserved at the Marriott Detroit Renaissance Center hotel at a discounted rate, and will be offered on a first-come-first-serve basis. To claim this discount, please register directly at:

http://tinyurl.com/PlugVoltOct2015MarriottHotel

Pricing & Registration

May 4, 2015	Registration Opens
May 4, 2015 – August 3, 2015	Early Bird Rate: $699/day or $949 for both days
August 4, 2015 – October 26, 2015	Regular Rate: $749/day or $1049 for both days
October 27, 2015 – October 28, 2015	On-Site Rate: $799/day or $1149 for both days

- 10% group discount for 3+ attendees from the same corporation/institution (all attendees must register and pay at the same time)
- 10% discount for attendees from a government agency (copy of a valid government ID is required)
- 10% discount for attendees from an academic institution (copy of a valid academic institution ID is required)
- Contact us for additional attractive group discounts for parties of 5+ people attending from the same corporation/institution

Payments can be made via check, bank wire transfer, or electronically using any major bank credit or debit cards.

Questions?

Contact JC Soman at 1-877-PLUGVOLT or juratesoman@plugvolt.com for more details, or visit our website www.plugvolt.com

Program Outline

This seminar will carry several unbiased, in-depth technical sessions on recent materials science and R&D advancements in anodes, cathodes, electrolytes, separators, etc. Presentations will also include discussions on hottest trends and upcoming cutting-edge developments in the increasing role of software analytics in energy storage.

Complementary industry updates will be offered by subject matter experts from major multinational OEMs, Tier 1 suppliers, and battery manufacturers. Topics will cover several existing battery chemistries and their application to stationary/grid storage and automotive xEVs, along with recent advances in some lithium ion technologies,

challenges faced in bringing these batteries to a high volume production, and any specific performance requirements driven by such applications.

The seminar will also include an exclusive tour of the NextEnergy facility. NextEnergy's Microgrid Pavilion (MGP) and Alternative Fuels Platform (AFP) were originally developed to test and validate a wide variety of advanced energy products. In recent years, NextEnergy has focused its efforts on energy storage, electric vehicle (EV), smart grid, and "vehicle-to-X" interface technologies, in line with domestic interests.

NextEnergy's state-of-the-art facility features:

- Electric Vehicle Supply Equipment (EVSE) infrastructure and charging stations, including multiple Dual Bi-directional Charging Modules (DBCMs)
- NextHome, an energy efficient residential platform with DC appliances, which resides between the MGP and AFP
- Eight (8) laboratories to incubate advanced energy technologies, featuring innovative partners like Nextek Power and Qualcomm
- A state-of-the-art Atrium/Showroom and Auditorium

The tour will also highlight NextEnergy and partners' unique programs (in collaboration with DTE Energy, the Department of Energy, Department of Defense, and leading automotive OEMs to name a few) such as:

- Ongoing testing and validation enabling the use of intelligent "V2X" systems, including: vehicle-to-grid (V2G), vehicle-to-vehicle (V2V), vehicle-to-infrastructure (V2I) and vehicle-to-home (V2H) technologies and platforms
- A Community Energy Storage project looking at the impact of grid-tied multiple 25 kW (50 kWh) CES units and a 500 kW lithium ion battery, including secondary use batteries and photovoltaics, on a MISO circuit. The CES aims to demonstrate utility distributed generation benefits utilizing energy storage such as: peak shaving, demand response, voltage/VAR support, emergency load relief; integration of renewable generation without intermittency; and islanding during outages

Seminar Registration Form

Please fill out the paper form below, or register online electronically at address:

http://tinyurl.com/PlugVoltOct2015Seminar

Organization	
Title	
First Name	
Last Name	
Street	
City	
State	
Country	
Zip	
Phone	
Fax	
E-mail	
Where did you hear about this seminar?	

Select preferred payment method:

- ☐ Wire transfer
- ☐ Check
- ☐ Credit card

Please forward an electronic copy of the completed registration form to JC Soman at juratesoman@plugvolt.com

Payments can be made via check, bank wire transfer, or electronically using any major bank credit or debit cards. All checks should be made payable to PlugVolt LLC.

Payment details will be sent upon receipt of completed registration form.

Questions?

Contact JC Soman at 1-877-PLUGVOLT or juratesoman@plugvolt.com for more details, or visit our website www.plugvolt.com

Supporting Organizations and Media Partners