



MARCH MEETING NOTICE

Joint Meeting with ACS Energy Technology

Topic: *On Fischer-Tropsch Slurry Technology*

Where: Lombardozzi's Restaurant
4786 Liberty Avenue (Bloomfield)
Pittsburgh, PA
412-682-5785

When: Wednesday, March 15, 2006

Time: 5:30PM Registration
6:00 Dinner
7:00 Presentation by Dr. Badie Morsi

Menu: Please select one of the entrees below. All meals include Italian Wedding Soup, Dinner salad, a side of Pasta, Fried Zucchini, rolls and butter with choice of coffee or tea.

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

Cost: \$20.00 Members
\$15.00 Students and unemployed members
\$25.00 Non-members

**RSVP NO LATER THAN
FRIDAY MARCH 10, 2006**

To: Mr. David Missenda, Chair

Phone: 412-503-4620

E-mail: David_Missenda@URSCorp.com

Your RSVP must include: **Name, Company Name,
Menu Choice, 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 Presentation~

The havoc in the Middle East, the volatility in Nigeria, the brawl with Venezuela, and the emerging demand for oil by China and India are driving the US economy towards insecure energy future, and raising the crude oil and consequently gasoline prices at the pump to sky-high levels throughout the world. Also, the environmental concerns in Europe, Japan, Australia, and with anticipation in the US will be mandating sulfur-free diesel for on-road use by 2009. Indeed, the leading technology that could provide answers to such critical situation and pressing concerns is the Gas-To-Liquid (GTL) process (Fischer-Tropsch Synthesis), which is capable of catalytically converting syngas to synthetic liquid products, including gasoline, olefins, diesel, and wax.

Currently, numerous oil-poor, coal-rich countries throughout the world are expressing irrefutable interest in developing GTL technologies. In addition, leading energy companies, such as ConocoPhillips, ExxonMobil, Sasol and Shell have recently committed themselves to building GTL plants in Qatar, which is an oil-rich country. Thus, the international commercial era of GTL will soon commence as these players and others start bringing production capacity on-line and GTL products to an economically- and environmentally-conscious market.

In this talk, the slurry-phase Fischer-Tropsch process will be briefly discussed. Also, modeling of a commercial-scale slurry bubble column reactor for producing 10,000 bbl/day of syncrude will be introduced.

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LETTER FROM THE CHAIR

Dear Members,

I hope everyone had an enjoyable evening at our **Annual Student Night**. Thank you to Dr. Hong Koo Kim from the University of Pittsburgh for his presentation about nanotechnology research. Congratulations to the following students who won the Professional Promise Award: Justin Hartshorn from West Virginia University, Kenneth Hu from Carnegie Mellon University, Ahmad Al-Own from Youngstown State University and Anthony Longo from the University of Pittsburgh. Thank you to all the students who participated, especially those who prepared poster presentations of their research.

Thank you to Nancy Hirko for organizing our annual booth at the Carnegie Science Center in celebration of **National Engineers Week**. Superballs upon superballs were generated. Thank you also to all of the volunteers.

Our next meeting is scheduled jointly with the ACS - Energy Technology group for Wednesday, March 15th at Lombardozzi's Restaurant. Dr. Badie Morsi, Professor in the Department of Chemical and Petroleum Engineering at the University of Pittsburgh (and one of my former professors) will be presenting about **Fischer-Tropsch Slurry Technology**.

David Missenda
AIChE Pittsburgh – Section Chair

MONTHLY MEETING

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Dr. Badie Morsi joined the Chemical and Petroleum Engineering Department, University of Pittsburgh in 1982 and currently he is George M. and Eva M. Bevier Professor, and Director of the Petroleum Engineering Program. He received his B.S. in Petroleum Engineering from Cairo University, Cairo, Egypt, 1972; M.S. in Chemical Engineering from Ecole Nationale Supérieure des Industries Chimiques (ENSIC), Institut National Polytechnique de Lorraine (INPL) Nancy, France, 1977; Ph.D. in Chemical Engineering, ENSIC, INPL-Nancy, France, 1979; and Sc.D. in Chemical Engineering, ENSIC, INPL-Nancy, France, 1982.

Professor Morsi's research activities involve different aspects of Chemical, Environmental, and Petroleum Engineering. His recent research work focuses on: design and scaleup of multiphase reactors; modeling and optimization of industrial processes; CO₂ sequestration in deep coal seams; CO₂ capture from syngas and natural gas streams using chemical and physical solvents; SO_x and NO_x removal from flue gas; and Enhanced Oil Recovery using CO₂ and alcohols.

Professor Morsi is serving as the Executive Officer for the Annual International Coal Conferences; and Chair of area 2F "Fluid/Particle Separation," AIChE Annual Meetings. He has been serving as a consultant to major corporations and organizations in the US and worldwide. He has been also serving as a reviewer for International Conference on gas-liquid and gas-liquid-solid reactor engineering; for research proposals for the US-DOE; and for papers for Chem. Eng. Sci., Chem. Eng. J., Chem. Eng. Comm. J., Ind. & Eng. Chem. Res., Energy & Fuel, Coal Prep., Chem. Eng. & Processing, AIChE J, and SPE J.

Professor Morsi has received various honors, including the Beitle-Veltri School of Engineering's Outstanding Teaching Award (1999); ORISE Fellow, (2000-present); CNG Faculty Fellow (1991-1995);

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MEMBERSHIP CORNER

Please send all change of address notifications to the Membership Chair:

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

MONTHLY MEETING

CONTINUED FROM PAGE 2

The Richard A. Glenn Award, ACS National Meetings (1995) and (2002); and Mentor of the Year Award for the 2002-2003 Minority Engineering Mentoring Program (MEMEP), School of Engineering. He is also a member of AIChE; ACS; SPE; and AFS. Professor Morsi can be reached at Morsi@enr.pitt.edu or 412-624-9650.

~Directions to Lombardozi's~

From the South:

Take Rt. 19 (West Liberty Avenue) through the Liberty Tunnels and across the Liberty Bridge. Continue straight and go onto Crosstown Blvd. Merge onto I-579N. Take the Rt. 380/Bigelow Blvd. Exit. Continue straight and take the Bloomfield Bridge exit. After crossing the bridge, bear right onto Liberty Avenue. Continue straight on Liberty Avenue to the restaurant.

From the East:

Take PA Turnpike I-76 to Exit 57. Follow I-376 West towards Pittsburgh. Take the Squirrel Hill/Homestead Exit. Stay left at the fork in the ramp. Continue straight, and then turn left onto Forward Avenue. Turn left onto Murray Avenue. Take another left onto Wilkins Avenue. Turn right onto South Negley Avenue, then left onto Fifth Avenue. Turn right onto South Aiken Avenue. Take a slight left onto Liberty Avenue. Continue straight on Liberty Avenue to the restaurant.

From the North:

Take I-79 to I-279 South to Exit 8B East Street. Continue straight to the third stop light, then left to East Ohio Street. At the second stop light, turn right to the 16th Street Bridge. Stay in left lane across bridge. At the second light, turn left onto Liberty Avenue. Continue straight on Liberty Avenue towards Bloomfield and to the restaurant.

From the West:

Take I-376 East through the Fort Pitt Tunnels and across the Ft. Pitt Bridge. (Stay in the left lane through tunnel and in middle lane across bridge.) Follow the sign straight ahead to Liberty Avenue. Continue on Liberty Avenue towards Bloomfield and the restaurant.



NEWSLETTER DEADLINE

**THE DEADLINE FOR THE
APRIL NEWSLETTER IS
FRIDAY, MARCH 24, 2006**

Please submit information to:

E.G. Klein
Goldschmidt Industrial Chemical Corp.
941 Robinson Highway
McDonald, PA 15057
724-796-3128
eg.klein@giccusa.com

AICHE NATIONAL NEWS

Short Courses for Chemical Engineers - For a complete list of upcoming short courses, dates, locations, and registration information, visit: www.asme.org/education/shortco/shortcourses.htm (Note: Chemical engineering courses start with the letters "CH")

Easy Dues It - Log on to the newly redesigned www.aiche.org to pay your dues online. It's quick and easy. Log in and select "update my membership" from the home page or visit the Member Center.

That's One Big Meeting! Save the Date for Spring

This spring, the **2006 AIChE Spring National Meeting**, Global Congress on Process Safety—with CCPS International Conference, Loss Prevention Symposium, Process Plant Safety Symposium--plus World Congress on Particle Technology will all be held at Disney's Dolphin Hotel, Orlando, Florida, April 23-27. For details, visit:

www.aiche.org/Conferences/SpringMeeting/index.aspx

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2006-2007 PITTSBURGH SECTION EXECUTIVE COMMITTEE NOMINATIONS

Are you interested in volunteering and in becoming more involved in your Pittsburgh Section? Then, you might want to become a member of our Executive Committee. By volunteering to be part of this Committee or as one of the additional officers and chairs, you will be giving back to your profession and you will be helping others as well.

The Pittsburgh Section will be holding its annual elections in May for the following positions:

Vice-Chair
Treasurer
One Counselor

The Vice-Chair will automatically elevate to the position of Chair in the 2007-2008 program year. The Secretary, Treasurer and Counselor each serve a two-year term.

If you would like to learn more about these positions or to nominate someone or yourself (why not?), please contact the Past Chair, Dr. Jim Schneider at 412-268-4394 or by e-mail to schneider@cmu.edu.



THANKS FOR VOLUNTEERING!

The Pittsburgh Section members and others listed below who volunteered for the **Engineers Week** celebration at the Carnegie Science Center, deserve a big *thank you* for their hard work and dedication in helping with another successful superball booth. Engineers Week celebrations were well attended on February 17th and 18th. Our Engineers Week chair, Nancy Hirko, said our table was again one of the most popular; over 600 superballs were made by many future engineers and chemists.

Our section volunteers were Sam Vance, David Missenda, Deborah Kosmack, William Mentzer (Bill volunteered for both days!), and of course Nancy Hirko. Additional volunteers were Zach Fuller, Jeff Baker (both are University of Pittsburgh sophomore students), and Cathy Fabrizio from Pittsburgh's Brashear High School.

Also deserving recognition is JoAnn Truchan for the work she did with the Society of Women Engineers and the demonstration/lecture that she prepared for the Engineers Week celebration.

Thanks again to all who participated! For those of you who have not experienced this event, it is a lot of fun and very rewarding. Think about volunteering next year!

Our next outreach event will be National Chemistry Week in October, 2006. The theme this year is *Chemistry Used Around the Home*. If you have an idea for a good demonstration, please contact Nancy Hirko, nhirko@air-comp.com or 412-826-3636.

AICHE PITTSBURGH SECTION 2005-2006 SCHOLARSHIP WINNER

Congratulations to Mr. William L. Nicoll, a junior at Carnegie Mellon University, and Ms. Hsiao-Wen Huang, a sophomore at Carnegie Mellon University, who in February were awarded \$750 scholarships from our section for the 2006-2007 academic year.

AICHE STUDENT NIGHT 2006 AWARD WINNERS

Congratulations to our **Student Night 2006 Professional Promise Award winners!** This year's awardees were:

Justin Hartshorn, West Virginia University
Kenneth Hu, Carnegie Mellon University
Anthony Longo, University of Pittsburgh
Ahmad Al-Own, Youngstown State University



(l to r) Kenneth Hu, David Missenda, and Dr. Przybycien

Chair David Missenda and Dr. Przybycien presented the Professional Promise Award to Kenneth Hu of Carnegie Mellon University.



(l to r) Dr. Dadyburjor, Justin Hartshorn, and David Missenda

Dr. Dadyburjor and Chair David Missenda presented the Professional Promise Award to Justin Hartshorn of West Virginia University.



(l to r) Ahmad Al-Own, Dr. Douglas Price and David Missenda

Dr. Douglas Price and David Missenda presented the Professional Promise Award to Ahmad Al-Own of Youngstown State University.



Speaker Dr. Hong Koo Kim delivered a presentation about nanotechnology-based materials and devices for biochemical sensing.

SCIENCE FAIR

Pittsburgh Regional Science & Engineering Fair — March 31 - April 1, 2006 —at Heinz Field, Pittsburgh, PA.

The Pittsburgh Regional Science and Engineering Fair will celebrate its 67th year of open competition of research projects in the fields of science, mathematics, and engineering on March 31 and April 1, 2006, hosted by Heinz Field. This competition is open to all students in grades 6-12 from the 26 counties within Western Pennsylvania and West Virginia. The Science Fair has been a Pittsburgh tradition since 1940. It is also the third oldest science fair in the United States under the affiliation of Science Service, Inc., which facilitates the International Science and Engineering Fair. In 2005, nearly 700 students from 90 schools in 12 counties competed for over \$300,000 in cash prizes, scholarships and trips.

Become A Science Fair Volunteer! The Science Fair is looking for volunteers to help on Competition Day, **March 31, 2006**. The competition takes place at Heinz Field, Club Levels. Breakfast, lunch, parking and a Science Fair t-shirt will be provided FREE! Please contact the Science Fair office at kosickl@carnegiesciencecenter.org or 412-237-1534.



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2006 Monthly Meeting Schedule

Date	Topic	Location
March 15, 2006	Joint Meeting with ACS - Energy Technology	Lombardozzi's – (Bloomfield) Pittsburgh, PA
April 11, 2006	Corporate Culture & Managing Change	Jimmy G's – Sharpsburg, PA
May, 2006	Last Meeting of the Year	TBA

Mark your Calendars!

For the Following Dates:

March 15, 2006	Joint Meeting with ACS	Lombardoizzi's Restaurant – Pittsburgh, PA
April 11, 2006	Monthly Meeting	Jimmy G's – Sharpsburg, PA
May 2, 2006	Pittsburgh Chemical Day	Hilton Hotel, Pittsburgh, PA



The Catalyst

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