

AICHe



# The Catalyst

PITTSBURGH CHAPTER  
AMERICAN INSTITUTE OF CHEMICAL ENGINEERS



Volume 19 Issue 8



April 2005

[www.aichepgh.org](http://www.aichepgh.org)

## APRIL MEETING NOTICE

### Joint Meeting with the American Chemical Society

**Where:** Lombardozzi's Restaurant  
4786 Liberty Avenue (Bloomfield)  
Pittsburgh, PA

**When:** Tuesday, April 12, 2005

**Time:** 5:45 PM Registration and Networking  
6:00 PM Dinner  
7:00 PM Technical Presentation

**Menu:** Please select from the following menu items:

- ❖ Top Sirloin of Beef
- ❖ Chicken Breast Romano
- ❖ Pasta with Clam Sauce and Shrimp

All entrees served with wedding soup, dinner salad, side of pasta, zucchini, rolls and butter, and choice of coffee or tea.

**Cost:** \$20.00 AICHe or ACS Members  
\$15.00 Students / Unemployed Members  
\$25.00 Non-members

**PLEASE RSVP NO LATER  
THAN APRIL 8<sup>TH</sup>, 2005**

To: Mr. David Missenda, Vice-Chair  
Phone: 412-503-4620

E-mail: [David\\_Missenda@URSCorp.com](mailto:David_Missenda@URSCorp.com)

Your RSVP must include: **Name, Company  
Name, Email Address, and Phone Number.**

**PLEASE PAY AT DOOR**

**CANCELLATIONS:** If you must cancel your meeting reservation, please do so no later than 24 hours prior to the meeting. Otherwise, you will be invoiced to defray the cost of your meal.

### ~About the Presentation~

Eric A. Thumma is Director of the Bureau of Energy, Innovations and Technology Development for the Pennsylvania Department of Environmental Protection. In this capacity Eric manages a broad portfolio of the agency's voluntary initiatives, including the pollution prevention, energy efficiency and renewable energy programs.

Eric was instrumental in developing and implementing the agency's Energy Harvest grant program to support the deployment of advanced energy and energy efficiency technologies in the Commonwealth. Energy Harvest is the largest single year state grant investment in advanced energy.

Mr. Thumma's current work emphasizes the deployment of advanced energy resources and includes a leading role in crafting the Governor's Advanced Energy Portfolio Standard, acting as co-Executive Director of the recently re-launched Pennsylvania Energy Development Authority and working on distributed generation and net-metering and interconnection standards.

Prior to being appointed Director in May 2003, Eric Thumma served as Deputy Secretary for the Office of Pollution Prevention and Compliance Assistance. In this capacity Eric oversaw DEP's Growing Greener program, produced Pennsylvania's first comprehensive report on pollution prevention and energy efficiency achievements and cost savings, developed the Pennsylvania Environmental and Energy Challenge grant program and released the Commonwealth's first greenhouse gas inventory since 1992.

*CONTINUED ON PAGE 2*



## LETTER FROM THE CHAIR

Dear Members,

Thanks to NCE, Inc. for hosting the March meeting in Leetsdale. Our tour guides Paul Pollos and Dave Ocamb were very informative, and we appreciate the time they took to show us their state-of-the-art facility.

This month, we'll have a second joint meeting with the ACS Coal Technology Group. Eric Thumma (Pennsylvania Dept. of Environmental Protection) will give a presentation on alternative energy sources in Pennsylvania. This will be the last meeting arranged by Vice-Chair David Missenda, who has done an excellent job pulling things together all year. Thanks again, David!

There's still time to nominate a local chemical engineer for the McAfee Award (deadline is April 15<sup>th</sup>). Please contact me or Ed Moretti if you have a nominee and need help getting paperwork together. Also, we're looking for additional industrial sponsorship for the banquet. Consider making a donation for this important event, which will be on Tuesday May 10<sup>th</sup> at Fox Chapel Golf Club.

We're also still soliciting nominations for several officer and board member positions in the Pittsburgh Section, and encourage you to consider volunteering for the upcoming year. For more details, please see page 3 of this issue.

I hope to see you at our upcoming meeting on April 12<sup>th</sup>!

Best wishes,

Jim Schneider,  
Chair, AIChE Pittsburgh Section

## MONTHLY MEETING NOTICE

(CONTINUED FROM PAGE 1)

Mr. Thumma has served in other senior capacities at PA DEP, including Executive Assistant to the Secretary and Executive Assistant to the Deputy Secretary for Air, Recycling and Radiation Protection.

Eric began his career with the Commonwealth in 1996 after finishing his master's degree in public and international affairs at the University of Pittsburgh. Mr. Thumma has a B. A. from the University of Pittsburgh and has studied at Moscow State University and St. Petersburg University.

### ~ Directions to Lombardozi's ~

#### From the South:

Take Rt 19 (West Liberty Avenue) through the Liberty Tunnels and across the Liberty Bridge. Stay straight and go onto Crosstown Blvd. Merge onto 579 N. Take the Rt 380 / Bigelow Blvd exit. Stay straight to go onto Rt 380 / Bigelow Blvd. Turn left onto the Bloomfield Bridge. Take a slight right turn onto Liberty Ave. Continue on Liberty Avenue to the restaurant.

#### From the East:

Take the turnpike heading West (76 W). Take the 376 W / US-22 exit # 6 towards Pittsburgh. Merge onto 376 W. Take exit # 5 towards Squirrel Hill / Homestead. Keep left at the fork in the ramp. Stay straight, then turn left onto Forward Ave. Turn left onto Murray Ave. Take another left onto Wilkins Ave. Turn right onto South Negley Ave., then left onto 5<sup>th</sup> Avenue. Turn right onto South Aiken Ave. Take a slight left onto Liberty Avenue. Continue on Liberty Avenue to the restaurant.

#### From the North / West:

Take Rt 60 S to 79 S to 279 N. Take the exit on the left towards Ft Duquesne Blvd / Strip District. Keep left at the fork in the ramp. Take the PA-28 N exit # 7C towards Chestnut St / East Ohio St / Etna. Merge onto PA-28 N. Turn right onto 31<sup>st</sup> Street Bridge. Continue onto 31<sup>st</sup> Street. Turn left onto Liberty Ave. Continue on Liberty Avenue to the restaurant.



## MEMBERSHIP CORNER

Dear Members,

We are constantly updating our local membership database. Please send all change of address notifications to our Membership Chair:

**Holly Gray**  
**Michael Baker Jr., Inc.**  
**Airside Business Park**  
**100 Airside Drive**  
**Moon Township, PA 15108**

**[hgray@mbakercorp.com](mailto:hgray@mbakercorp.com)**

If you have not already done so, please verify your updated e-mail address with us so that you will continue to receive monthly newsletters!

Thank you!

### Please sign me up for the local Pittsburgh Section of AIChE

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Business Phone \_\_\_\_\_

Residence Phone \_\_\_\_\_

Email \_\_\_\_\_

Annual Dues are \$16.00. Make check payable to "AIChE Pittsburgh Section" and send to our Treasurer:

**Leigh Anne M. Wacker,**  
**AIChE Treasurer**  
**337 Quail Run Road**  
**Venetia, PA 15367**

## 2005-2006 LOCAL SECTION EXECUTIVE BOARD NOMINATIONS

*Now is the time to start thinking about joining the Pittsburgh AIChE Executive Board. The Section cannot run smoothly by itself. It's the commitment of volunteers like you that keeps the Section running.*

*The Local Chapter will be holding its annual election for the following positions this May:*

- Vice-Chair
- Treasurer
- Secretary
- Counselor

*The Vice Chair will automatically elevate to the position of Chair in the 2006-2007 program year. The Treasurer, Secretary, and Counselor each serve a two-year term that will end in May 2007.*

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*The following Chairperson positions are also available for the 2005-2006 Program year:*

- Newsletter Editor
- Student Chapter Liaison

*If you would like to learn more about any of these positions, please contact me by April 19<sup>th</sup>, 2005.*

*Thank you for your continued support of our local AIChE Chapter!*

*Best regards,*

*Nathan Peters*  
*Past Chair*  
*724-942-7935*  
[npeters@chemadvisor.com](mailto:npeters@chemadvisor.com)

## DON'T FORGET!

Daylight Savings Time is Sunday, April 3rd.  
 Don't forget to "Spring Ahead" one hour!



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### NEWSLETTER DEADLINE

**THE DEADLINE FOR THE MAY 2005 NEWSLETTER IS  
APRIL 15, 2005.**

Please submit information to:

*Mariangela Peters*  
**Bayer MaterialScience, LLC**  
100 Bayer Road  
Pittsburgh, PA 15205

Phone (412) 777-4195

[mariangela.peters@bayermaterialscience.com](mailto:mariangela.peters@bayermaterialscience.com)

### A BRIEF HISTORY OF THE MCAFEE AWARD

This May, we will be presenting the McAfee Award to another distinguished Chemical Engineer in the Pittsburgh area. Thanks to J. Finley Bush for providing this brief history of the award.

**Purpose:** To provide recognition to a local member of AIChE who defines the utmost in professionalism to the profession, personal life, and community, and to provide publicity and recognition to the local section in Pittsburgh and national AIChE through publication of the award in CEP and local newspapers.

- The spirit of the award requires the following three things:
  - Service to AIChE
  - Service to the Profession
  - Service to the Community
- Awardees are presented with a plaque and honorarium.
- The event is held every two years, and it is a gala affair with keynote speaker and personal comments made by co-workers, associates, and members of the community;
- *This Award is not to be taken lightly.* It provides a forum for the local section to publicize the work of notable members and the profession to the public.
- To insure the local section receives recognition at both the local and national level, public relations work with local newspapers and CEP is a necessary action.



## SOLICITATION FOR 2005 MCAFFEE AWARD NOMINEES

There are many talented chemical engineers in our region. The Pittsburgh Section of AIChE provides an opportunity for us to network with many of our colleagues in the tri-state area. Additionally, the Section is proud to honor the professional and community service of our most remarkable members through the biennial McAfee Award.

The McAfee Award is presented to a distinguished chemical engineer in honor of Jerry McAfee, former Chief Executive Officer of the Gulf Oil Corporation. The award, the culmination of our program year, is an important opportunity to promote chemical engineering in the Pittsburgh area and a chance to celebrate our profession with our associates, clients, and spouses.

The award is presented to a distinguished Pittsburgh chemical engineer who:

- Is widely recognized for contributing to the profession
- Has community appreciation where she or he lives and works, and
- Has participated in and contributed to the AIChE and the Pittsburgh Section

Nominations for this year's McAfee Award recipient are now being accepted. The nomination must include a letter from a "champion" and at least three supporting letters.

Please send the letters via USPS or email to:

Mr. Ed Moretti, Scholarship and Awards Chair  
AIChE Pittsburgh Section  
c/o Moretti Consulting Group  
314 East Main Street  
Carnegie, PA 15106  
[emoretti@moreticonsulting.com](mailto:emoretti@moreticonsulting.com)

**Nominations are due by April 15, 2005.**

This year's event will be held at the elegant Fox Chapel Golf Club on Tuesday, May 10, 2005. Watch upcoming issues of The Catalyst for additional details.

## AICHE MEMBERS: GET FREE ACCESS TO SCIENTIFIC REFERENCES ON-LINE

As a member of AIChE, you now have access to varied engineering and scientific references, handbooks, and databases at [www.knovel.com](http://www.knovel.com).

You will have access to Knovel's Life Sciences and Chemistry Collection, and the AIChE Center for Chemical Process Safety Guidelines Series for a limited time. This will allow Knovel and AIChE to determine member interest in the hundreds of references available. Based on your feedback, we'll fine-tune which references to offer to our members.

Knovel brings data to life in a virtual technical library that solves problems for engineers and scientists. On one interface, Knovel combines content from major Sci-Tech publishers including John Wiley & Sons, McGraw-Hill and Elsevier, with time saving analysis tools like interactive tables, equation plotters, and graph digitizers. As a member, you'll enjoy access to many of the references with which you are familiar as well as more specialized references on topics important in your daily work. Corporate subscriptions to Knovel's services are available and offer a wide range of material.

To get started, register on the AIChE Web site at [www.aiche.org/membership/knovel](http://www.aiche.org/membership/knovel). This one-time registration process ensures security so that only AIChE members have access to the site. Your registration information will also help AIChE and Knovel to better understand your interests and hone this impressive collection.

## SPONSORSHIPS

*Interested in placing your company's information in future AIChE Newsletters?*

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|--------------------|-------|
| Full Page          | \$300 |
| Half Page          | \$175 |
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Please contact Mariangela Peters at  
[mariangela.peters@bayermaterialscience.com](mailto:mariangela.peters@bayermaterialscience.com)  
or 412-777-4195 for more information.



## SAVE THE DATE!

*Career Recognition Symposium  
and  
90<sup>th</sup> Birthday Celebration*

for

**Irving Wender**  
Distinguished University Research Professor  
Department of Chemical Engineering  
University of Pittsburgh

*Guest Lecturers*

**Robert Bergman**  
*Professor of Chemistry  
Gerald E. K. Branch Distinguished Professor  
University of California, Berkeley*

**Donna Blackmond**  
*Chair in Catalysis  
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**June 15, 2005**  
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For additional information, call 412-624-9630

## POSTER PRESENTATION HIGHLIGHTS FROM AICHE STUDENT NIGHT 2005

**"The Recyclability of Flame Retarded Polycarbonate"** by David Statler Jr., West Virginia University

The poster presented some recent flammability data on using Fyrolflex BDP as a flame retardant for polycarbonate. The PC material was two different blends of Bayer's Makrolon and one blend of Recycled Compact Disks made from PC. The

results look promising and future mechanical tests need to be performed.

**"Study of Low Cost Carbon for the DCFC" (Direct Carbon Fuel Cell)** by Abha Saddawi, West Virginia University

The aim is to optimize carbon fuel for a particular DCFC which uses solid fuel as the anode. This work is done in collaboration with a company named SARA (Scientific Applications & Research Associates) who's DCFC we are making fuels for. Due to the cell's structure, the fuel, rod-like in shape, must be a durable solid, must be conductive, and, most importantly, cheap. SARA has demonstrated that fuels made from coal and petroleum coke are superior to graphite fuels. My project intends to determine a method for creating solid cylindrical carbon fuel rods, optimize desirable characteristics while keeping cost down by substituting in cheaper materials and so on.

Thus far we have succeeded in mastering a rod production technique with varying pitch and petroleum coke mixtures with binder percentages lower than 10%. Work on the characterization of the fuel rods, as well as studies of cheaper material substitution are ongoing.

## SPRING SITES

### GREAT PEEPS

When they were invented in 1953, it took 27 hours to create one marshmallow Peep. Today, more than 4.2 million marshmallow Peeps, bunnies, and other shapes are made each day at the Bethlehem, Pennsylvania factory. Take a tour at <http://www.marshmallowpeeps.com>.

### APRIL FOOLS

Many ancient cultures, including Roman and Hindu, celebrated New Year's Day on or close to April 1. In 1564, France adopted the Gregorian Calendar and shifted New Year's day to Jan. 1. When traditionalists refused to accept the new date, they were subject to tricks and fool's errands. Great Britain switched over in 1752, and April Fool's began to be celebrated in England and the colonies. See <http://www.infoplease.com/spot/aprilfools1.html?link=tmplnav>.

### NATIONAL POETRY MONTH

"I have never started a poem whose end I knew. Writing the poem is discovering" -- Robert Frost. For information on National Poetry Month events and a host of poems, see <http://www.poets.org>.



## AICHE PITTSBURGH SECTION 2004-2005 OFFICERS

### Executive Committee

#### Chair

Dr. Jim Schneider (schneider@cmu.edu)  
Carnegie Mellon University  
412-268-4394

#### Vice-Chair & Program

David Missenda (david\_missenda@URSCorp.com)  
URS Corporation  
(412) 503-4620

#### Secretary

Justin P. Filey (jfiley@ppg.com)  
PPG Industries, Inc.  
724-274-3529

#### Treasurer

Leigh Anne M. Wacker (lamwacker@adelphia.net)  
ANSYS, Inc.  
724-514-3046

#### Counselors

John Hauser (hauserjj@prosaf.com)  
PROSAF, Inc.  
724-942-3717

Dr. Douglas Price (dmprice@cc.ysu.edu)  
Youngstown State University  
330-941-3019

#### Past Chair & Nominations

Nathan Peters (npeters@chemadvisor.com)  
ChemADVISOR, Inc.  
412-847-2000 x227

### Additional Officers and Chairs

#### Membership Chair

Holly Gray (hgray@mbakercorp.com)  
Baker Environmental, Inc.  
412-269-6059

#### Newsletter Editor

Mariangela Peters  
(mariangela.peters@bayermaterialscience.com)  
Bayer MaterialScience, LLC  
412-777-4195

#### Engineers' and Chemistry Week

Nancy Hirko (nhirko@air-comp.com)  
Air/Compliance Consultants, Inc.  
412-826-3636

#### Scholarship Chair

Ed Moretti (emoretti@moretticonsulting.com)  
Moretti Consulting Group, LLC  
412-276-2228

#### Committee Chairs

Safety & Environmental: Shiw Tseng  
PE Review: Carl Schwartz

#### Web Master

Richard Dupree (rrd@telerama.com)  
Dupree & Associates  
724-775-5122

## 2005 Monthly Meeting Schedule

| Date              | Topic                   | Location                      |
|-------------------|-------------------------|-------------------------------|
| January 19, 2005  | Joint Meeting with AWMA | Penn Brewery                  |
| February 10, 2005 | Annual Student Night    | Univ of Pittsburgh - Oakland  |
| March 22, 2005    | Plant Tour with SWE     | NCE, Inc – Leetsdale, PA      |
| April 12, 2005    | Technical Presentation  | Lombardozi's – Bloomfield, PA |
| May 10, 2005      | McAfee Award Banquet    | Fox Chapel Golf Club          |

**Mark your calendars!**

For the Following Dates:

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April 12, 2005

Monthly Meeting

Technical Presentation -  
Joint Meeting with ACS

May 10, 2005

Bi-Annual Award Banquet

AIChE Pittsburgh Section  
McAfee Award at the Fox Chapel Golf Club

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***The Catalyst***

American Institute of Chemical Engineers  
337 Fourth Avenue  
Pittsburgh, PA 15222-2097



Visit us on-line at [www.aichepgh.org](http://www.aichepgh.org)

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