



The Western Palmetto Informer

American Institute of Chemical Engineers

November 2011

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Contact Information

Visit our website:

<http://wsc.aiche.org>

Email us at:

sec@wscaiche.org

October Meeting Thank You

WSCAIChE would like to extend a thank you to Lewis Lee Rich for the excellent discussion on Fulcrum BioEnergy's process for converting garbage to ethanol.

NEXT MEETING

November Meeting: "A Template-based Approach to Asset Reliability for Preventive Maintenance"

There is extensive experience in many industries showing that Preventive Maintenance (PM) programs developed on the basis of OEM requirements span the range from overbearing to deficient, typically lack a sound technical basis and are hard to maintain. Reliability Centered Maintenance (RCM) has taught us that an adequate technical basis requires a functional analysis to establish the need for PM and a Failure Mode Analysis (FMEA) to decide what PM actions to take. However, apart from fleet applications or strongly focused efforts that are limited in scope, RCM in its traditional form has proven to be too resource intensive to be sustainable in most industrial environments. This talk will explain the rationale behind the PM Template approach, which was developed during the period 1985-1995 by the nuclear power industry to overcome precisely these problems. It will describe how overcoming the problems of RCM lead to the project planning, workflow, and resource requirements that constitute a PM Template methodology. This approach has been successfully applied in most industries because it is based on RCM, produces RCM-quality results, is more efficient, and in particular, requires much less time from plant personnel. A brief example will be shown in a software demonstration.

Mark S. Benak, CEO, Asset Performance Technologies, Inc. is a technologist, entrepreneur, and angel investor with over 23 years experience in engineering, business development and company building. In addition to his current duties at APT, he also serves as Board Chairman for Incitor, Inc., a novel developer of synthetic enzymes for algal and biofuels. Previously, Mark completed consulting projects through his own company Southwest Solutions House LLC in the areas of economic development in New Mexico, business management, recruiting and retention, and market validation for new medical technologies. Prior to Southwest, Mark was part of a team that founded and operated InLight Solutions, Inc., an Albuquerque based medical technology startup whose mission is to provide optical solutions for life sciences applications. Before InLight, Mark was a staff scientist with the institute for fluid mechanics (LSTM) at the University of Erlangen-Nuernberg. Prior to LSTM, Mark was a research engineer with Daimler-Benz AG in Germany. Mark received his B.S. and M.S. degrees from Stanford University in Mechanical Engineering.

November MEETING SUMMARY

TITLE: "A Template-based Approach to Asset Reliability for Preventive Maintenance"

DATE: Tuesday, November 8, 2011

TIME: 6:00 PM Social
6:30 PM Dinner
7:00 PM Presentation

LOCATION: **Hilton, Greenville**
45 West Orchard Park Drive
Greenville, SC 29615-3548

DIRECTIONS: I-385 @ Haywood Road Exit #39

COST: \$10 for Members
\$15 for Non-members
Free to Attend Presentation Only

Please reply to Secretary Alan Vibber at sec@wscaiche.org by Friday, November 4th, 2011.

Note that the dinner portion of the meeting is not mandatory. Arrive by 7:00 pm if you want to attend the presentation without dinner.

Only RSVP if you plan to dine with us.

2011-2012 Calendar of Events

DATE	LOCATION	TOPIC
8 Nov 2011	Hilton	Mark S. Benak - Preventative Maintenance Software **Joint meeting with The Association for Operations Management (APICS)**
10 Jan 2012	Trane Carolinas Office - 288 Fairforest Way, Greenville	Joe Cain - HVAC Pump / Chiller Equipment and Controls
21 Feb 2012	Hilton	TBA - Clemson University Provided Speaker
13 Mar 2012	Hilton	Robbie Hilton - Solar Industry
Mar 2012	Carolina First Center	Science Fair Judging for the Greenville County Science Fair
10 Apr 2012	TBA	Plant Tour
May 2012	TBA	Social

Active participation in professional societies as well attending our professional and technical presentations count towards Continuing Professional Competency requirements for Licensed Professional Engineers. Upon request, the Section Secretary can provide attendance verifications for this purpose to our members.

Annual WSCAICHe's \$1000 Clemson Scholarship

Calling all you Clemson Chemical Engineering Seniors and Juniors with projected graduations between August 2012 and May 2013. Fill out the attached scholarship form and email it the section secretary by midnight January 28th to apply for the WSCAICHe \$1000 Clemson Chemical Engineer Scholarship. The award presentation will be made during the February 14th Meeting.

Attached to this month's newsletter is the Clemson Scholarship Application. Instructions can be found on the application form.

2011-2012 Officers and Executive Committee

POSITION			
POSITION	NAME	EMAIL	PHONE
Chair	Don Gurney	degurney@charter.net	864-879-7935
Vice-Chair	Karl McCaleb	kmccaleb@bellsouth.net	843-858-1182
Secretary	Alan Vibber	sec@wscaiche.org	864-554-3906
Treasurer	Mike Thompson	michael.thompson@dayzim.com	N/A
Webmaster	Eugene Gill	eugene@eugenegill.com	864- 281-8627
Historian	David Hine	dhine@fujifilm.com	864-993-8235
Former Chair	Rick Vogel	rvogel1@hotmail.com	864-420-5777
Executive Committee	TBD	TBD	TBD
Executive Committee	TBD	TBD	TBD

WESTERN SOUTH CAROLINA AICHE SECTION SCHOLARSHIP

The Western South Carolina Section of the American Institute of Chemical Engineers is pleased to support the Chemical Engineering program at Clemson University by offering a \$1,000 scholarship. This scholarship is to be awarded to a returning Chemical Engineering student with a projected graduation date between August 2012 and May 2013

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 14, 2012.

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 midnight on January 28, 2012, 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.