



The 7th Annual University of Pittsburgh <u>Electric Power Industry Conference</u> November 12 and 13, 2012 – Pittsburgh Athletic Association, Pittsburgh PA

"The Power to Innovate: Shining a Light on Clean Energy Solutions and Grid Integration"

Conference Chair: Gregory Reed, PhD

Director, Electric Power Initiative and Associate Director, Center for Energy

Swanson School of Engineering, University of Pittsburgh

Keynote Speaker: John A. Swanson, PhD

Founder, ANSYS Inc.

Evening Session

Guest Speaker: C.D. (Dan) Mote, Jr., PhD

Former President and Regents Professor, University of Maryland Nominee for President of the National Academy of Engineering

CONFERENCE SCHEDULE AND PROGRAM

MONDAY NOVEMBER 12th - MORNING SESSIONS - Pennsylvania Room

9:00 AM Registration and Networking

10:00 AM Welcome and Opening Remarks

Gerald Holder, PhD - Dean, Swanson School of Engineering, University of Pittsburgh

10:10 AM Keynote Address:

John A. Swanson, PhD – Founder, ANSYS Inc.

Topic: "Solar Energy Today"

11:00 AM Panel Session

Title: Power System Modeling and Analysis Developments for Clean Energy Integration Moderator: Tom McDermott, PhD – Asst. Professor, Swanson School of Engineering

The panel - consisting of leaders from industry, government, and academia - will discuss the trends and new developments in association with modeling and analysis of power systems in relation to clean energy integration challenges.

Panelists:

Brian Gemmell, PhD – General Manager, Power Technologies International, Siemens Energy

Marius Rosu, PhD - Manager, Electromechanical Product Line, ANSYS

Donald Shoup, PE – Manager, Power System Engineering Services, Mitsubishi Electric Stephen Zitney, PhD – Director, AVESTAR, DOE National Energy Technology Lab (NETL)

12:30 PM Luncheon – Schenley Lounge / Pennsylvania Room





MONDAY NOVEMBER 12th - AFTERNOON SESSIONS – Pennsylvania Room and Library

1:30 PM Technical Program – Invited Presentations

Title: Electric Power Industry Strategies for Addressing the Challenges of Grid Planning and Operations for Clean Energy Integration

The technical program will feature invited presentations on advanced developments and emerging applications from several of the world's leading electric power technology suppliers, project developers, electric utilities, and academic researchers.

Session A – Pennsylvania Room

Chair – Zhi-Hong Mao, PhD – Assoc. Professor, Dept. of Electrical & Computer Engineering, Swanson School of Engineering

Dan Carnovale – Manager, Power Systems Experience Center, Eaton Corp.

Jason Black, PhD — Research Director, Energy Systems, Battelle Memorial Institute

Ken Loparo, PhD – Nord Professor of Engineering, Great Lakes Energy Institute,

Case Western Reserve University

Steve Mankevich - Chief R&D Engineering, GE Energy Power Conversion

Open Discussion – Impacts of Super Storm Sandy on Power Grid Infrastructure

Session B - Library

Chair – Ervin Sejdic, PhD – Assistant Professor, Dept. of Electrical & Computer Engineering, Swanson School of Engineering

David Roop – Director, Electric Transmission Operations, Dominion Virginia Power Wayne Galli, PhD – Vice President, Transmission Services, Clean Line Energy Partners

John Daniel – Senior Principal Consultant, ABB Inc.

Bruce Campbell – Engineering Manager, Advanced Power System Technologies, Eaton Corp.

Open Discussion — Impacts of Super Storm Sandy on Power Grid Infrastructure

4:00 PM Graduate Student Research Symposium and Poster Session

University of Pittsburgh Electric Power Initiative Research Group Students and NETL-RUA Partner Universities

GSR Posters and Paper Presentations:

Graduate students will highlight recent research work, including various poster topics and brief presentations on the following specific titles:

- Ship to Grid: Medium Voltage DC Concepts in Theory and Practice
 (Brandon Grainger, Adam Sparacino, Matthew Korytowski, Shimeng Huang)
- Energy Conversion Trends: High Frequency System Operation and Economic Impacts (Emmanuel Taylor, Raghav Khanna, Ansel Barchowsky, Rusty Scioscia)
- Electric Grid Design, Take Two: Next Generation Grid Network Controls, Power Converters, and Renewable Energy Supply

(Hashim Al Hassan, Patrick Lewis, Alvaro Cardoza, Benoit DeCourreges)





MONDAY NOVEMBER 12th - EVENING SESSIONS

Student-Industry Networking Event

6:00 PM Evening Session Guest Speaker – Pennsylvania Room

C. D. (Dan) Mote, Jr., PhD

Former President and Regents Professor, University of Maryland; Nominee for President of the National Academy of Engineering

~ 7:00 PM – Networking Reception and Industry Exhibits – Main Ballroom

An evening social event bringing together Pitt students studying in the electric power and energy fields with participating industry organizations, as well as business-to-business contacts among the industry participants. The evening session provides networking and information exchange opportunities focused in the electric power and energy sector.



Past Conference Student-Industry Networking Event Attendees





TUESDAY NOVEMBER 13th - MORNING SESSIONS

Workshop Series

8:45 AM Review of Day 2 Workshops and Re-cap from Day 1 Sessions – Pennsylvania Room

9:00 AM Workshop Sessions A

A-1) National Academy of Sciences and Engineering (NAS/NAE) Energy Ambassador Program

Location: **Library**Session Moderators:

Emmanuel Taylor – Energy Ambassador Program Representative

and Pitt Graduate Student Researcher

Barbara Kline Pope - Executive Director for the Office of Communications and the

National Academies Press

The National Academies of Science, Engineering, and Medicine

A-2) Technology Regional Innovation Cluster (T-RIC) Program

Location: **Patriarch** Session Moderator:

Petra Mitchell - President and CEO, Catalyst Connection

10:00 AM Workshop Sessions B

B-1) APRA-E Solar ADEPT Program Project

Location: **Library**Session Moderators:

Brandon Grainger – Pitt Graduate Student Researcher Alex Leary – CMU Graduate Student Researcher

B-2) DOE-414 National Offshore Wind Energy Grid Interconnection Project

Location: **Patriarch**Session Moderators:

John Daniel – Senior Principal Consultant, ABB Inc. Hashim Al Hassan – Pitt Graduate Student Researcher





11:00 AM Workshop Sessions C

C-1) DOE NETL Regional University Alliance (RUA) Grid Technologies Collaborative

Location: **Library**Session Moderators:

Wayne Honath - Director of GTC Program Development and Industry Relations,

University Energy Partnership

Steven Bossart - Lead Energy Analyst, Project Management Center,

DOE National Energy Technology Lab (NETL)

C-2) DOE-152 Workforce Training – Keystone Smart Grid Fellows Program

Location: **Patriarch**Session Moderators:

Matthew Korytowski and Rusty Scioscia – Pitt Graduate Student Researchers

12:15 PM Lunch and Closing Remarks – Pennsylvania Room / Schenley Lounge

1:00 PM Adjourn