

AIChE-PITTSBURGH THE CATALYST

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APRIL 1 (AND 2) MEETING: TOUR OF ERGON-WEST VIRGINIA REFINERY IN NEWELL, WV



AIChE-Pittsburgh's next meeting will include a tour of the Ergon-West Virginia Refinery in Newell, WV.

Neil Stanton, AIChE-Pittsburgh member and Ergon Plant Manager has scheduled a tour for April 1 (and a second on April 2 if we have over 30 members interested in attending).

Neil and Ergon have kindly offered to provide a dinner as part of our visit. Therefore, there will be no registration fee for this tour and meeting! Ergon will provide hardhat, safety glasses and overcoat as PPE for plant tour. Casual attire—including slacks—is strongly recommended. Low-heel, closed-toe shoes are required.

The schedule for the meeting/tour will be as follows:

- 5:30-6:00 brief overview in the training room
- 6:00-7:00 plant tour
- 7:00-8:00 dinner & discussion

To register, contact Paul Brezovec before March 30

Phone: 814-269-2844

E-mail: brezovec@ctc.com

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

Please see page 3 for additional information.





GOLF! WARM WEATHER! FOOD! BEER! PRIZES! GOLF!

We will have the first of what we hope will become an annual golf outing on June 12, 2009. We need some help on the committee running the event. If you are interested please contact Gary Hall (see list of officers at end of newsletter for contact info). We need help the day of the event and beforehand. The scoring system and format we will use will help even someone who has never golfed before, so everyone can get involved and/or play. If interested in becoming a sponsor or donating a prize, please let us know.

Please sign me up for the Pittsburgh Section of AIChE

Name _____

Company _____

Address _____

City _____ State _____ Zip _____

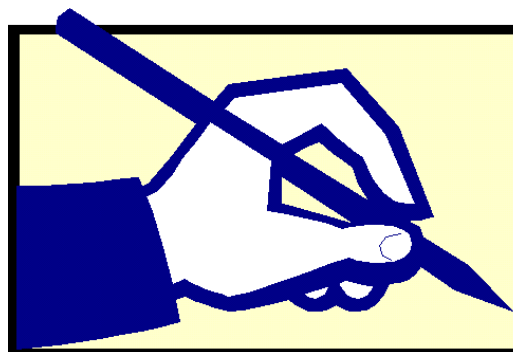
Business Phone _____

Residence Phone _____

Email _____

BECOME A MEMBER OF AIChE-PITTSBURGH!

Local Section dues are \$20/year. Contact Gary Hall: gary.hall@sauereisen.com



NOMINATIONS FOR 2009/2010 AIChE PITTSBURGH SECTION OFFICERS

Pittsburgh section members may now begin nominating candidates for the 2009/2010 season. Members may nominate themselves. The open positions are:

Vice Chair, responsibilities include coordinating the monthly programs for the 2009/2010 season. The Vice Chair must also commit to holding the position of Chair in the 2010/2011 season.

Treasurer, responsibilities include reviewing projected receipts and expenses; preparing a budget for the 2009/2010 fiscal year, and managing and documenting the actual fiscal activity. For continuity, this position extends into the 2010/2011 season. This position receives the assistance of executive board members.

Counselor, responsibilities include providing advice to the executive board concerning section business. A counselor holds office for two years. Generally counselors have been active members in the section and help to offer continuity in the section activities.

Please contact Jim Miller at (412) 268 9517 or e-mail jbmiller@andrew.cmu.edu to nominate yourself or another candidate. Nominations will be open until the deadline for the April newsletter. Ballots will be transmitted at that time, and the results will be announced at the May meeting.

Becoming an officer or participating on a committee is a great way to get more out of your AIChE membership. It provides a venue for exercising business skills such as leadership, organizing, communications, and networking as well as developing friendships with fellow members.

TOUR OF ERGON-WEST VIRGINIA REFINERY (FROM PAGE 1)

Ergon - West Virginia, Inc. is an ISO-9001 certified petroleum refinery.

Located in Newell, WV; Hancock County; Northern Panhandle.

Employs approximately 180 people full-time in Refinery.

Purchased from Quaker State in 1997.

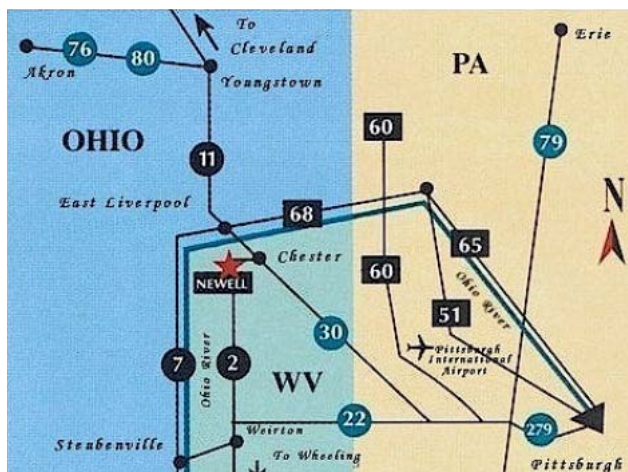
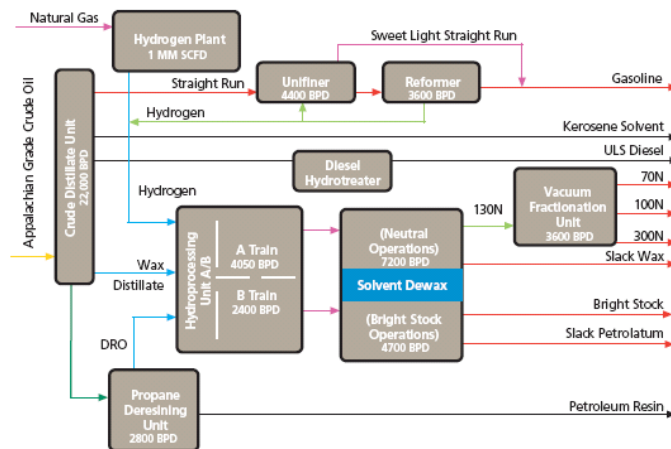
Process crude oils primarily from WV, OH and western PA.

Produce Group 2 paraffinic base oils, highly saturated Bright Stock and waxes.

Also produce gasoline, ultra low sulfur diesel, heating oil and petroleum resin.

Ergon products end up in consumer products ranging from Quaker State motor oil and rubber golf cart tires, (lube and process oils), to lip balm and cosmetics, (waxes). One product blend is being used by banana growers to protect fruit from insects.

Ergon - West Virginia, Inc. Refinery Flowscheme



ADMINISTRATION BUILDING

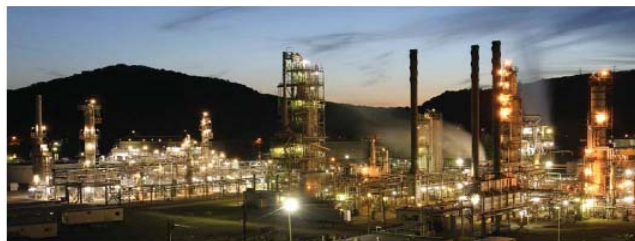


Ergon-West Virginia is located in Newell, in the Northern West Virginia panhandle, at 9995 Ohio River Blvd, Newell, WV 26050. However, that address is not recognized by on-line mapping services. Ohio River Blvd is WV Route 2; Ergon is located between Homer Laughlin China and Mountaineer Racetrack. Parking is available to the left of the Administration Building; enter the Administration Building through the front door and you will be directed to the training room.

From Pittsburgh, take US 22 west toward Weirton. At Weirton, take Exit 2 to WV 2 north. Stay on WV 2 for ~ 15 miles.

From Washington, PA, take PA 18 north to US 22 west. At Weirton, leave US 22 at Exit 2 to WV 2 north. Stay on WV 2 for ~ 15 miles.

We recommend that you carpool with other members from your area!



Welcome to
Ergon - West Virginia, Inc.

ENERGY TECHNOLOGY GROUP

Pittsburgh Section,
American Chemical Society

**Wednesday
March 25, 2009**

More Restaurant
214 North Craig Street
Oakland Section of Pittsburgh, PA

5:30 pm
Cocktail Time - Cash Bar
6:00 pm Dinner
7:00 pm Program

“Adsorption of SO₂ and H₂S by Modified Amorphous Carbon Films”

James B. Miller
Department of Chemical Engineering, Carnegie Mellon University
National Energy Technology Laboratory (NETL)

Abstract: Sulfur compounds are ubiquitous in fossil fuels processing. Solid sorbents, including activated carbons, have seen growing interest for both capture and conversion of H₂S and SO₂. However, relatively little is known at the molecular level about the nature of sulfur-compound adsorption onto carbonaceous surfaces. In this work, we prepare a set of well-controlled model carbon surfaces and apply the methods of ultra-high vacuum (UHV) surface science to determine how microstructure and surface chemical modification influence adsorption capacity and desorption kinetics for H₂S and SO₂. This approach allows us to isolate and understand important elementary steps in capture of sulfur-compounds by carbon surfaces; our results will contribute to a basis for rational design of next-generation activated carbons for fossil fuel applications.

Biography: Jim Miller is a Fellow of the Institute for Advanced Energy Solutions at NETL and Assistant Research Professor at Carnegie Mellon's Chemical Engineering Department. He joined CMU in February 2006 after over 25 years in industry as a developer of catalysts, catalytic processes and chemical sensors. Jim's research interests include characterization of surfaces and surface processes for basic understanding of catalysts, separation devices and chemical sensors. He is a past Chair of AIChE-Pittsburgh and current President of the Pittsburgh-Cleveland Catalysis Society.

For reservations, please call Al Mann by noon Monday March 23, 2009 at 412-661-5947 or by email at alfred.mann@verizon.net

UPCOMING EVENTS-MARK YOUR CALENDAR!

April 1/2: Ergon plant tour
April: TBD
May: McAfee Award Night
June: Student Scholarship award announcement
June 12 First Annual Local Section Golf Outing

JOB SEARCHING FOR CHEMICAL PROFESSIONALS WORKSHOP SUM- MARY

On February 7, 2009, 51 chemical professionals attended the all-day workshop at the University of Pittsburgh. Special thanks go to Elie Absey, Jay Auses, Michelle Blanken, and Toby Chapman for arriving just after 8:00 AM to setup and manage the registration, hiring representative, and food service tables. Thanks also to Paul Brezovec, Gary Hall, Hub MacDonald, Jim Miller, and Sabina Robinson for their help during the morning session.

Of the 51 attendees, 40 were students and 11 were mid-career job seekers. Between 1/4 and 1/3 of the attendees were chemical engineers. Of the students, half were from the University of Pittsburgh, 1/4 were from CMU, and the rest from other colleges and universities in the area. Half were Ph.D. candidates, 1/4 were B.S. candidates, and the rest were M.S. candidates and post-docs. Timing of the workshop was ideal for mid-career job seeker and many Ph.D. candidates.

During the morning session, Daniel Eustace presented an overview of the job searching process and Joseph Jolson provided information specific to job hunting in the Pittsburgh region. After the networking lunch, all attendees stayed for the afternoon resume review and career counseling session and most interacted with hiring agency representatives. Elie Absey, Jay Auses, Michelle Blanken, Paul Brezovec, Toby Chapman, Dan Eustace, Gary Hall, Hub MacDonald, Jim Miller, Joe Jolson, and Sabina Robinson reviewed resumes and provided career counseling.

Jim Knights of the FBI, Zane Frund of MSA, and Lisa Buchanan of On-Assignment staffed recruitment tables. Gary Hall interviewed attendees for positions at Sauereisen while reviewing resumes. ChemImage provided a job description for an open position.

**Submitted by Joseph Jolson
Chair, ACS-Pittsburgh Professional Relations Committee**



In the back, from right to left, is Dan Eustace (main speaker), Joe Jolson (ACS committee co-chair), Paul Brezovec, Jay Auses (SACP co-chair), and Elie Absey. In the front, from right to left, is Hub MacDonald (SSP co-chair), Toby Chapman (University of Pittsburgh representative), Gary Hall (AIChE co-chair), Michelle Blanken, Jim Miller, and Sabina Robinson.

FUTURE CITIES AICHE AWARD WINNERS



Freedom Middle School's "Greenville" City won AICHE-Pittsburgh's award for "Most Creative Use of Recyclable Material" at the annual Future Cities competition which took place at the Carnegie Music Hall in Oakland in January. Local Section volunteers at the event included JoAnn Truchan, David Missenda, Carl Schwartz, and Jim Miller. For additional information on the Future Cities program, see <http://www.futurecitypittsburgh.org/>

STUDENTS' NIGHT AND AWARDS BANQUET

An outstanding senior from each of the regional Chemical Engineering Programs was recognized with the Pittsburgh Section's Professional Promise Award at our February Students' night banquet held at the William Pitt Student Union. Congratulations to our 2009 Awardees:

Cassie Cunningham, West Virginia University

James D. Fisher, University of Pittsburgh

Benjamin D. Krafcik, Youngstown State University

Lisa Plimpton, Carnegie Mellon University

Students' Night also included a presentation by Alan Russell, director of the McGowan Institute for Regenerative Medicine at UPMC, and the following student poster presentations:

Connecting the Aggregation Behavior of Formulated Recombinant Human Growth Hormone with Gibbs Energy of Unfolding, Amanda DiIenno, Carnegie Mellon

Spontaneous Spreading of Particle Monolayers from Unstable Pickering Emulsions, Hsin-Ling (Linda) Cheng, University of Pittsburgh

The CO₂ and H₂ Permeability of Membranes Composed of Highly CO₂-philic Polymers, Katie Barillas, University of Pittsburgh

Investigating Cytokine Removal Using TNF Specific Aptamers, James D. Fisher, University of Pittsburgh

Interrogating Proteomic Profiles of Cellular Models of Breast Cancer, Yogesh Kulkarni and Vivian Suarez, West Virginia University

Principal Component Analysis of the Differentiation of Dendritic Cells Jennifer Knipe and Chris Cuff, West Virginia University

Shape Controlled Synthesis of Platinum Nanoparticles and Their Catalytic Effect on the Reduction of Aromatic Nitro Compounds, Erica Sladky, West Virginia University

AIChE-Pittsburgh Executive Committee 2008-2009

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Vice-Chair and Program

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Young Professionals

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