

AIChE



The Catalyst

PITTSBURGH CHAPTER
AMERICAN INSTITUTE OF CHEMICAL ENGINEERS



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March 2004

www.aichepgh.org

MARCH MEETING NOTICE

Topic: *Tour of Seagate Research Center*

1251 Waterfront Place
Pittsburgh, PA 15222

When: *Wednesday, March 17, 2004*

Time: 5:45pm Registration and Networking
6:00pm Tour begins
7:45pm Walk to Lidia's
8:00pm Dinner at Lidia's

Menu: *Pasta Trio at Lidia's Pittsburgh*

The Pasta Trio features unlimited servings of three different pastas, with at least one veggie pasta and one with meat or seafood. Caesar salad, rolls with spread, a tiramisu dessert, and beverage are included. There is no need to specify a menu selection when you RSVP.

Cost: \$25.00 Members
\$20.00 Students / Unemployed Members
\$30.00 Non-members

RSVP NO LATER THAN FRIDAY MARCH 12TH, 2004

TO: Dr. Jim Schneider, Vice-Chair
Phone: 412-268-4394
E-mail: schneider@cmu.edu

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 48 hours prior to the meeting. Otherwise, you will be invoiced for the cost of your meal.

~ About the Site Tour ~

Seagate is the worldwide leader in the design, manufacturing and marketing of hard disc drives, providing products for a wide range of enterprise, PC, notebook and consumer electronics applications. The company is committed to delivering award-winning products, customer support and reliability.

When Seagate was founded in 1979, it was the first company to build 5.25-inch hard disc drives specifically for the PC. The introduction of Seagate's hard disc drives helped fuel the PC revolution, and the world has never been the same. Suddenly, it was possible to quickly and easily store and access data like never before, giving people access to unprecedented amounts of information and eventually giving rise to developments like the Internet. The entire computing landscape changed dramatically and evolved to a point today where computing and digital information have become part of our everyday lives. For 24 years Seagate has been developing the technology and manufacturing the products that helped make it all happen.

Seagate Research, the company's research and development wing, faces a challenging initial mandate--come up with a way to store one terabit of data on each square inch of the recording disc, a milestone that some consider impossible. Seagate Research is already investigating several possible pathways to achieve that areal density.

It is Seagate Research's responsibility to pull together the work that has been done to date and coordinate efforts among the various drive and component design centers and the Advanced Integration Technology team. Possible approaches centered within Seagate Research include perpendicular recording, patterned media, heat-assisted magnetic recording and probe storage. Because researchers and scientists are working on difficult, often visionary, alternatives for the future, Seagate Research was chartered to look at storage technologies that might be integrated into products four to 10 years from now.

Leading these efforts is Dr. Mark Kryder. Dr. Kryder came to Seagate from what is widely regarded as the pre-eminent academic research center in the world of magnetic storage -- the Data Storage Systems Center at Carnegie Mellon University in Pittsburgh -- a center that he founded.

More information is available at:

<http://www.seagate.com/newsinfo/technology/research/D4b1.html>

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LETTER FROM THE CHAIR

Dear Members,

February was a great month for the Pittsburgh Section of AIChE! Student Night this year was an incredible success. Ten students presented posters and four students were honored with our section's Professional Promise Awards. Bill Byers, the national president of AIChE gave a timely presentation on marketing yourself on the job.

National Engineers Week was a blast with all of the volunteers helping out at the Science Center. I'd like to give a hearty thanks to all involved and encourage you to look through the rest of this newsletter for more details on the above events.

For March, Jim Schneider has prepared a St. Patrick's Day delight with a tour of Seagate in the Strip District. We hope to see you there on the 17th!

I'd also like to remind you that the Pittsburgh Section is an all-volunteer organization. We are always looking for people to help out. If you think you'd like to get more involved, please contact JoAnn Truchan or myself. We're always happy to discuss opportunities in the section.

Sincerely,

Nathan Peters

AIChE Pittsburgh Section- Chair

MONTHLY MEETING – CONTINUED

MEETING LOCATION AND PARKING INFORMATION:

Seagate Research is located in Downtown Pittsburgh.

From I-279N: Exit 6B onto Liberty Ave. toward the Civic Arena. Turn left onto 11th St., then turn right onto Waterfront Place.

From I-579S: From the Veterans' Bridge, take the 7th Ave. Exit toward the Convention Center. Turn right onto 7th Ave., then turn right onto Grant St. Turn left onto 11th St., then right onto Waterfront Place.

From I-376W: Take Exit 1C to Grant St. and turn left onto 11th St. Turn right onto Waterfront Place.

From Oakland via Boulevard of the Allies: Follow signs indicating Downtown/Fort Pitt Bridge. Take Exit 1C to Grant St. and turn left onto 11th St. Turn right onto Waterfront Place.

Parking:

Limited parking will be available in the lot directly in front of the research center. If the lot is full, there are public lots adjacent to Seagate and across the street from Lidia's (\$4 for the night), and metered spaces are available on Waterfront Place. Lidia's is a short walk from Seagate, so there is no need to re-park your vehicle.

ABOUT THE RESTAURANT:

Lidia's Pittsburgh

1400 Smallman St.
Pittsburgh PA 15222
(412) 552-0150

Lidia's Pittsburgh was founded March of 2001 by Lidia Matticchio Bastianich. Their specialty is a Pasta Trio - three fresh (homemade) pasta dishes, served table side with unlimited refills. Lidia's Pittsburgh was awarded the Pittsburgh City Paper's "Best New Restaurant" in 2001 and was also named "Editors Choice" for Best New Restaurant by Pittsburgh City Search.

More information is available at:

<http://letscheed.pghboe.net/grassroots/Lidia's/Lidia's.html>.

THANK YOU TO ALL OF OUR VOLUNTEERS FOR NATIONAL ENGINEERS' WEEK!

Thank you to all of our volunteers who helped with this year's Engineers' Week festivities at the Carnegie Science Center on February 20th and 21st.

We helped children interested in science to make their own super balls, and to construct molecular models out of gumballs and toothpicks.

Our local section could not take part in this worthwhile event without your help!

We would especially like to thank Nancy Hirko, who coordinates our participation in this event every year!



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

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
705 Chrysler Street
Pittsburgh, PA 15226

ESWP TECHNICAL SOCIETY FAIR

Celebrate the Profession at the 2004 ESWP Technical Society Fair!

The Engineers' Society of Western Pennsylvania has affiliated memberships with over 35 of Pittsburgh's technical society chapters. It is a member-based, non-profit organization whose primary purpose is to promote the profession of engineering.

The ESWP is presenting this unique opportunity to join your fellow members, renew old acquaintances, meet new friends, and visit with colleagues. At a time when we are facing so many important challenges, we think it is very important to establish this dialogue.

Enjoy complimentary hors d'Oeuvres and a cash bar, combined with an insightful program discussing *Engineering Today*, including speakers Bernie Fedak, GM Engineering of US Steel, and Vito Cedro, Engineering Technology Manager of Alcoa World Alumina.

The event will be held on Wednesday, March 3, 2003 (following National Engineers' Week) from 5:30 – 8:30 pm in the Engineers' Building at 337 Fourth Avenue, Pittsburgh, PA, 15222.

The Technical Society Fair is open to all members of the engineering community in Western Pennsylvania. There is no cost to attend, but reservations are requested.

Please RSVP to ESWP at (412) 261-4300, or by e-mail to c.bisacca@eswp.com (subject: Technical Fair). Please include your name, company, address, phone number, e-mail, and professional society affiliation. You may also RSVP via fax at (412) 261-1606.



2004-2005 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.

Becoming an officer is a great way to become more involved in AIChE and the Section. If you think you might be interested, please contact Past-Chair JoAnn Truchan at 412-578-7981 or jtruchan@achd.net.

TAKING THE P.E. EXAM?

Are you interested in taking the Chemical Engineering P.E. Exam?

Several Pittsburgh Section Members have expressed an interest in forming a study group for the P.E. Exam. If you are interested in participating in a study group, or would like information about an online refresher info, please contact Carl W. Schwartz at 412-374-3678 or email schwarcw@westinghouse.com.

SPONSORSHIPS

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

Full Page	\$300
Half Page	\$175
Quarter Page	\$95
Business Card Size	\$45
1/12 Page	\$30

*Place multiple sponsorships and receive a discount!
Three consecutive ads – 10% off
Eight consecutive ads – 30% off*

Please contact Mariangela Peters at mariangela.peters@bayerpolymers.com or 412-777-4195 for more information.

NATIONAL AIChE NEWS

SPRING AHEAD: REGISTER TODAY FOR AIChE SPRING MEETING

Network with over 1500 of your colleagues and discover real-world solutions you can put to use immediately. Enjoy New Orleans' music, food, and culture, including the acclaimed JazzFest music festival. Learn more and register today at www.aiche.org/spring.

ANNUAL CALL FOR PAPERS

The 2004 AIChE Annual Meeting Call for Papers - PTP process is now open. Papers and posters are due on May 1. Submit papers online at <http://www.aiche.org/annual>.

COATING AND DRYING, ADHESION SEMINARS OFFERED

The Coating and Drying Technology Seminar is designed for engineers and scientists who work with the coating of fluids onto continuous webs, and who wish to become familiar with all aspects of coating and drying. The seminar will be held May 3-6.

The Adhesion Technology Seminar is ideal for engineers and polymer chemists involved with practical adhesive bonding to plastics, metals, and other substrates. The next one-day seminar will be May 6-7. For more information, contact Dr. Edgar B. Guttoff, at 617/734-7081; ebgutof@coe.neu.edu; or visit: <http://www1.coe.neu.edu/~ebgutof/>.

NAS: ENHANCING THE POST-DOC EXPERIENCE

The National Academy of Sciences Committee on Science, Engineering and Public Policy will hold its second convocation, "Enhancing the Postdoctoral Experience for Scientists and Engineers," April 15, Washington, D.C, to evaluate the impact of the COSEPUP guide of the same title. The guide was drafted to inform post-docs, supervisors, institutions, and funding agencies of their opportunities, rights, and responsibilities. Postdoctoral scholars and principal investigators are invited to attend this free event.

<http://www7.nationalacademies.org/postdoc>

NATIONAL BIOTECHNOLOGY CONFERENCE

Learn how biotechnology is transforming the pharmaceutical sciences at the American Association of Pharmaceutical Scientists (AAPS) National Biotechnology Conference, May 16-19, Boston, MA. AIChE members will receive a member discount. For more information, visit <http://bio.aiche.org/>



FUTURE CITIES COMPETITION



AICHe sponsored the “Best Use of Recycled Materials” Award, which was won by 7th and 8th graders from St Thomas More School.



AICHe Volunteers for Future Cities (left to right): David Missenda, JoAnn Truchan, Richard Anderson, Mike Flaherty, and Peggy Flaherty.
Not pictured: Dick Dupree, Mary Ann Walsh, Michael Friedrich, Curt Miller, Carl Schwartz, and Erin Whiting.



4916 William Penn Highway
Monroeville, PA 15146
www.langstonsubaru.com
724-325-2888 • 800-463-6082
Fax: 724-733-2555
marcella@langstonsubaru.com

Marcella Manning
Sales Consultant

THANK YOU TO OUR VOLUNTEERS FOR FUTURE CITIES!

The Future City Pittsburgh Regional competition was held on January 24, 2004 at the Camegie Music Hall. AICHe Pittsburgh was well-represented by members in various positions from model movers, monitors, committee members and school mentors.

For the first time in section history, two members were pitted as competitors because they were mentoring competing middle schools. Michael Flaherty, a Past-Chair, spent the past four months working with Mars Middle School. David Missenda, Student Outreach Chair, teamed up with Carlynton Middle School.

As mentors, engineers guide the 7th and 8th grade teams through three components of the competition: design a computer model with SimCity 3000, write an essay about a new engineering technology, and construct a scale model of a city and presentation. Both our new mentors' schools performed well. Mars Middle School won a special award for “Best Use of Steel.” Carlynton won “Best Fire Protection System” and “Best Power Supply System”.

AICHe Pittsburgh Section sponsored an award for “Best Use of Recycled Materials.” St. Thomas More in Bethel Park was the proud recipient of the award.

Following competition day, David Missenda stated “I am pleased with my team’s performance. They performed a lot of research and I learned about new technologies with them. How many 7th graders would consider wave power to generate electricity? I wish Future Cities and National Engineer’s Week at the Science Center were around when I was in middle school. I loved the experience and am looking forward to returning next year.”

Michael Flaherty commented that “I was astonished by the creativity of my team. The ideas they would generate on their own never ceased to amaze me. I was very pleased with the effort the team members put forth on this project. I look forward to working with a new group of students next year.”

Thank you to all of our members who volunteered for this year’s Future Cities Program! We are especially proud to congratulate Riverview High School, the winner of the Pittsburgh Regional Competition who went on to win 1st place in this year’s National Future Cities Competition in Washington, DC!



NEWSLETTER DEADLINE

THE DEADLINE FOR THE APRIL NEWSLETTER IS
MONDAY, MARCH 15, 2004.

Please submit information to:

Mariangela Peters
Bayer Polymers, LLC
100 Bayer Road
Pittsburgh, PA 15205

Phone (412) 777-4195
mariangela.peters@bayerpolymers.com

SCIENCE SHORTS...

NEW SUPERHEAVY ELEMENTS DISCOVERED

A team of scientists from the Glenn T. Seaborg Institute and the Chemical Biology and Nuclear Science Division at the Lawrence Livermore National Laboratory and the Joint Institute for Nuclear Research in Russia (JINR) recently discovered two new superheavy elements: element 113 and element 115. "This just opens up the horizon on the periodic table," said Ken Moody, Livermore's team leader. "It allows us to expand the fundamental principles of chemistry. From new chemistry comes new materials and new technology."

Read more at http://www.cms.llnl.gov/e113_115/.

LEAP YEAR FACTS

Did you know one solar year (the time it takes for the earth to travel around the sun) is 365.24219 days? February 29 is added every fourth year to align the year with the course of the sun. Historically, after Julius Caesar's death in 44 B.C., calendars marked leap year every three years, not four, causing the seasons to slowly fall off course. In 1582, Pope Gregory XII noticed the problem and reset the seasonal schedule by decreeing October 4 as October 15, thus erasing the accumulated error.

ENGINEERING CHOCOLATE

According to the U.S. Census Bureau, Americans consumed 24 pounds of candy per capita in 2002, with a large portion attributed to Valentine's Day. Learn about the engineering behind the sweets at <http://www.engineergirl.org/nae/cwe/egcars.nsf/weblink/s/CTON-4THVDV?OpenDocument>

STUDENT NIGHT 2004

Thanks to everyone who joined us for AICHE Student Night 2004! National AICHE President Bill Byers came to Pittsburgh for the event, and delivered the evening's after-dinner presentation.

Also at Student Night, the Pittsburgh Section announced the 2004 recipients of our Professional Promise Award.

Congratulations to our winners from each University in our section:

Mr. Kris Howard – Carnegie Mellon University
Mr. Drew Cunningham – University of Pittsburgh
Ms. Donna Hayworth – Youngstown State University
Mr. Craig Travis – West Virginia University



Dr. Jim Schneider and Nathan Peters congratulate Professional Promise Award-winner Kris Howard.



Pittsburgh Section students and professionals review and discuss the poster presentations.



AICHE PITTSBURGH SECTION 2002-2003 OFFICERS

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Nathan Peters (npeters@larocheind.com)
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412-889-7833

Vice-Chair & Program

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

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PPG Industries, Inc.
724-274-3529

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Leigh Anne M. Wacker (lamwacker@msn.com)
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PROSAF, Inc.
724-942-3717

Dr. Joseph McCarthy (mccarthy@engrng.pitt.edu)
University of Pittsburgh
412-624-7362

Past Chair & Nominations

JoAnn Truchan (jtruchan@achd.net)
Allegheny County Health Dept.
412-578-7981

Additional Officers and Chairs

Membership Chair

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

Newsletter Editor

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

Engineers' and Chemistry Week

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

Student Outreach Chair

David Missenda (david_missenda@URSCorp.com)
URS Corporation
(412) 351-2044 x230

Scholarship Chair

Ed Moretti (emoretti@moretticonsulting.com)
Moretti Consulting Group, LLC
412-276-2233

Committee Chairs

Safety & Environmental: Shiao Tseng
PE Review: Carl Schwartz

Web Master

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

2003-2004 Tentative Monthly Meeting Schedule

Date	Topic	Location
January 14, 2004	Joint Meeting with AWMA	Penn Brewery
February 11, 2004	Annual Student Night	Univ of Pittsburgh - Oakland
March 17, 2004	Plant Tour	Seagate - Pittsburgh
April 2004	Technical Presentation	TBA
May 2004	Last Meeting of the Year	TBA

Mark your calendars!

For the Following Dates:

March 3, 2004	ESWP Event	Western PA Technical Society Fair
March 17, 2004	Monthly Meeting	Site Tour of Seagate in Pittsburgh



The Catalyst

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



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