



# UNIT OPERATIONS

OFFICIAL NEWSLETTER OF THE AKRON SECTION AICHE



*December 2001*

## DECEMBER MEETING

### JOINT ACS/AICHE MEETING

#### "Hurricane Forecasting at the National Weather Service"

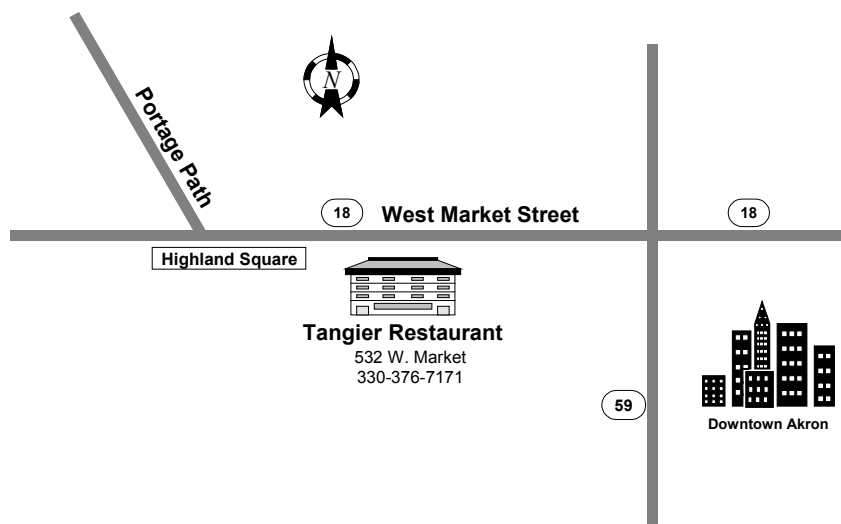
<b>DATE</b>	<b>Thursday, December 13, 2001</b>
<b>LOCATION</b>	Tangiers Restaurant (See map below) 532 West Market Street Akron, OH 330-376-7171
<b>SPEAKER</b>	<b>John Guiney of the National Weather Service</b>
<b>SCHEDULE</b>	5:15 Social 6:00 Dinner 7:00 Presentation
<b>COST</b>	\$14 per member; \$7.00 for students
<b>RSVP</b>	Ann Bolek Phone 330-972-6264, FAX 330-972-7033 or <a href="mailto:bolek@uakron.edu">bolek@uakron.edu</a> <b>By Monday, December 10th</b>

Below is the bio and attached is the abstract for the December meeting.

John Guiney is currently the Chief of Meteorological Services for the Eastern Region of the National Weather Service. Prior to his current position, John was a Hurricane Specialist and Warning Coordination Meteorologist at the National Hurricane Center in Miami, Florida. John earned his B.S. in Meteorology from the State University of New York at Oswego and a M.S. in Fluid Dynamics from New York University. He is also a graduate of Harvard University's John F. Kennedy School of Government Senior Executive Fellows program. John has presented invited papers on hurricanes at national and international conferences, workshops, scientific meetings, and public lectures. He has served as a scientific advisor for the Museum of Discovery and Science in Fort Lauderdale, Florida and a subject matter expert for the National Red Cross Children's Hurricane Safety Curriculum. He also has been an Instructor for the United Nations-sponsored World Meteorological Organization Course on Tropical Meteorology and Tropical Cyclone Forecasting. John has given hurricane preparedness talks to organizations around the country. He has provided numerous interviews on hurricanes with the local and national electronic and print media. John current resides in Holbrook, New York.

**NEWSLETTER GOES ELECTRONIC** In the interest of saving postage and streamlining the distribution process, the Akron Section of AICHE will be distributing its monthly newsletter electronically to its members. For a while we will distribute the newsletter in both electronic and paper form. The Newsletter will be sent as a Microsoft Word document and in PDF format. We have email addresses for most of the members through the AICHE National registration. Please do your part and notify us when your email address changes. Send changes of addresses to the Newsletter Editor [tom.j.flynn@mcdermott.com](mailto:tom.j.flynn@mcdermott.com) or call at 330-829-7622.

# DECEMBER MEETING



## LOCAL SECTION SCHEDULE FOR 2001/2002

<i>DATE</i>	<i>TOPIC</i>	<i>LOCATION</i>	<i>SPEAKER</i>
December 13, 2001	Joint AIChE/ACS Meeting – Hurricane Forecasting	Tangiers Restaurant - Akron	John Guiney of the National Weather Service
January 2002	TBD	TBD	
February 21, 2002	Engineers' Week Banquet	Emidios Party Center	
March 2002	TBD	TBD	TBD
April 2002	Student Night	TBD	University of Akron Seniors
July 2002	Cleveland Indians Game	Jacobs Field	
August 2002	Cleveland Indians Game	Jacobs Field	

### **JOB Opportunity:**

Seeking an experienced process engineer with laundry care experience for a management position in R&D. The candidate should have experience in both dry and liquid laundry processes, strong leadership experience and management skills.

Work Experience: (This is the most important criterion.) It is expected the candidate will have a minimum of at least 15 years experience in R&D with at least 10 years experience in laundry detergent (both dry and liquid) processes. The candidate should have at least 5 years experience in managing other engineers. It is preferred that the candidate comes from a large to medium size consumer goods company where new products and processes are regularly rolled out. Assignments in manufacturing and engineering in addition to R&D are a plus. Salary range is \$80,000 to \$110,000,+ bns and stock grants

### **Contact:**

Rick Hazelton  
 Director  
 The Porter Hamel Group  
 207-828-1135  
[Rick@Porterhamel.com](mailto:Rick@Porterhamel.com)  
 Web: [www.Porterhamel.com](http://www.Porterhamel.com)

## LOCAL AREA NEWS/EVENTS

### NOVEMBER MEETING

#### **"THE ROLE OF CHEMICAL ENGINEERING EDUCATION IN INDUSTRY- A ROUND TABLE DISCUSSION"**

*by Joanne Compton*

The November joint meeting of the Cleveland and Akron sections was a resounding success, with an interesting pre-meal roundtable discussion, followed by rich discussion during dinner. Panel members had a few minutes to introduce themselves and then were each given 3 minutes to answer two questions. Representing Industry on the Roundtable were Mr. Fred Glock from PolyOne, Dr. Jim Stevens from Washington Group, and Mr. Ben Horwitz, Penciless Process Design. Representing Academia were panelists Dr. H. Michael Cheung from University of Akron, Dr. Joanne Belovich from Cleveland State University, and Dr. Robert Harris from Case Western Reserve University. Gurmukh Bhatia moderated the discussion.



*Members of the panel included (left to right) Robert Harris, Joanne Belovich, Michael Cheung, Ben Horwitz, Jim Stevens and Fred Glock. Gurmukh Bhatia moderated from the podium.*

During introductory statements, Mr. Glock mentioned the importance of cooperative experience, and that presenting theory should be more effective, noting that quality varies from school to school. Dr. Stevens stated that students need life skills in addition to engineering and chemistry, and that there should also be some practical education. Mr. Horwitz stated that there is not enough industrial experience in engineering faculty. Dr. Harris spoke about the challenge of preparing for future technologies, by looking at where ChE's are being hired, and also mentioned the increased importance of soft skills such as writing, speaking, presentations, and teamwork. Dr. Belovich talked about creating a balance of fundamentals and new technology in education, and the need for developing skills in experimental design and teamwork. Dr. Cheung said that ABET 2000 is changing education.

Each participant had the opportunity to answer the question, "Why do you think there is a perception that schools aren't responsive to industry needs?"

Dr. Cheung responded that coursework is more fractionated to cover non-traditional topics, that there are more tools which take time to master, and that engineering schools see a trend in non-engineering schools to reduce credit hours to compete for students. Dr. Belovich said that one response to the fragmentation is to focus on fundamentals, meaning that students do not have specific experience in non-traditional areas to bring to their first jobs. It is difficult to find faculty with industrial experience because faculty has to be willing/able to do research and also accept the salary that the University offers. She also mentioned the declining level of high school education as a reason for spending so much time on basics in college. According to Dr. Harris, as the field broadens, educators are falling back on core skills – science, math, engineering, and communication, that the industry expectations such as creative problem-solving and critical thinking may be unrealistic.

Responses from the Industry representatives ranged from Mr. Horwitz's statement that the perception IS reality, and that it is due to arrogance and lack of a requirement for educators to have industrial experience. Dr. Stevens stated that industry doesn't expect graduates to do complicated things, but that they must have knowledge of tools and beginning skills. Mr. Glock said that industry requires graduates who can listen, write clearly, and think clearly, and that we are seeing uneven results in recent graduates' capabilities. He observed that co-ops tend to do better and are more productive more rapidly.

To the question "What should we do to address the above perception and make graduates ready for industry?" there was much common ground in both sides' responses. Emphasis on lab report quality, with grading on content, communications, and critical thinking. Presentations from and with industry representatives, teaming across colleges (such as design projects with business students) or levels (involving freshmen through senior level students). Increased emphasis on co-op and intern programs, with more monitoring from the colleges to ensure the quality of the experience. Recruiting faculty with industrial experience may provide an added dimension, as may spending less time on theory and more time on practical examples in class and labs. Tools such as ChemCAD will provide familiarity with process simulation. Using university Unit Ops labs to run real experiments to solve problems in industry could benefit both industrial and academic partners.

Following the Roundtable, the audience continued tablewide discussion of the topic during dinner. David Industrial Sales, manufacturers' representatives for a variety of liquid and solids processing equipment, sponsored the event.

## AICHE LOCAL SECTION EXECUTIVE COMMITTEE

<b>Position</b>	<b>Name</b>	<b>Phone</b>	<b>E-mail</b>
Chair	Dan Jones	(330) 338-8029	<a href="mailto:djones1@neo.rr.com">djones1@neo.rr.com</a>
Vice-Chair	Gia Hudak	(330) 588-2711	<a href="mailto:gia.hudak@colaik.com">gia.hudak@colaik.com</a>
Secretary & Newsletter	Tom Flynn	(330) 829-7622	<a href="mailto:tom.j.flynn@mcdermott.com">tom.j.flynn@mcdermott.com</a>
Treasurer & E-week Rep.	John Zuppo	(330) 796-6308	<a href="mailto:john_zuppo@goodyear.com">john_zuppo@goodyear.com</a>
Government Interaction	John Spero	(440) 329-2515	<a href="mailto:bevo@raex.com">bevo@raex.com</a>
Public Relations	Dr. Kathy Fullerton	(216) 248-0600 X3431	<a href="mailto:kathy_fullerton@adlt.com">kathy_fullerton@adlt.com</a>
Awards	Joanne Compton	(330) 255-6374	<a href="mailto:comptonj@gojo.com">comptonj@gojo.com</a>
Webmaster & Membership	Kaylynn Johnston	(330) 796-7594	<a href="mailto:ksjohnston@goodyear.com">ksjohnston@goodyear.com</a>
ACCESS Representative	Joe Feil	(330) 796-6613	<a href="mailto:jnfeil@aol.com">jnfeil@aol.com</a>
ACCESS Representative	Walt Ruthenburg	(330) 796-7385	<a href="mailto:walt_ruthenburg@goodyear.com">walt_ruthenburg@goodyear.com</a>

### AIChE Web Sites

Local: <http://members.core.com/~aiche/>

National: <http://www.aiche.org>

Cleveland: <http://ctsc.org/aichecle>



### **AKRON SECTION AICHE**

c/o T. J. Flynn

McDermott Technology Inc.

1562 Beeson Street

Alliance, OH 44601-2196

**ADDRESS CORRECTION REQUESTED**