



American Institute of Chemical Engineers

# *The Western Palmetto Informer*

February 2017

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## Contact Information

Visit our website:  
[www.aiche.org/wsc](http://www.aiche.org/wsc)

E-Mail us at:  
[sec@wscaiche.org](mailto:sec@wscaiche.org)

## February 14<sup>th</sup>, 2017 - Energy Storage for Renewable Energy

This month's WSCAIChE meeting will feature a presentation by Clemson Professor Mark Roberts. Following last month's presentation that dealt with the merits of different electrical energy sources, Professor Roberts will present on the energy storage technologies required to make renewable energy sources viable.

**Abstract:** As renewable energy becomes increasingly utilized by modern society, functional polymers are being designed to interface with various materials to address fundamental challenges facing energy storage and sensors, and enable new research directions, such as responsive electrochemical systems. Dr. Roberts will discuss the concepts of:

- 1) Developing polymer-carbon composites for electrochemical capacitors (super capacitors)
- 2) Tailoring the electrochemical properties of conducting polymers and guiding their assembly into three-dimensional films with defined nanostructure
- 3) Understanding how molecular structure and functionality influence electrochemical and thermal properties of responsive polymer electrolytes

**Bio:** Mark Roberts, Ph.D. is an Associate Professor of Chemical and Biomolecular Engineering and Graduate Coordinator at Clemson University. At the university, his research interests include electroactive polymers, thermoresponsive polymers, electrical energy storage, and chemical sensors. Mark earned his Chemical Engineering Ph.D. at Stanford University in 2009, a M.S. degree from Stanford University in 2005, and a B.S. degree from Montana State University - Bozeman in 2002.

## January Meeting Thank-You

WSCAICHe would like to thank Dr. H.L. (Lee) Dodds for stopping in Greenville to present on the benefits and drawbacks of various electrical power generation options, and food for thought on the merits of nuclear power sources. We are also grateful to CH2M for allowing our group to use their well-appointed conference room.

## WSCAICHe February Meeting Information

<b>TITLE:</b>	Energy Storage for Renewable Energy
<b>DATE:</b>	Tuesday, February 14 <sup>th</sup> , 2017
<b>TIME:</b>	6:00 PM Social 6:30 PM Dinner 7:00 PM Presentation
<b>LOCATION:</b>	CH2M Offices 200 Verdae Blvd. Greenville, SC 29607 (864) 920-7300
<b>DIRECTIONS:</b>	Take I-385 Exit 37 (Roper Mountain Rd.) From I-385 S: Turn right on Roper Mountain Rd From I-385 N: Turn left on Roper Mountain Rd Continue straight past Woodruff Rd onto Verdae Blvd. Go past Embassy Suites to the 2 <sup>nd</sup> light and turn left into the CH2M parking lot Enter Lobby - Meeting room is on the left
<b>DINNER COST:</b>	\$5 for WSCAICHe members \$10 for Non-members

**To guarantee dinner, RSVP by 5 PM - Monday, February 13, 2017 to: WSCAICHe Secretary - [sec@wscaiche.org](mailto:sec@wscaiche.org)**

The dinner portion of the meeting is not mandatory. Plan to arrive by 7:00 pm if you would like to attend the presentation without dinner. Both the dinner and meeting are open to all interested people - no AICHe membership is required!

**Only RSVP if you plan to dine with us.**

February 2017

## 2016-2017 Calendar of Events

DATE	LOCATION	TOPIC
13 Sept 2016	CH2M	Project Management - John Brady, CH2M
11 Oct 2016	Clemson University Madren Center	Panel Discussion on Chemical Engineering Careers
15 Nov 2016	Michelin Conference Center	ACS Joint Meeting: Powering the Next Generation of Robotic Space Exploration - Erik Brandon, NASA JPL
Dec 2016	None	Happy Holidays!
10 Jan 2017	CH2M	Energy Choices and Consequences - Prof. H.L. (Lee) Dodds, Univ. of Tennessee
14 Feb 2017	CH2M	Energy Storage for Renewable Energy - Mark Roberts, Ph.D. Clemson University
14 Mar 2017	CH2M	Chemical Process Equipment - RE Mason
11 Apr 2017	Shaw Industries Central, SC	Plant Tour - Shaw Industries
09 May 2017	TBD	WSCAICHe May Social

## 2016-2017 Officers and Executive Committee

This is YOUR local section of the American Institute of Chemical Engineers. If you have ideas or concerns regarding operation of the WSCAIChE, or if you are a member who would like to help out, please contact any of the Officers or Executive Committee members listed below:

POSITION	NAME	COMPANY	E-MAIL
Chair	Jacob Lindler	aeSolutions	jllindler@yahoo.com
Vice-Chair	Marty Milne	PinPoint Solutions	martymilne@gmail.com
Secretary	VACANT		
Treasurer	Rick Vogel	Fulcrum BioEnergy	rvogel1@hotmail.com
Webmaster	VACANT		
Historian	David Hine	Fujifilm	dhine@fujifilm.com
Former Chair	Mary Ferris	Michelin	maryferris@charter.net
Executive Committee	Don Gurney	Retired	degurney@charter.net
	Karl McCaleb	Mitsubishi	kmccaleb2@bellsouth.net

## Clemson Scholarship Support to Continue

The Executive Committee has again agreed to support a single student enrolled in Clemson's Chemical and Biomolecular Engineering program with a \$1,000 scholarship. The scholarship is open to all ChBE students who will be graduating between August 2017 and May 2018.

Come to the February meeting for the scholarship presentation to the winning Clemson student!