
AIChE® The Pipeline

Volume 18 Issue 5

A. Shaikh, M. Kettner, Co-Editors

June 2011

NEWSLETTER OF THE EAST TENNESSEE SECTION OF AIChE

Local section website

<http://www.tnengineering.net/AICHE/>

Local section mailing address

PO Box 7448 Kingsport, TN 37664-7448

Recap of May Program



and

East TN Section
AIChE®

A Fun (but Educational) History of Chemistry --- Celebrating the International Year of Chemistry 2011

Presented by

Dr. Al Hazari, Professor of Chemistry at the University of Tennessee,
Knoxville

Date: Thursday, May 19, 2011

Location: Eastman Lodge, Bay's Mountain

Attending were members of ACS and AIChE, as well as students and faculty from NE State. Following a dinner catered by Pratt's, Dr. Hazari presented 5,000 years of chemistry in about two hours! He used information, humor, and hands-on activities to excite us about the history of chemistry. His approach was an easy-to-understand and memorable way to learn (or re-learn) chemistry, the central science. His method of engaging the audience is a great example to teachers and educators everywhere.

Hazari's talk was divided into four historical periods. Pre-17th century, which was presented first, included the natural philosophers and the alchemists (check out his car license plate!). Next, the 17th and 18th centuries; this was the beginning of our modern chemistry. These included the scientific method, gas laws, the phlogiston theory, and the later discovery of O₂ and other gases. Discussion of the 19th century detailed organic chemistry,



spectrometry, the development of the periodic table, chemical reactions and catalysis. Finally, the 20th century started with the quantum theory, the photoelectric effect, polymer chemistry, the nuclear age, and ended with novel chemical structures (e.g., buckyballs). Throughout his presentation, Dr. Hazari used fun experiments to demonstrate the various chemical concepts.


On several occasions, Dr. Hazari would stop to ask us “wonder” questions. The following are two examples. “What was Dimitri Mendeleev’s favorite toy at age 5?” (Wooden blocks that he stacked in the shape of a periodic table!) And, “What did Marie and Pierre Curie receive as a wedding present?” (150 kg of pitchblende!) These questions and others were presented to show us the human side of our historical chemistry story.

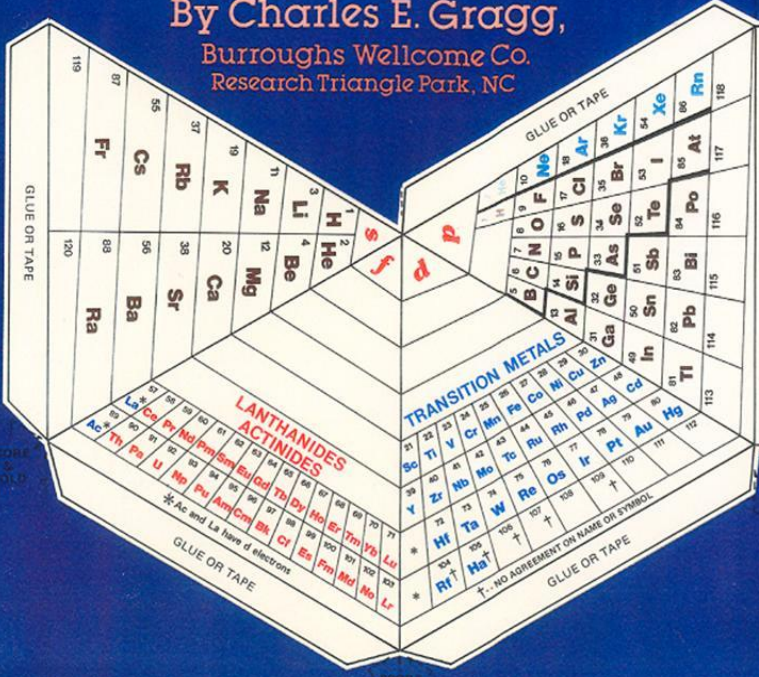
We would like to thank Dr. Al Hazari for coming to Kingsport to share with us his love and his excitement for learning and for science and chemistry.

Please see below, a gift from Dr. Hazari, the Periodic Pyramid. Copy and resize, and then print.

THE PERIODIC PYRAMID

By Charles E. Gragg,
Burroughs Wellcome Co.
Research Triangle Park, NC






THE PERIODIC PYRAMID
By Charles E. Gragg,
Burroughs Wellcome Co.
Research Triangle Park, NC

Each side represents
one type of atomic orbital
s, p, d, f

*Note exceptions

©1983 by Instruments for Research and Industry
Cheltenham, PA, for Charles E. Gragg

Directions: Cut out, score along fold lines,
fold and glue (or tape).

For extra copy printed on heavier paper
send card to  Cheltenham, PA 19012.

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Letter from the Chair

Patrice Riesenberg

Our 2010-2011 programming year has just completed with the presentation by Dr. Hazari. Enjoy your summer off. We will restart again around September. We look forward to a great slate of events brought to you by the new 2011-2012 programming committee!

Local Section Bylaws

Rebecca Glaspie

The East Tennessee Section of AIChE Leadership Board has updated the local section bylaws. The bylaws are going to AIChE Nationals for review and comments. The board would like you to review these bylaws in parallel. To view the proposed bylaws please go the local section website www.tnengineering.net/AICHE/ (If it asked for a password, click cancel and you should be able to open the document.).

Please review these by the June 30th if you would like to comment. After June 30th commenting will be closed. When Nationals approves the bylaws, they will be sent out to the local section for voting and ratification. Please send any comments to the Local Section Secretary, Rebecca Glaspie, by email at rglaspie@eastman.com.

Short Course Announcement

The time and place for this year's Short Course has been set. It will be held Monday, October 24th and Tuesday, 25th in the B-150C Multimedia Room (201C). For those of you who are not familiar with our facilities, this is the room that is commonly used for our lunch-time section meetings.

I am not ready to accept enrollments at this time. I still have some course details to work out. For Eastman employees, I will be working with the training department to set up a course in TEDS. For Non-Eastman employees, I will be taking the reservations personally. As an AIChE member, you will receive advanced notification of the enrollment period when it opens.

As a reminder, here is the brief description of the course:

Multi-Disciplinary Process Development (CH757)

In this course, we will present a unique industrially proven approach to process development which encompasses decision making across various layers which include; business layer, chemistry layer, reaction/reactor layer, separations layer, heat recovery layer and the utility systems layer.

You will learn:

- Process development from the time a process chemistry is invented in the lab to the development of a commercial scale process
- Critical issues at each level on the development workflow
- The available technologies for solving problems and key information required

Instructors: Lionel O'Young and Vaibhar Kelkar

Mark Shelton, Short Course Coordinator

Shelton@eastman.com

(423) 229-4753

Information from National AIChE

Steve Miller

Keep Pace with New Developments through Participation in AIChE Conferences

AIChE's conferences and meetings are designed to help you stay current on the latest advances in core areas and emerging fields, from bioengineering and nanotechnology to process safety and also include many topical conferences covering a wide range of areas in chemical engineering.

As an AIChE member, you save \$200 or more on registration fees. Membership pays for itself when you attend just one conference. Plus, you can save up to 15% on airfare and 25% on rental cars when you book through AIChE's travel center.

2011 AIChE Conferences

[AIChE-DECHEMA Global Conference on Energy Sustainability in the Process Industries \(ESPI\)](#)

Hong Kong University of Science and Technology (HKUST)
Hong Kong SAR, China
June 5-8, 2011

[56th Annual Safety in Ammonia Plants and Related Facilities Symposium](#)

Sheraton Montreal Hotel
Montreal, QC
September 11-15, 2011

[6th AIChE/SPE Joint Workshop - Challenges in Flow Assurance and Crude Oil Quality](#)

Omni-Houston Westside
Houston, TX
September 26-28, 2011

[OTC Brasil 2011](#)

Riocentro
Rio de Janeiro, Brazil
October 4-6, 2011

[2011 AIChE Regional Process Technology Conference](#)

Moody Gardens Hotel
Galveston, TX
October 6-7, 2011

[Annual Meeting](#)

Minneapolis Convention Center
Minneapolis, MN
October 16-21, 2011

Continuing Education – Professional Development Hours Available



Eastman Employees Only: Are you a professional engineer seeking to meet state continuing education requirements for professional development hours (PDH's)? If so, please visit this website for a list of potentially eligible courses and more information: [Continuing Education for Professionals](#)

Have a Safe and Enjoyable Summer!

Keep Up With the Local Section Online

Up-to-date information about the East Tennessee Section of the American Institute of Chemical Engineers can be found [on our website \(www.tnengineering.net/AICHE\)](http://www.tnengineering.net/AICHE). The website includes the Local Section Bylaws, List of Officers from 1945 to present, and an archive of Pipeline Newsletters - to mention only a few aspects of the information covered. Photos from past events can be found, along with contact information for the Local Board. Review the site occasionally and keep up with the local section!

2011 Local Section Officers, Directors, & Support Staff

Chair:	Patrice Riesenberg	229-8980
Chair-Elect and Program Committee Chair:	Stephen Miller	224-7350
Secretary:	Rebecca Glaspie	229-6144
Treasurer:	Braxton Sluder	578-6225
Directors:	Mark Harrison	229-6952
	Jennifer Mize	224-7018
	Lauren Moyer	229-2208
	Tim Nolen	229-8287
Local Section Webmaster:	Mark Shelton	229-4753
Short-Course Coordinator:	Joe Parker	229-3850
Professional Development Coordinator:	Ashfaq Shaikh/Mark Kettner	229-8840
AIChE Pipeline Newsletter Co-Editors:	Joey Watson	229-6486
ETEAC Representative:		

2011 Local Company Contacts

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BAE Systems, Ordnance Systems Inc.	Braxton Sluder, Process Chemical Engineer Acids Manufacturing 423-578-6225, braxton.sluder@baesystems.com
Nuclear Fuel Services Inc., a subsidiary of The Babcock & Wilcox Company	Natalie Robertson 423-743-2526, nsrobertson@nuclearfuelservices.com
Domtar	Rhonda Smith, Process Control Engineer 423-392-2797, Rhonda.Smith@domtar.com

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