

Northeastern University & Sandia National Laboratories



Renewable Energy Storage Symposium

Enabling New Novel
Large Scale Energy
Storage Solutions for
Future Green Energy
Initiatives

August 13-14, 2013
Northeastern
University
Boston, MA USA



Northeastern University



Sandia
National
Laboratories

NUCRET

Northeastern University Center for
Renewable Energy Technology



KNOWLEDGE FOUNDATION
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Symposium Overview

Globally, the use of traditional sources of energy have come under increased pressure for reform due to tighter competition for traditional resources and increasing evidence of climate change. Towards the goal of lowering our carbon footprint and indigenizing our resource base there exists a significant gap in our ability to store large amounts of energy in a safe and viable fashion. This symposium constitutes a continuing conversation with key leaders in government, industry and academia on what solutions exist and timelines for their adoption.

This two-day symposium will focus on the science, technology, policy and entrepreneurial challenges in

enabling new novel energy storage solutions for the future green energy initiatives.

Government leaders, entrepreneurs and front-line researchers will share their experiences and present solutions for enabling these technologies to become commercially viable.

This meeting is jointly sponsored by Sandia National Laboratory and College of Science and Department of Chemistry and Chemical Biology at Northeastern University. This event is managed by the Knowledge Foundation.

About Northeastern University Center for Renewable Energy Technology (NUCRET)

Northeastern University Center for Renewable Energy Technology (NUCRET), established in 2009, aims to further research and education at Northeastern University; dedicated to the mission of advancing our knowledge and practice of technologies as applied to efficient renewable energy conversion and storage.

This meeting is in line with these objectives to enable students, researchers and lay people to interact with frontline people in the field of energy storage. This two day symposium will be highlighted throughout the campus and local community.



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Call for Exhibitors & Sponsors

SPONSORSHIP AND EXHIBIT OPPORTUNITIES

Attendees at this event represent the very top industry, government and academic researchers from around the world and provide an extremely targeted and well-qualified audience for exhibitors and sponsors. Your participation as an exhibitor or sponsor is the most cost effective way to gain high quality, focused exposure to these industry leaders. Among other benefits, sponsorship packages include your logo on marketing materials to promote your participation and expose your company to 10's of thousands of prospects prior to the program - in addition to the highly targeted audience we deliver at the event itself.

CONFERENCE SPONSORSHIPS

A variety of conference sponsorships are available which offer incremental levels of visibility to conference delegates at the event — as well as opportunities for marketing exposure prior to the event. Taking advantage of pre-conference options has the added benefit of getting your organization's name out to a large group of interested decision makers.

NETWORKING EVENT SPONSORSHIPS

These "mini" sponsorships offer representatives of your organization a dedicated opportunity to network with conference delegates — with your organization clearly recognized as the host of the event.

- Cocktail Receptions
- Dinner Banquets
- Luncheons
- Hospitality Suites

WORKSHOP SPONSORSHIPS

Your company may sponsor an instructional workshop (subject to approval) for delegates in conjunction with the conference. Highlight your organization's expertise! Delegate feedback indicates that these scientific/technical vehicles enhance retention of your organization's presence in their minds — increasing the potential for drawing customers long after the conference is over. Call Dave Garcia at (617) 232-7400 ext. 204 or email dgarcia@knowledgefoundation.com today for pricing information and customization options.

LIVE WEBCAST & CONFERENCE DOCUMENTATION AVAILABLE

Nothing can substitute the benefits derived from attending **Lithium Battery Power 2012**. But if your schedule prevents you from attending, this invaluable resource is available to you. *Note: Documentation is included with conference fee for registered delegates and live and on demand webcasts are available for download.*



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Symposium Agenda

Tuesday, August 13, 2013

Room 105, Shillman Hall,
Northeastern University

8:00 *Registration, Exhibit/Poster Setup,
Coffee & Pastries*

8:45 **Opening Remarks**
*Prof. Steven Director, Provost,
Northeastern University*

9:00 **Summit Keynote**
Senator Ed Markey (D) MA (Tentative)

ENERGY CHALLENGES & INCLUSIVE GROWTH

9:45 *Refreshment Break*

10:00 **Science Policy for Green Energy and
Climate Change**
*Prof. John Holdren, Director,
Office of Science and Technology Policy,
White House*

11:00 **Department of Energy Initiatives for
Large Scale Energy Storage**
Dr. Imre Gyuk, U.S. Department of Energy

12:00 *Lunch Break*

1:30 **University of Southern California**
*Prof. Srinivas Narayanan,
University of Southern California*

2:15 **Case Western University**
*Prof. Robert Savinell, Case Western Reserve
University, Cleveland, OH*

3:00 **A123 Systems - New Frontiers in Power,
Safety & Life**
*Dr. Mujeeb Ijaz, PhD, Chief Technology
Officer, A123 Systems, LLC*

3:45 *Refreshment Break*

4:00 **Ambri's Liquid Metal Battery: A New
Storage Solution**
Dr. Phil Giudice, CEO, Ambri, Inc.

4:45 *End of Day One*





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Symposium Agenda

Wednesday, August 14, 2013

Room 105, Shillman Hall,
Northeastern University

8:00 *Exhibit/Poster Viewing, Coffee & Pastries*

8:45 **Opening Remarks**

*Prof. Sanjeev Mukerjee, Director, NUCRET,
Northeastern University*

9:00 **In situ TEM Spectroscopy of
Li Intercalation**

Dr. John Sullivan, Sandia National Laboratory

9:45 **Metal ligand Ionic Liquids for Flow
through Batteries**

*Dr. Travis Anderson,
Sandia National Laboratory*

10:00 *Refreshment Break*

10:45 **Battery innovation Hub Activities at
Sandia National Laboratory**

*Dr. Kevin Zavadil,
Sandia National Laboratory*

11:30 **Latest Advances in Nitrogen Oxygen
Storage Systems**

*Dr. Karen Waldrip,
Sandia National Laboratory*

12:00 *Lunch Break*

2:00 **Abuse Testing of Batteries**

Dr. Kyle Fenton, Sandia National Laboratory

2:45 **University of Kansas**

Prof. Trung V. Nguyen, University of Kansas

3:30 **United Technologies**

*Dr. Michael Perry, United Technologies
(Tentative)*

3:45 *Refreshment Break*

4:00 **Open Discussion & Symposium
Conclusions**

*Moderator: Prof. Sanjeev Mukerjee, Director,
NUCRET, Northeastern University*

5:00 *End of Symposium*





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REGISTRATION FORM

3040RESS13 ONLINE

Please register me for	Member	Non-Member
<input type="checkbox"/> 2 Day Commercial (August 13-14, 2013)	<input type="checkbox"/> \$424	<input type="checkbox"/> \$499
<input type="checkbox"/> 2 Day Academic/Gov. (August 13-14, 2013)*	<input type="checkbox"/> \$339*	<input type="checkbox"/> \$399*
<input type="checkbox"/> Poster Space Reservation	<input type="checkbox"/> \$59	<input type="checkbox"/> \$59

Become a member of the Alliance & take 15% off your registration fee

- I would like to become a member of the Knowledge Foundation Technology Commercialization Alliance:
 - \$229/yr Individual Commercial Member \$49/yr Individual Student Member
 - \$169/yr Individual Government/Academic Member
- I cannot attend, but please send the conference documentation.
 - Enclosed is my check for \$99. Invoice Me
 - Enclosed is a check/bank draft for US\$_____

- Invoice me Charge my Credit Card: VISA MC AMEX in the amount of US\$_____

Card #: _____ Exp.: _____

- Please send me information on exhibit and sponsorship opportunities.

Name: _____

Job Title: _____

Organization: _____

Division: _____

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Tel: _____ Fax: _____

Email: _____

*The academic/government rate is extended to all participants registering as full time employees of government and universities. To receive the academic/government rate you must not be affiliated with any private organizations either as consultants or owners or part owners of businesses.

FAX, MAIL, CALL, E-MAIL TO:

The Knowledge Foundation, Inc.
2193 Commonwealth Ave. #398
Boston, MA 02135 USA
Tel: (617) 232-7400
Fax: (617) 232-9171
E-Mail: custserv@knowledgefoundation.com

Payment: All payments must be made in U.S. funds drawn on a U.S. bank. Please make check(s) payable to The Knowledge Foundation, Inc. and attach to the registration form even if you have registered by phone, fax or e-mail. To guarantee your registration, payment must be received prior to the conference. Confirmation of your booking will follow.

Substitutions/Cancellations: A substitute member of your company may replace your attendance at any time at no charge if you find your schedule prevents you from attending. Please notify us immediately so that materials can be prepared. If you do not wish to substitute your registration, we regret that your cancellation will be subject to a \$100 processing fee. To receive a prompt refund, we must receive your cancellation in writing 30 days prior to the conference. Unfortunately cancellations cannot be accepted after that date. In the event that Knowledge Foundation cancels an event, The Knowledge Foundation cannot resume responsibility for any travel-related costs.

Unable to Attend?

You can purchase a full set of conference documentation. Simply check the box on the registration form and send it to us along with your payment. Please allow 4 weeks after the conference date for delivery.