



The Crucible



<http://membership.acs.org/P/Pitt>

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WPTAG - How it All Began! 1996 - 2006 10th Anniversary Celebration

This is the third and final article to be published in 2006 in honor of WPTAG's 10th Anniversary

In 2006 the Western Pennsylvania Technician Affiliate Group (WPTAG) marks its 10th anniversary. Due to the transient nature of an organization built on volunteers, the institutional memory of an organization can be lost over time. As with the first two articles published earlier this year, the following will attempt to capture some of WPTAG's history, as well as look at how far this chemical technician affiliate group of the Pittsburgh Section of the American Chemical Society (ACS) has come in meeting the goals and objectives the group set out to achieve ten years ago.

During the past ten years, WPTAG has had the honor of receiving five ACS awards, sponsored by the Division of Chemical Technicians, Inc. (TECH). In addition, in 2003 WPTAG was the recipient of an ACS Salutes to Excellence award for the group's continuous support at the local section level of the ACS's National Chemistry Week program.

In 1997, WPTAG received its first award from TECH in the category of "Most Innovative TAG." The award was based on a number of programs and activities initiated in 1997, including the introduction of the WPTAG "Job Bank" which resulted in WPTAG helping to place members into laboratory technician positions at a local chemical company. In addition, in September 1997, WPTAG offered the ACS's workshop "Career Enhancement/Advancement for Chemical Technicians." This well received event was co-sponsored by the Pittsburgh Section of the ACS, Bayer Corporation, and the Bidwell Training Center and fea-

tured national ACS Career Consultant Don Bly. Finally, WPTAG offered its first "Technician of the Year" recognition award in 1997 to Robert Morgan from PPG Industries, Inc.

In 1998, WPTAG received TECH's "Best Overall TAG" award. WPTAG was recognized for the training it provided during the year, as well as the networking opportunities and community outreach it conducted. In partnership with Bayer Corporation, WPTAG held a "Science is Fun" night in May 1998. Neil Nodelman, from the Bayer Association for Science In Communities, presented an hour-long show featuring his "Magic in Chemistry" demonstration. In addition, WPTAG conducted several other networking events in 1998 including holding its 2nd Annual Picnic for members and their families in June and the 2nd Annual Pirate Baseball Outing in September. One of WPTAG's most successful training sessions in 1998 was a general meeting/workshop titled "Improving your Interviewing Skills." Mr. Stuart Redshaw, Human Resources Manager for Bayer Corporation's Fibers, Additives, and Rubber Division, made the presentation.

WPTAG received its third award from TECH in 1999, this time in the "Best Interaction with Local Section" category. Under the leadership of WPTAG's 1999 Chair Brunette Richards, PPG Industries, Inc., WPTAG worked along side the Pittsburgh Section in order to develop stronger ties with the local chemistry community. On behalf of the Pittsburgh Section, WPTAG took on such duties as judging and presenting the Pittsburgh - ACS awards at the Pittsburgh Regional Science and

Look for Pittsburgh Section Election Results in the January Issue

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JOB SEARCHING FOR CHEMICAL PROFESSIONALS

Presented by

The Society for Analytical Chemists of Pittsburgh
The American Chemical Society, Pittsburgh Section
The Spectroscopy Society of Pittsburgh

Saturday, February 3, 2007

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PROGRAM

- 8:00 A.M. Registration
- 8:30 A.M. Welcome and Introduction
- 9:00 A.M. MANAGING AN EFFECTIVE JOB SEARCH
Dr. Ray O'Donnell
Career Consultant, American Chemistry Society
- 10:40 A.M. BREAK
- 11:30 A.M. Overview of Local Job Market - Joseph D. Jolson, Ph.D.
- 12:00 P.M. Working Lunch
- 12:30 P.M. Resume Review
Personal Consultation
- 3:00 P.M. Local Recruiting Opportunities

Please bring your resume in order to participate in the afternoon program

For additional information, contact Bob Theys at 412-823-3077 or theys@pittcon.org

Registration Form

2007 Job Searching for Chemical Professionals

Please make \$10.00 check for workshop fee payable to ACS Pittsburgh Section

Send completed registration form by January 20, 2007 to:

Mr. William Valenta, 214 Parkman Ave, Rm 244, Pittsburgh, PA 15260

Name _____ Resume Review Yes or No

Address _____

City _____ State _____ Zip _____ Phone _____

E-mail Address _____



Society for Analytical Chemists of Pittsburgh



January Meeting
Monday, January 8, 2007
Duquesne University, Maurice Falk Hall

“Microfluidic Devices for Bioanalytical Applications”

Christopher T. Culbertson, Ph.D.
Associate Professor
Kansas State University

Student Affiliates Meeting, Duquesne Room (Student Union) 5:45 P.M.
Dinner - Student Union, City View Café (6th Floor) 6:30 P.M.
Technical Presentation 8:00 P.M. Maurice Falk Hall

Microfluidic devices are dramatically changing the face of bioanalytical chemistry. These devices have the unique capability of integrating a variety of chemical processing and analysis steps with single cell culturing, handling and transport. Many of the microfluidic devices developed for cell work are fabricated from poly(dimethylsiloxane) (PDMS). PDMS is generally used because of its high oxygen permeability and biocompatibility. Unfortunately, however, electrophoretic separations on PDMS-based microfluidic devices are generally much poorer than on glass microfluidic devices especially for hydrophobic molecules (e.g. rhodamine and BODIPY® labeled biomolecules). In order to improve the separation of these analytes we have developed both covalent and non-covalent coatings based upon sol-gel chemistry and surfactants, respectively, that result in very high efficiency, diffusion limited separations. While these coatings work well, it would be easier to find a polymer whose bulk characteristics would impart non-ab/adsorptive surfaces so no coating is necessary at all. To this end, we are also developing a novel PDMS-PEO block copolymer that will intrinsically resist the ad/absorption of hydrophobic molecules while still remaining transparent and oxygen permeable. Initial results indicate that separations on these devices will also be diffusion limited. Finally, because many analytes in biological samples are at very low concentrations, they are difficult to detect. The sol-gel chemistry we have used to coat PDMS channels can also be used to create nanoporous membranes in the microfluidic channel manifold. The electroosmotic flow mismatch between the nanometer scale channels in the membrane and the microfluidic channels allows analytes to be preconcentrated near the nano-micro channel interface. The ion-depletion region that develops in front of the nanoporous membrane during preconcentration generates electroosmotic flow (EOF) of the second. The volumetric flow rates generated by EOF of the 2nd kind are significantly larger than the flows generated by simple EOF. These high flow rates allow large volumes of fluid to pass through the concentration zone rapidly so that analytes can be preconcentrated upwards of 1,000,000 fold in about 5 min. The results of all of this work will be presented and discussed.

Bio:
Dr. Christopher T. Culbertson received a B.A. in biology from Harvard University in 1988 and a B.S. in chemistry from The University of West Florida in 1991. He then received a Ph.D. in chemistry from The University of North Carolina at Chapel Hill under the direction of Prof. James Jorgenson. After completion of graduate school in 1996 he accepted a post-doctoral fellowship with J. Michael Ramsey at Oak Ridge National Laboratory. Dr. Culbertson was moved to permanent staff at ORNL in 1998. In 2002 he moved to Kansas State University and has been recently granted tenure and promoted to Associate Professor. His research interests include the development of microfabricated chemical instrumentation, microfluidics, single cell assays, capillary liquid chromatography and the development of novel materials and coatings for microfluidic devices. Dr. Culbertson has published 38 papers and presented 60 invited lectures. He was recently awarded an NSF CAREER award and the ACS Division of Analytical Chemistry Award for Young Investigators in Separation Science.

Dinner Reservations: Please email Carolyn Benga at crb.sacp@yahoo.com, by Thursday, January 4, 2007 to make dinner reservations. Carolyn's preference for reservations is an email. Should you not have email, please call 412-487-0915 to make dinner reservations. Dinner will cost \$8 (\$4 for students) and checks can be made out to the SACP. If you have any dietary restrictions, let Carolyn know when you leave message.

Parking: Duquesne University Parking Garage entrance is on Forbes Avenue. Upon entering the garage receive parking ticket and drive to upper floors. Pick up a parking sticker at the dinner or meeting. Contact Dr. Mitch Johnson at Duquesne University if any difficulties arise.

POLYMER GROUP
Pittsburgh Section
American Chemical Society

December 13, 2006

Duranti's Restaurant
128 N. Craig St.

Social Hour (cash bar)	5:30 pm
Dinner	6:30 pm
Technical Presentation	7:30 pm

**“Phase Transitions in Colloidal Systems
Using Temperature Sensitive Gels”**

Mohammad F. Islam
Department of Chemical Engineering and
Department of Materials Science & Engineering
Carnegie Mellon University

I will describe recent experiments on phase transitions in colloidal rods and spheres using temperature sensitive gels. In one set of experiments we explore the isotropic-to-nematic transition of rods, in this case single wall carbon nanotubes, by dispersing nanotubes in a temperature sensitive cross-linked polymer gel, and then inducing a temperature-dependent volume-compression transition of the gel [1]. We also observe the following striking features due to the coupling of nematic order and elasticity of the polymer matrix: (i) undulations and then cusping of the gel sidewalls, (ii) a nematic director field that evolves as the gel sidewalls deform, (iii) networks of surface cracks that are orthogonal to the nematic director field, and (iv) fissures at the sidewall cusps and associated topological defects that would not form in liquid nematics [1,2]. In a second set of experiments we investigate the melting mechanisms of three dimensional (3-D) colloidal crystals using thermally responsive monodisperse microgel spheres [3]. The particle diameter decreases with increasing temperature and leads to volume fraction changes that drive phase-transitions. Interestingly, by imaging the motions of individual particles in 3-D colloidal crystals during the melting process, we find premelting near grain boundaries and dislocations.

References

- [1] Islam, Alsayed, Dogic, Zhang, Lubensky, Yodh, Phys. Rev. Lett. 92, 088303 (2004).
[2] Islam, Nobili, Ye, Lubensky, Yodh, Phys. Rev. Lett. 95, 148301 (2005).
[3] Alsayed, Islam, Zhang, Collings, Yodh, Science 309, 1207 (2005).

For dinner reservations please contact Nick Tsarevsky 412-268-1872; e-mail: nvt@cmu.edu no later than Tuesday, December 12, 2006. The cost of dinner is \$19.00 per person; discount rate of \$11.00 for retirees; no charge for students. All are welcome!

**Pitt Department of
Chemistry Names 2006
Distinguished Alumni**

On Friday, September 29, 2006, the Department of Chemistry proudly honored these five leaders as 2006 Distinguished Alumni. We extend our congratulations and appreciation to each for the contributions they have made to our science, our communities, and the nation.

Sharon Marion D’Orsie

BS 1969

Founder, Eagle Environmental Services, Houston. Pioneer business woman and a dedicated and valued educator who returned recently to her first love - teaching high school chemistry

G. Michael Deeb, MD

BS 1971

Herbert Sloan Collegiate Professor, University of Michigan. Thoracic surgeon, former Director of Cardiac Surgery, and present Co-Director, Heart Care Program at the University of Michigan Medical Center

Joseph A. Gardella, Jr.

PhD 1981

Professor of Chemistry, SUNY Buffalo. Community and campus leader, outstanding teacher, and innovative scientist. Active in public service through the ACS, community education, and local government

Frederick S. Humphries

PhD 1964

Regent Professor, Florida A&M University. Former president of Florida A&M, former president of Tennessee State, continued service as a national leader in education

Costas G. Karakatsanis

BS 1974, PhD 1978

Former Director, Materials Characterization at Bayer MaterialScience. Important contributor to the research enterprise at Bayer and a valued partner in Pittsburgh regional university- industrial relations

Submitted by University of Pittsburgh



The 2007 Tripartite Symposium

Realities and Challenges of Global Warming/Global Dimming

Sponsored by

Society for Analytical Chemists of Pittsburgh (SACP)
Spectroscopy Society of Pittsburgh (SSP)
American Chemical Society (ACS) – Pittsburgh Section

April 23, 1:00 – 5:30 p.m.
Eddy Theatre, Chatham College
Dinner following Symposium

Featured Speakers

Dr. M. Granger Morgan — Carnegie Mellon University
International Expert on Energy and Global Warming

Dr. Beate Liepert — Lamont-Doherty Earth Observatory
Research Pioneer on Global Dimming

Dr. Patrick Michaels — Cato Institute
One of the most prominent scientists articulating the
paradigm that global warming will be modest

Further Details to Come

ACS Launches Social Networking Site

In late 2006, the American Chemical Society launched a new social networking site targeted to professionals, students, and researchers interested in and working in biotechnology.

BiotechExchange.org provides individuals the opportunity to meet, dialogue, discuss, debate, and interact with other researchers and professionals involved in discovery and process development for the pharmaceutical and bio-based materials industries. BiotechExchange.org provides a forum to share information, identify opportunities, and seek collaborations with fellow scientists and industry professionals.

Features on the site include:

- Pre-meeting information from event organizers
- On-site blogs from event attendees
- Virtual poster sessions (including peer-review)
- Audio casts, news feeds, and journal article summaries

In addition, the site will permit the creation of special interest groups. These enable smaller collections of individuals to gather and share specialized information of interest. More information regarding the creation of groups may be found at www.biotechexchange.org.

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Chemistry Prof Cohen Marks 50 Years at Pitt

When Theodore Cohen arrived in Pitt's chemistry department 50 years ago, "It really was pretty miserable," he recalls. Fresh from postgraduate work in Glasgow under Derek Barton (later a Nobel laureate), he'd been hired long-distance, without even an interview, to join Pitt's organic chemistry faculty.

When he walked into his assigned space in Eberly Hall (then known as Alumni Hall) he found a big, dirty lab with an old desk in the corner and not even a blotter on the desk. A \$1,000 budget to equip his lab and office had to cover everything from pens and paper clips on up. "I had to start from the beginning," he said.

Now, professor emeritus Cohen's office and lab in the Chevron Science Center are considerably better equipped, as is the entire chemistry department, which has grown in size and reputation in the past half-century.

"Everything is entirely different," he said, citing excellent front office support as well as mechanical, glass and spectroscopy shops to aid faculty in their work. "What we have is sensational."

Looking back on 50 years at Pitt, Cohen says, "It worked out beautifully. I couldn't have been in a place more rewarding."

To mark the milestone, Cohen, 77, was honored with a reception following a lecture he presented on his work at Pitt.

During opening remarks at the talk, colleague Toby Chapman noted of Cohen, "With his dedication to science, with his dedication to the department and with his work ethic, we're celebrating the equivalent of about 75 years of achievement."

Among his lab's many discoveries was a synthetic method for making phenols (components in the production of pharmaceuticals and synthetic resins) that now is the standard in many chemistry textbooks. "This is probably my main legacy in chemistry," he said.

A 1992 recipient of the Chancellor's Award for Distinguished Research, Cohen retired from the University in 1999 and was feted with a symposium in his honor. Since that time, he has continued working in his lab with both undergrad and graduate researchers.

Cohen is the first to admit that he often didn't get off to a quick start in his endeavors, but "I always ended up well."

He left high school with no strong inclinations as to a career path. "I never was one of those geeks who really loved science," he said. But he enjoyed chemistry, especially in figuring out the mechanisms of organic reactions and understanding how nature works.

He considered medical school, but decided instead to pursue chemistry. Looking back, he said he made the right choice. "Research I think is much more exciting than being a physician," he said. "Research is always new."

In 50 years in the field, Cohen has seen computers and new technology revolutionize the way chemists work, replacing the tedious method of drawing out chemical structures on boards with a program that speeds the process. "The computer has revised the way we write papers, read papers and search literature in ways we could never before. It's marvelous," he said. "Technology has made a huge difference."

Cohen said he has learned that "when something happens, you can never tell if it's good or bad," labeling several low points on his career path as blessings in disguise.

As a student, he'd applied for a Fulbright scholarship to work with Barton in London, only to discover that Barton had moved to Glasgow.

He got the scholarship but not the London life he'd anticipated. "It was dismal and dirty," he recalled. The blessing: "In Glasgow there was nothing to do outside my work," he quipped. "It worked out very

well." His work with Barton on biosynthesis added to his credibility and played a role in his being hired sight unseen at Pitt.

Before heading to Pittsburgh, the Massachusetts native researched the city in the Encyclopedia Britannica. "It sounded like Glasgow," he said. His fears of a life spent in sooty gray towns turned out to be unfounded. "Pittsburgh is one of the greatest places to live that you can find, in many ways," he said.

He even found a silver lining in appendicitis. Three days in the hospital in his early days at Pitt freed him to read about nuclear magnetic resonance. "It gave me the opportunity to become the foremost expert at the University of Pittsburgh in NMR" at the time, he said. New in the 1950s, NMR, the technology on which MRIs are based, has become a standard way organic chemists identify a compound's molecular structure.

Most researchers wouldn't call losing funding a "lucky thing," but Cohen found it to be so. Having his National Science Foundation support pulled in the early 1970s after nearly two decades of renewals was another blessing in disguise. In declining to renew funding for his mechanistically-oriented work, the NSF program manager said he should move on to other areas, Cohen said.

"This liberated me," he said. "I had a number of ideas, new things I wanted to do." The forced change in direction led him to focus on synthetic chemistry, which led to new funding from both NSF and the National Institutes of Health and whole new areas of discovery. Among his more recent work has been in the synthesis of pheromones.

Cohen said his regrets lie in his habit of moving on too quickly to new ideas. "I love to discover new things," he said, lamenting that he set aside some discoveries without fully developing them. "I've moved into other things too fast," he admitted.

He's begun correcting that by publishing in collaboration with his former post-doc

Continued on Page 7

ENERGYTECHNOLOGYGROUP

Pittsburgh Section
American Chemical Society

Thursday, December 7, 2006

“Alternate Strategies for Coal Liquefaction”

by

Elliot Kennel
Research Coordinator
Department of Chemical Engineering
West Virginia University

More Restaurant

214 N. Craig St., Pittsburgh, PA, 412-621-2700

11:30 am	Networking-Cash Bar
12:00 noon	Luncheon
1:00 pm	Presentation

All are welcome! Please plan to attend. For reservations, call Christina at 412-386-4484 (for Tom Sarkus) by noon on Friday, December 1, 2006.

Although processes to convert coal to liquid fuels such as gasoline and diesel have been available for more than sixty years, new processes are required in order to meet modern requirements for environmental friendliness and low cost. For that reason, researchers worldwide have sought to develop alternative strategies for coal liquefaction in order to produce more attractive suites of products, while also reducing the costs of production and, in particular, the capital costs needed for coal liquefaction systems. In particular, the advent of coal gasification technologies, such as (but not limited to) the U.S. Department of Energy's FutureGen Initiative, is expected to result in the availability of hydrogen as well as process heat, both of which can be key assets for liquefying coal-based feedstocks. At the same time, the research and development community is preparing technology options to sequester or limit CO₂ production from coal liquefaction processes, in anticipation that that may be required in the future.

Biography

Elliot Kennel has been with WVU since 2002, where his research interests include development of carbon products from coal-derived precursors, carbon nanomaterial production from coal-derived precursors, and other ways to develop value added products from coal. Previously, he was Vice President and Director of Research at Applied Sciences Inc., in Cedarville, Ohio, where he specialized in carbon nanofibers, and helped to develop one of the first commercial production lines for tonnage quantities of carbon nanomaterials. Prior to that, Mr. Kennel worked for the U.S. Air Force as a military officer from 1980 to 1984, and as a civilian employee from 1984 to 1990 as a specialist in thermionic energy conversion and high temperature materials. He holds a BS degree in Physics from Miami University (of Ohio), a MS degree in Nuclear Engineering from Ohio State University, and a MDiv degree from United Theological Seminary.

February Meeting: Watch for details in the January issue of *The Crucible!*

Cohen Continued from Page 6

Xiaoming Zhao, now of the Shanghai Institute of Organic Chemistry. That partnership allows Cohen to wrestle with the ideas while others halfway around the world contribute the lab work.

Still in process at Pitt is his work with undergraduate Justin Chalker to develop a new method of synthesizing kainic acid. The substance, derived from seaweed, is important to medical research because it is able to induce symptoms of neurological disorders. If symptoms of seizures, strokes or Alzheimer's can be induced, researchers can then develop cures.

Although other syntheses exist, Cohen believes his lab's method will be more efficient and could cut the cost (about \$10,000 a gram) by a factor of 10.

Chalker, whom Cohen calls "extraordinary" among his team members, is pursuing a master's degree in England on a Rhodes scholarship, and is among the many students Cohen considers instrumental to his work.

On the bookshelves lining Cohen's office are the theses of his 45 PhD advisees and scattered photos of former students. "I've been helped by so many people," he said, adding that his student researchers "have been great. They've helped enormously intellectually as well as with the lab work."

Of the nearly two dozen graduate researchers and more than three dozen post-docs he's mentored, some have followed him into academia, while others have chosen careers in industry. "That's been the satisfying legacy," he said.

--Kimberly K. Barlow

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WPTAG Continued from Page 1

Engineer Fair. WPTAG also organized and ran the Pittsburgh Section's National Chemistry Week (NCW) program, which consisted of a two-day celebration held at the Carnegie Science Center on November 12-13, 1999. In addition, with a total of \$4000 in funding provided by the Pittsburgh Section, Bayer Corporation, and the PPG Industries Foundation, WPTAG completed one year early its community outreach goal set in 1997 of donating 100 copies of the book "The Best of WonderScience" to Pittsburgh area elementary schools by 2000.

Under the leadership of the 2002 and 2003 WPTAG Chair Alan Bushmire, Bayer MaterialScience LLC, WPTAG received TECH's "Most Innovative TAG" for both 2002 and 2003. In 2002, WPTAG offered a number of innovative workshops and networking opportunities that included a financial planner who made a presentation on personal retirement and savings plans, the Vice President of Technology in the Plastics Division at Bayer Corporation who spoke about several new innovations in plastics, and the Manager of University Relations at Bayer Corporation who lead the audience in an interactive exercise to determine their personal traits and how those traits can influence interactions with other people.

In 2003, WPTAG continued to offer relevant programming. Leslie Bonner of Job House in Pittsburgh presented "Creating You Inc." Ms. Bonner's presentation focused on what the mindset is when people lose their job and how to overcome this and move on. She also discussed what area agencies have to offer those who have recently lost their job and how they can help. Another well received presentation organized by WPTAG featured Linda Sturdivant, a counselor with the Bayer EASE program, who presented "Thriving in a Changing Environment." This interactive activity helped people identify characteristics of those who manage change well and develop strategies to reduce stress and thrive in a changing environment. In 2003, WPTAG initiated a Career Services Committee, with the goal of reaching out to recently displaced technicians and helping them to get in touch with agencies that could help them find employment. A

Yahoo! Discussion group was formed on the Internet to keep members up to date on area employment opportunities, through real-time discussions and passing of information. In addition, a links page was added to WPTAG's web page with links to local and ACS job posting Internet sites.

During the past ten years WPTAG has focused on providing informative and timely programming to its members, as well as networking opportunities that allow technicians to interact with a wide variety of people employed in the chemical enterprise. In addition, WPTAG has focused on conducting community outreach activities through such things as a book donation program to local schools and in helping to organize and run the Pittsburgh Section's NCW event for the past eight years. These efforts have allowed WPTAG to raise the public's awareness of the chemical technician profession, while providing relevant programming and training to meet the needs of the chemical technician community. For its efforts, WPTAG has received national recognition from the ACS for 5 out of the 10 years the group has been around! Congratulations WPTAG - and Best Wishes on the next 10 years!

Submitted by V. Michael Mautino

ACS Pittsburgh Chemists Club

Pittsburgh Section, American
Chemical Society

The Pittsburgh Chemists
Club will not meet
in December.

Stay up-to-date on
all the happenings
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Section ACS by
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[http://
membership.acs.org/P/Pitt](http://membership.acs.org/P/Pitt)

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Call for Nominations: The Patterson-Crane Award

Do you have a colleague whom you feel should be acknowledged for their work in chemical information? The Dayton and Columbus Sections of the American Chemical Society, which sponsor the Patterson-Crane Award, would like to hear from you. The biennial award consists of a \$2,000 honorarium and a personalized commendation and is to be presented in the Spring of 2007 at an awards dinner to be held in Columbus, Ohio. The recipient is expected to give an address at the time of the award presentation.

Award Criteria

Nominees, who need not hold ACS membership, should demonstrate outstanding achievement in the field of chemical information science. Contributions of international significance may relate to:

- Design, development, production, or management of chemical information systems or services.
- Electronic access to and retrieval of chemical information; critically evaluated data compilations.
- Information technology applications in chemistry or other significant chemical documentation, including production of original works, editorial work, or chemical library work.

Nominations for the award must be in writing and may be sent either hard copy or via email.

They should discuss the nominee's contributions to the field as well as an evaluation of accomplishments. Materials supporting the nomination should include a biography and bibliography of publications and presentations. Seconding letters are required and may also be sent either hard copy or via email.

Send the nomination materials to Dr. Theresa Huston, Chair of the Patterson-Crane Award Committee, (thuston@cas.org or CAS, P.O. Box 3012, Columbus OH 43210) for receipt by 31 January 2007. To receive more information about this award, contact Dr. Huston (614-447-3600, ext. 3354 or thuston@cas.org).

Nominations will be judged by a seven-member selection committee consisting of Dayton and Columbus Section members as well as the Chair of the American Chemical Society's Division of Chemical Information.

The Patterson-Crane Award is international in scope and given in honor of two outstanding members of the Sections: Austin M. Patterson (1876-1956) and E.J. Crane (1889-1966), who were both Editors of Chemical Abstracts Service.

ACS Cut and Paste November/December 2006



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Pittsburgh Area Calendar

December

- Wed. 13 **Polymer Group, Pittsburgh Section ACS**
Duranti's Restaurant
"Phase Transitions in Colloidal Systems Using Temperature Sensitive Gels"
Mohammad F. Islam, Department of Chemical Engineering and Department of Materials Science and Engineering,
Carnegie Mellon University
- Thur. 7 **ACS Pittsburgh Energy Technology Group**
More Restaurant
"Alternate Strategies for Coal Liquefaction"
Elliot Kennel, Department of Chemical Engineering, West Virginia University

January

- Mon. 6 **Society for Analytical Chemists of Pittsburgh (SACP)**
"Microfluidic Device for Bioanalytical Applications"
Christopher T. Culbertson, Ph.D., Associate Professor, Kansas State University

The Crucible

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