



The Western Palmetto Informer

American Institute of Chemical Engineers

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Contact Information

Visit our website:

<http://wsc.aiche.org>

Email us at:

sec@wscaiche.org

NEXT MEETING - October 8, 2013

Facility Energy Management at Clemson University

This presentation and tour will review major plant systems used to operate and control the Central Energy Facility (CEF) facility at Clemson University. Clemson University owns and operates a “municipal” scale utility infrastructure that serves over 80 major campus buildings with medium voltage electrical distribution system, water distribution, sanitary and storm water services. Additionally, the Utility Department operates institutional central steam and chilled water plant systems that serve heating and air conditioning needs for most of the main campus.

The Central Energy Facility (CEF), located between the stadium and Tillman Hall, is a major part of the University’s institutional utility system. The original CEF was originally constructed in 1948. Currently, it houses three boilers, three operational centrifugal chillers, two natural gas fired combustion turbines for parallel electrical generation, electrical equipment and the plant control room.

This presentation will be made by Tony Putnam, Director of Utility Services at Clemson University. Tony’s department supports utilities and energy services for the 6.2 million square-foot campus and research facilities. They are specifically responsible for energy management, electrical distribution, energy plant operations, water distribution and waste water treatment plant operations.

Tony fosters academic and research opportunities at the university through corporate partnerships and internal collaboration to achieve the world’s foremost system of energy production, distribution, and conservation. These progressive energy management strategies and major utility system improvements planned through 2020 are expected to serve as a model for research and sustainability education.

Prior to joining Clemson University, Tony was plant engineer and senior department manager in facilities at the Medical College of Georgia (now part of Georgia Regents University) and senior system engineer at Carolina Power and Light Company (now Progress Energy).

OCTOBER Meeting Information

TITLE: Clemson University Utility Systems - Central Energy Facility

DATE: Tuesday, October 8, 2013

TIME/PLACE: In Clemson's University Earle Hall
(ChemE. Bldg. on Fort Hill St.)
6:00 PM Social and Barbeque Dinner
7:00 PM Presentation
7:30 PM Tour the Clemson Utility Plant
Start at Dillard Bldg at Klugh Ave ATMs

DIRECTIONS: I85 south to exit 19B
North on SC28/US76
10 miles then TURN LEFT onto Perimeter Road
1.6 miles then TURN RIGHT onto Williamson Road
(toward east end of stadium)
0.4 miles then TURN RIGHT onto Fort Hill St.
Earle Hall is on right. Park on roadside.

COST: \$5 for Members
\$10 for Non-members
Free to Attend Presentation Only

**Please reply by Noon - Friday, October 4th, 2013 to
Secretary - Conny Walker at sec@wscaiche.org**

Save the Date! November 12, 2013 - The Tweel

Tim Rhyne of Michelin Research and Development Center in Greenville, SC will speak on the subject of the Tweel, a unique invention that although it has not yet succeeded in the market place continues to come under reevaluation. Recent interest in "continued mobility" has prompted discussion on a new generation of hybrid solutions that combine a pneumatic tire and a means to provide some limited ability to continue to operate after a loss of inflation pressure.

This talk will examine the pneumatic tire and the critical characteristics that made it so successful. The Tweel, meaning the integration of the tire and wheel, is a structural wheel design that mimics the mechanics of the pneumatic tire. So, save the date and plan to join us for dinner at the Hilton, Greenville, SC.

2013-2014 Upcoming Events

DATE	LOCATION	TOPIC
8 Oct 2013	Clemson Earle Hall (Chem. Eng. Bldg.) and Utility Plant	Mr. Tony Putnam - Talk and Tour Clemson University Utility System's Central Energy Facility
12 Nov 2013	Greenville Hilton	Mr. Tim Rhyne, Michelin - Michelin's Newest Technology "Tweel"
14 Jan 2014	Greenville Hilton	Mr. Kendall Oliphant, Horsehead Metal Products, Inc.
11 Feb 2014	Greenville Hilton	TBA - Clemson University Provided Speaker
11 Mar 2014	FUJIFILM Greenwood, SC	Plant tour - FUJIFILM Water Recycling System
Mar 2014	Carolina First Center	Science Fair Judging for the Greenville County Science Fair
08 Apr 2014	ASHLAND, INC. Piedmont, SC	Plant tour - ASHLAND
May 2014	TBD	Family Social

Clemson Scholarship Support to Continue

The Executive Committee has again agreed to support Clemson's Chemical and Biomolecular Engineering program with a \$1,000 scholarship. The application is attached to this newsletter.

Science & Engineering Fair Support Continues

Our section will continue to assist in judging student projects and providing monetary awards at the South Carolina Regional Science & Engineering Fair in 2014. Please contact Conny Walker, at sec@wscaiche.org if your company is interested in sponsoring judges or special awards for this endeavor.

2013-2014 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're a member with a desire to serve, please contact any of the Officers or Executive Committee members listed below.

POSITION	NAME	EMAIL	PHONE
Chair	Rick Vogel	rvogel1@hotmail.com	864-420-5777
Vice-Chair	Mary Ferris	MaryFerris@charter.net	864-498-3436
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Webmaster	Eugene Gill	eugene@eugenegill.com	864-281-8627
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ECM*	Don Gurney	degurney@charter.net	864-879-7935
	Mike Thompson	mike.thompson@fluor.com	864-281-6791
	Jeremiah Batiste	Jeremiah.Batiste@fluor.com	864-281-4568

(* Executive Committee Member)

WESTERN SOUTH CAROLINA AIChE SECTION SCHOLARSHIP

The Western South Carolina Section of the American Institute of Chemical Engineers is pleased to support the Chemical and Biomolecular Engineering program at Clemson University by offering a \$1,000 scholarship. This scholarship is to be awarded to a returning Chemical and Biomolecular Engineering student with a projected graduation date between August 2014 and May 2015.

The \$1,000 award will be presented at the joint meeting between the Clemson Student Chapter and the Western South Carolina AIChE Section on February 11, 2014.

Applications are available at <http://wsc.aiche.org>. Completed applications are due to the Western South Carolina AIChE Section Secretary at sec@wscaiche.org by noon on January 19, 2013, in PDF or Word format. The Secretary will email reply receipt of application.

Name of Student: _____

Student email address: _____ Phone: _____

Student ID # _____ AIChE Student Chapter Member? Yes _____ No _____

Expected Graduation Date: _____

Chemical Engineering Courses Completed	Semester Course was completed	Credits	Grade
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Calculate the average of *only the courses listed above* to determine your chemical engineering GPA: _____

List extracurricular activities and describe special duties (e.g., offices held, etc.)

Attach two written essays (250 words maximum per essay, typed):

1) Describe your career goals as a chemical engineer.

2) Describe (in words that a freshman engineering student could understand) what a practicing chemical engineer does.