

# The Crucible



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

Volume: XCI No.2

October 2005



ACS President William F. Carroll will visit more than ten cities during this year's National Chemistry Week, October 16-22. The "Extreme NCW Tour," will include visits to ACS local sections and participation in a variety of activities, from meetings with chemistry clubs to talks with community college leaders. Events in each city will be arranged by local section leaders and provide an opportunity to emphasize the importance of chemistry and science education.

"The goal of the 'Extreme NCW Tour' is to meet ACS members, attract attention to their commitment to community service and remind the public of the benefits of chemistry. Plus, you can't beat a good road trip," said Carroll.

Cities and the dates scheduled for visits are:

San Juan, PR, Friday, Oct. 14; Memphis, Oct. 15 -16; Nashville, Oct. 17; Oswego, NY, Oct. 18; Schenectady, NY, and Burlington, Mass., Oct. 19; Charlotte, NC and Fort Lauderdale, Oct. 20; Los Angeles, Oct. 21; Pittsburgh and St. Louis, Oct. 22; and Dallas, Oct. 23.

For more information about the tour and other plans for the 2005 National Chemistry Week visit <http://www.chemistry.org/extremencwtour>

*Submitted by V. Michael Mautino and ACS Communications Office*

## Attention National Chemistry Week Enthusiasts!

You are invited to meet with ACS President William F. Carroll during the Pittsburgh stop on his 'Extreme NCW Tour.' Dr. Carroll will be available at the Pittsburgh Section ACS' NCW event at the Carnegie Science Center, Saturday, October 22, from 10 to 11 AM. Look for him at the Western Pennsylvania Technician Affiliate Group's table, located in the Science Center's first floor lobby. There is no charge for parking at the Carnegie Science Center. Access to the NCW celebration in the Carnegie Science Center's first floor lobby is also free!

For more information about the Pittsburgh Section's 2005 NCW event see page 3 or visit <http://membership.acs.org/P/Pitt/activities.html#week>

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## The Second Year of Project SEED at Washington & Jefferson College

Between practicing for band and cross country as well as working part time at McDonald's, it's tough to imagine that R. Troy Hull would have room in his schedule for summer research. Nevertheless, this motivated young man managed to balance it all this summer. Troy conducted research on the synthesis of heterocyclic molecules during the day, while filling his

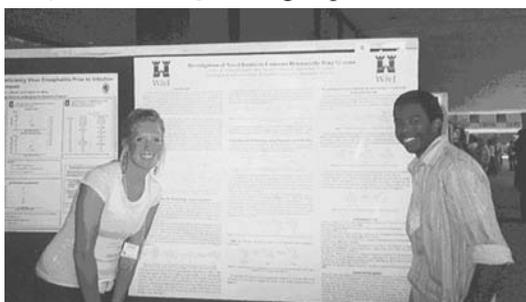
evenings with his other commitments. Troy was the second participant in Washington & Jefferson College's Project SEED program (summer educational experience for economically disadvantaged high school stu-

dents). He was selected for the program on the basis of the talent that he demonstrated in his high school science classes. In his application for the program, Troy stated that "Chemistry has enabled me to think about an idea, expand on the idea, and learn something new because of it." Project SEED helps to foster a deeper understanding of this very principle by giving talented students the opportunity to engage in hands-on research in a college laboratory.

Along with his lab mates Chelsey Gillen (W&J Class of 2006) and Nicole Kennedy (W&J Class of 2007), Troy studied the synthesis of novel beta-carbolines via mechanistically interesting pathways in the laboratory of Dr. Michael Leonard, Assistant Professor of Chemistry. Troy worked towards the preparation of analogues that will eventually be tested for bioactivity using patch clamp technology in collaboration with Dr. William Sheers of the W&J Physics Department. In the course of this research, Troy learned to use IR and NMR techniques, acquiring his own analytical data on W&J's 400 MHz NMR spectrometer. His investigations culminated in the presentation of a poster at Duquesne University's Summer Undergraduate Research Symposium.

The program has several features in addition to the laboratory work. Weekly group meetings gave all of the students an opportunity to present their research results as

well as recent literature. Over the course of the summer, Troy presented two articles, one on protein folding and the other on the constituents of coffee. To provide Troy with the background knowledge to appreciate his project, Chelsey, Nicole, and Dr. Leonard took turns giving lectures on the fundamentals of Organic Chemistry. The group also took several tours of local



Nicole Kennedy and R. Troy Hull with their poster at Duquesne's Summer Undergraduate Research Symposium

chemical companies in conjunction with Duquesne University's Project SEED program led by Dr. Jennifer Aitken. The visits to Ferro Corporation, R.J. Lee Group, Inc., Bayer

Material Science LLC, and PPG Industries provided the students with an overview of opportunities in the chemical sciences.

As Troy enters his senior year at Washington High School, he is looking ahead to college applications. Troy plans to study chemistry and music in college. While he has not yet decided on a career path, the Project SEED program has provided Troy with the tools to make an informed decision about his future. Troy said, "I really enjoyed doing the program this summer. Not only did I learn a lot about Organic Chemistry, I also learned how to pursue a career in chemistry. Overall it was a great experience."

W&J's program was made possible by the Project SEED Endowment and by generous donations from Ferro Corporation, Westinghouse, Bayer Material Science LLC, PPG Industries, the local ACS section, Eastman Chemical Company, and LabChem, Inc. We thank Tabitha Riggio (Bayer Material Science LLC and Chair of the Committee on Project SEED for the Pittsburgh Section of the ACS) and David Foreman (previously Director of Foundation Relations at W&J) for their tireless fundraising efforts. Cecilia Hernandez and Raihanah Rasheed of the National ACS are also gratefully acknowledged for their assistance with the SEED program.

*Submitted by Michael S. Leonard*

## Who Will Be The Next Generation of Chemical Scientists?

Your support of ACS programs can help determine the future face of science.

Our next generation – Project SEED and ACS Scholars

American Chemical Society programs designed to spark the interest and support the academic achievement of aspiring, young chemists

### *Project SEED*

A summer educational experience targeting economically disadvantaged high school students who are interested in science. It provides the rare chance to work alongside scientist-mentors on research projects in industrial, academic and federal research laboratories.

### *ACS Scholars*

College scholarships for talented students with financial need. The program provides support and mentoring to African American, Hispanic and Native American undergraduates majoring in the chemical sciences.

For more information on these programs or to make a gift, please contact Mary Bet Dobson or Kathy Fleming, ACS Development Office, 1155 Sixteenth Street, NW, Washington, DC 20036 - 1-800-227-5558, ext. 6210 or visit [www.chemistry.org/gifts](http://www.chemistry.org/gifts)

*ACS Cut and Paste July/August 2005*



## *Celebrate NCW!*

Join the Pittsburgh Section ACS  
as we celebrate  
**National Chemistry  
Week 2005!**

**October 21-22, 2005**  
Carnegie Science Center  
10 AM to 5 PM

The 2005 National Chemistry Week (NCW) celebrations in Pittsburgh will be held on Friday, October 21 and Saturday, October 22, at the Carnegie Science Center. Join the NCW activities as the Pittsburgh Section of the American Chemical Society (ACS) celebrates this year's NCW theme "The Joy of Toys."

### *This year's event will highlight:*

- Toys that involve chemical reactions
- Materials that toys are made of
- Toy safety
- Designing and manufacturing toys
- Historical and multicultural toys (toys from around the world)

### *Theater Shows - Prizes - Surprises - Special Guest*

- Visit 25 tables with hands-on experiments, activities and demonstrations
- Register to win a chemistry set or one of several prizes
- Meet with ACS President William F. Carroll Saturday, October 22, from 10 to 11 AM during the Pittsburgh stop of his "Extreme NCW Tour"
- Catch special NCW-related theater shows throughout each day
- There is no charge for parking at the Carnegie Science Center
- Access to the NCW celebration in the Carnegie Science Center's first floor lobby is free!

For more information contact the Carnegie Science Center at (412) 237-3410 or the Pittsburgh Section's NCW Coordinator V. Michael Mautino at (412) 777-4792 or michael.mautino@bayermaterials.com

For more information about the Pittsburgh Section's 2005 NCW event visit <http://membership.acs.org/P/Pitt/activities.html#week>

*NCW '05 is sponsored by the Spectroscopy Society of Pittsburgh, the Society for Analytical Chemists of Pittsburgh, the Carnegie Science Center, and Bayer Corporation.*

## **ACS Sponsored High School Chemistry Clubs**

This fall, the ACS Education Division will initiate a pilot program for affiliated high school chemistry clubs across the U.S. Plans for contacting interested teachers, producing a handbook, identifying interesting and appropriate club activities, and establishing contacts with membership programs are underway. Staff also plans to set up a Web page for posting resources and encouraging communication among clubs. As funds permit, logo-bearing banners and pins will add to the starter package.

Supporting and establishing ACS high school chemistry clubs is an attractive idea that has been under discussion for several years. A survey sent out to high school teacher members—several of whom already sponsor clubs—confirmed support for such a program. A self-selected group of these teachers is already on board for the 2005-06 pilot program and will receive assistance from the Office of High School Education in launching their chemistry clubs. Additionally, these teachers will be encouraged to contact their local ACS sections and nearby ACS Student Affiliate Chapters to initiate joint activities and acquire member support.

This program is designed as a member benefit for high school teacher members. In order to be an ACS high school chemistry club advisor, the teacher must be a member of the Society, and/or a national, divisional, or local section affiliate.

Local ACS sections are encouraged to be pro-active in this pilot phase of the project. Any section wishing to initiate a partnership with an area high school to establish an affiliated

*Continued on Page 7*



# SPECTROSCOPY SOCIETY OF PITTSBURGH



## October Meeting

Wednesday, October 19, 2005

Duquesne University

6:00 PM - Social Hour, 6:30 PM - Dinner (City View Cafe - 6<sup>th</sup> Floor)

8:00 PM - Business Meeting, 8:15 PM - Speaker's Presentation

## The NASA Discovery Mission "Deep Impact"

**Dr. Dennis D. Wellnitz**

Research Associate, Deep Impact Mission

### *Abstract*

The NASA Discovery Mission "Deep Impact" was the first planetary-scale experiment attempted by NASA, and was spectacularly successful, starting off this past Fourth of July's festivities with a bang! The concept was quite simple: impact the nucleus of comet 9P/Tempel 1 with a 350 kilogram impactor moving at a relative speed of 10 kilometers per second and watch the impact from a second flyby spacecraft, to learn about the surface and interior of a cometary nucleus. However, the technical challenges were formidable: this was by far the most complicated and difficult mission so far undertaken in the Discovery series. After introducing the mission design and implementation, we shall see some of the results from this impressive experiment.

### *Biography*

Dennis D. Wellnitz received his Ph.D degree in Physics and a minor in astronomy from the University of Maryland in 1982. Dr. Wellnitz's main focus of study involves instrumental design, development, and use in both astronomy and physics. He is currently involved in observations of comets and asteroids by various methods, and further development of the University of Maryland Optical Observatory, while maintaining participation in observations of man-made satellites of the Earth; and with further development of the University of Maryland Amplitude Interferometers, and pursuit of optics-related consultation and collaborative projects with private industry.

His experience includes:

- Design and development of a number of different observing instruments, including astronomical refractometers, auto-guiders, stellar interferometers, balloon-borne atmospheric dispersion instrumentation, CCD imagers and spectrographs, and telescope control systems, many of these automated or semi-automated in operation.
- Contributions to research in observational astronomy and theoretical astrophysics, satellite and lunar laser ranging, experimental general relativity, optical computation and holography, solid state physics, applied mathematics, and meteorology; research, academic, and business programming in a variety of languages under a number of different operating systems using several types of computers; and teaching and tutoring astronomy, physics, and mathematics at both under graduate and graduate levels.
- Dennis has also had an asteroid named for him, Asteroid 4958Wellnitz.

**Dinner Reservations:** Please call Carolyn Benga at 412-487-0915 or e-mail [crbenga@aol.com](mailto:crbenga@aol.com) to make dinner reservations NO LATER THAN FRIDAY, October 14, 2005. Dinner will cost \$8 and checks can be made out to the SSP. If you have dietary restrictions, please let Carolyn know when you RSVP.

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



# Society for Analytical Chemists of Pittsburgh



## October Meeting

Monday, October 3, 2005, Duquesne University, Maurice Falk Hall

Social Hour 5:30 P.M.

Student Affiliates Meeting, Duquesne Room (Student Union) 5:45 P.M.

Dinner - Student Union, City View Café (6<sup>th</sup> Floor) 6:30 P.M.

Business Meeting - 7:40 P.M., Technical Presentation 8:00 P.M. Maurice Falk Hall

## *“Luminescent Lanthanide Complexes and Nanomaterials Emitting in the Visible and in Near-Infrared”*

### Stéphane Petoud, Ph.D.

Assistant Professor, Department of Chemistry  
University of Pittsburgh

#### **Abstract:**

Complexes and materials based on luminescent lanthanide cations have unique optical properties with significant advantages for practical applications. Lanthanide complexes have major advantages over organic fluorophores, leading to improved assays sensitivity, especially for bio-analytical applications such as fluorescence microscopy or immuno-assays on well plates. These advantages are: 1) long-luminescence lifetimes (micro- to milliseconds) that allow for background fluorescence (autofluorescence) removal through time resolved-measurements, 2) sharp emission bands and large energy gap between the absorption and emission bands, allowing for easy spectral discrimination from other fluorophores present in the experiment, and 3) high resistance to photodecomposition when exposed to light (photobleaching) allowing for long duration or repeated experiments. Despite these advantages, only a limited number of lanthanide compounds are currently used in practical applications (3 commercially available). The main reason for this situation is that many lanthanide reporters do not have a high enough luminescence intensity to allow for sensitive measurements.

Since  $f \rightarrow f$  transitions are forbidden, free lanthanide cations cannot be directly excited with good efficiency. This limitation can be overcome by placing the lanthanide cations in close proximity to a suitable sensitizer, which is able to absorb a large amount of light in the UV/visible range and to efficiently convert the resulting energy to lanthanide metal ion (“antenna effect”). One of the principal themes of our group’s research is the development of novel antennae for the efficient sensitization of lanthanide cations emitting in the visible and in the near-infrared domains. We will present here different strategies that we are developing for improved sensitization. These strategies are based on the use of both organic ligands and nanomaterials as sensitizers. Some of these antennas include specific sensing abilities (such as oxygen sensing). The photophysical properties of the various complexes will be discussed. We will also present examples of applications taking advantages of the luminescent complexes and materials developed in our group.

#### **Bio:**

Stéphane Petoud obtained his M.S. degree at the University of Lausanne, Switzerland. Professor Carlo Floriani was the advisor of his M.S. work. He received his Ph.D. from the University of Lausanne (with Professor Jean-Claude G. Bünzli) and Geneva, Switzerland (with Professor Claude Piguet). His Ph.D. thesis, entitled “Stability and Photophysical Properties of Lanthanide Complexes with bis(benzimidazole)pyridine” was targeted at the development and study of luminescent helical lanthanide complexes. Following graduate school he was a postdoctoral fellow (with independent support from the National Swiss Science Foundation, Leenaards Fondation and Novartis Stiftung) in Professor Kenneth N. Raymond’s research group at University of California, Berkeley. He worked there on the development of new luminescent and water-soluble lanthanide complexes for application in aqueous time-resolved bioassays and on the development of soluble helical dinuclear gadolinium complexes as new contrast agents in magnetic resonance imaging. In January 2002, Stéphane Petoud joined the Department of Chemistry at the University of Pittsburgh in Pennsylvania as an Assistant Professor. He investigates the design, synthesis, characterization and use of luminescent lanthanide complexes and materials and the development of applications that take advantage of their unique luminescence properties. His financial support is provided through the University of Pittsburgh and the National Science Foundation.

Stéphane Petoud is also a co-founder of Lumiphore Inc. (Redwood City, California) with Professor Kenneth N. Raymond. He is Chief Scientific Advisor, a part-time position, and co-chairman of Lumiphore’s scientific advisory board.

**Dinner Reservations:** Please e-mail William Straub at [straub@pittcon.org](mailto:straub@pittcon.org), by Thursday, September 29, 2005 to make dinner reservations. Bill’s preference for reservations is an e-mail. Should you not have e-mail, please call 412-372-8312. Dinner will cost \$8 (\$4 for students) and checks can be made out to the SACP. If you have any dietary restrictions, let Bill know when you leave message.

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*ACS Pittsburgh  
Chemists Club*

Pittsburgh Section, American Chemical Society

**Tuesday, October 25, 2005**

***“Cellular and Molecular  
Magnetic Resonance Imaging”***

by

Professor Eric T. Ahrens  
Department of Biological Sciences  
Carnegie Mellon University

**Duranti's Restaurant**

128 N. Craig St., Pittsburgh, PA  
6:00 PM Cocktail Time - Cash Bar  
6:30 PM Dinner, 7:45 PM Program

For reservations, please call Ed Martin by noon, Friday, October 21, 2005 at (724) 335-0904 or e-mail at [esm@icubed.com](mailto:esm@icubed.com).

***Abstract***

“In recent times there has been an explosive expansion of new imaging methodologies that are capable of visualizing specific populations of cells and molecular events in vivo. Vital imaging enhances our ability to study animal models of human development and disease, such as cancers, cardiovascular disease, diabetes, and Alzheimer's. Furthermore, noninvasive imaging may ultimately be useful for monitoring new generations of clinical molecular and cellular therapeutics, such as those utilizing viral vectors and stem cells. These new capabilities have been facilitated by the development of new imaging probes or reagents that target specific cell types, are chemically responsive to physiology, or are responsive to the presence of specific molecules, such as nucleic acids or enzymes. This talk will highlight recent technological developments using magnetic resonance imaging (MRI) to visualize cells and molecules in the body.”

***Biography***

Dr. Ahrens earned his B.S., M.S. and Ph.D. in physics at the University of California, L. A. His Ph.D. dates from 1994. He did post doctoral work at the California Institute of Technology. He's been a professor at CMU since 2000, and is also a faculty member at the University of Pittsburgh in the Department of Neurobiology, Center for the Neural Basis of Cognition, and the Cancer Institute. He has 35 publications in physics and biology. His current exciting research, some patented, is in the area of NMR exploration of cells and molecular events in vivo.

Spectroscopy Society of  
Pittsburgh  
*Technology  
forum*

**Duquesne University**

Mellon Science Hall  
5:30 p.m.

**Wednesday  
October 19, 2005**

***“Probing the Universe  
with Quasars”***

**David Turnshek**  
Professor of Physics  
and Astronomy  
University of Pittsburgh

Quasars are one of the most fascinating types of celestial objects in the Universe. They can emit as much light as 100 Milky Way Galaxies in a region about the size of the Solar System. Current models indicate that they are powered by accretion disks surrounding supermassive black holes. I will discuss how observations of quasars can be used to study the formation and evolution of galaxies over the past 10 billion years. Topics such as astronomical spectroscopy, the Hubble Space Telescope, and the Sloan Digital Sky Survey are touched upon in the talk.

***Bio***

Since receiving his Ph.D. in 1981 from the University of Arizona, Turnshek has held positions at the University of Pittsburgh, the Institute of Astronomy (Cambridge, England), and the Space Telescope Science Institute (Baltimore). He is currently a Professor of Physics and Astronomy at the University of Pittsburgh. Most of Turnshek's work has been in observational cosmology, on the

***Continued on Page 8***



## Society for Analytical Chemists of Pittsburgh

### November Meeting

Monday, November 7, 2005, Duquesne University, Maurice Falk Hall

Social Hour 5:30 P.M.

Student Affiliates Meeting, Duquesne Room (Student Union) 5:45 P.M.

Dinner - Student Union, City View Café (6<sup>th</sup> Floor) 6:30 P.M.

Business Meeting - 7:40 P.M., Technical Presentation 8:00 P.M.

### *“Health and Environmental Implications of Engineered Nanoparticles”*

**Kevin D. Ausman, Ph.D.**

Executive Director for Operations  
Rice University, Center for Biological and Environmental Nanotechnology

#### **Abstract:**

Engineered nanoparticles have recently become commercialized in a number of consumer products, and the types that are being produced in large-scale quantities are increasing dramatically. However, the biological and ecological impacts of these nanoparticles have only begun to be explored experimentally. The public perception, public policy, regulatory, and commercialization issues surrounding this technical area will be discussed. The general approach being employed to address these issues at Rice University's Center for Biological and Environmental Nanotechnology (CBEN) and its offshoot organization the International Council on Nanotechnology (ICON) will be described. As an illustrative example, studies on buckminsterfullerene, a model hydrophobic nanomaterial, will be described.

#### **Bio:**

Kevin D. Ausman received his Ph.D. in Physical Chemistry in May 1998 and is B.A. in Chemistry in May 1993 from Rice University. He is currently the Executive Director for Operations at Rice University, Center for Biological and Environmental Nanotechnology. He has been with the Rice University since 1997.

Some of the awards Dr. Ausman has received are: (1999) winning entry, Veridian Outstanding Technical Authors Awards Program, (1997) John L. Margrave Thesis Award in Chemistry, (1997) Robert A. Welch Foundation Predoctoral Fellowship, (1995) Nettie S. Autrey Fellowship, (1994 and 1995) Harry B. Weiser Scholarship for Excellence in the Teaching of Chemistry.

Some of his Refereed Publications are: “Helical ice-sheets inside carbon nanotubes in the physiological condition,” William H. Noon, Kevin D. Ausman, Richard E. Smalley, and Jian-peng Ma, *Chemical Physics Letters*, 355, pp. 445-448 (2002); “Reversible Water-Solubilization of Single-Walled Carbon Nanotubes by Polymer Wrapping,” Michael J. O’Connell, Peter Boul, Lars M. Ericson, Chad Huffman, Yuhuang Wang, Erick Haroz, Cynthia Kuper, Jim Tour, Kevin D. Ausman, and Richard E. Smalley, *Chemical Physics Letters*, 342, pp.265-271 (2001); “Organic Solvent Dispersions of Single-Walled Carbon Nanotubes: Toward Solutions of Pristine Nanotubes,” Kevin D. Ausman, Richard Piner, Oleg Lourie, Rodney S. Ruoff, and Mikhail Korobov, *Journal of Physical Chemistry B*, 104, pp. 8911-8915 (2000).

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### *ACS Sponsored Chemistry Clubs Continued from Page 3*

club is welcome to move forward with the plan. Education Division staff will include the school in the pilot plan, supplying available resources and support. Please e-mail staff at [education@acs.org](mailto:education@acs.org) with questions, plans and/or suggestions.

Initial support for the clubs may include the following:

- A tabbed binder and CD with detailed start-up materials for establishing a club
- A sample constitution and bylaws
- A charter application
- A collection of safety-reviewed activities (Some of these will support various established ACS programs like National Chemistry Week, Chemagination, Kids & Chemistry, U.S. National Chemistry Olympiad, Chemists Celebrate Earth Day, and Green Chemistry.)
- Career information
- Information on ACS Accredited Colleges and Universities
- A Website
- Logo imprinted items (pins, banners, perhaps t-shirts and other items)
- Contact information for Local Sections and Student Affiliate groups
- Community Service Project ideas

*ACS Cut and Paste July/August 2005*

**SSP Technology Forum**  
Continued from Page 6

study of quasars and their use as probes of galaxy formation. Quasars are widely believed to be super-massive black holes, surrounded by brilliant disks of accreting matter.

The quasar studies emphasize multi-wavelength (x-ray, UV, optical, IR, radio) observations of Broad Absorption Line quasars, which eject matter at velocities up to one-tenth the speed of light. His primary interest in this area currently lies in developing 2.5D models of quasars which are consistent with observations of their element abundances, ionization structure, absorption covering factor, geometry, and host galaxies. His use of quasars as probes of galaxy formation involves the observation and interpretation of intervening absorption-line systems, the most notable being investigations of the so-called damped Lyman-Alpha systems which arise in galaxies and proto-galaxies that are otherwise difficult to observe. Turnshek has also done research in the area of strong gravitational lensing. Much of his recent work has involved projects that use the Hubble Space Telescope or large ground-based optical telescope. He has authored or co-authored over 200 papers and is active in public outreach.



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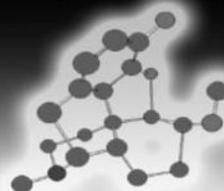


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John Arnett, Ph.D., Director of Operations



## ACS Member Insurance Program Celebrates 36<sup>th</sup> Birthday with Gifts for Members

Cashmere Sweater, iPod, Nice Dinner, Insurance... Happy Birthday!

If you are an ACS member turning 36 this year, you will receive an additional and unexpected birthday gift from the ACS Board of Trustees, Group Insurance Plans for ACS Members!

ACS members celebrating their 36<sup>th</sup> birthday in 2005 will receive a special piece of mail—an offer of \$25,000 in Group Term Life Insurance AND \$15,000 in Accidental Death and Dismemberment coverage for one full year...AT NO COST TO YOU! Members who wish to take advantage of this special offer simply need to complete the acceptance card that will be included and drop it in the mail. No strings attached!

This offer represents much more than a birthday gift. It's also the Board of Trustees' way of recognizing the transition of younger chemists. After all, by age 36, you're likely to be working for more than just yourself. It's possible that both your family and your income are growing. The ACS Member Insurance Program offers compre-

hensive insurance plans to help you get the protection you need. Obtaining coverage through ACS is a convenient and cost-effective solution for yourself and your family.

For more information on any of the plans offered through the ACS Member Insurance Program, visit our website at [www.chemistry.org/insurance](http://www.chemistry.org/insurance); call us at 1-800-227-5559, ext. 6037; or send an email to [memins@acs.org](mailto:memins@acs.org).

Sponsored by the Board of Trustees, Group Insurance Plans for ACS Members—Your Colleagues Working For You!

Brokered and administered by Pearl & Associates, Peoria Heights, IL. Underwritten by New York Life Insurance Company, 51 Madison Avenue, New York, NY 10010. Issued under Group Policy GMR, G29200-0/FACE

The premium for this insurance will be paid by the American Chemical Society Member Insurance Program.

*ACS Cut and Paste July/August 2005*

Stay up-to-date on all the happenings of the Pittsburgh Section ACS by visiting the section's website.

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

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# Pittsburgh Area Calendar

## October

- Mon. 3 **Society for Analytical Chemists of Pittsburgh (SACP)**  
Duquesne University, Maurice Falk Hall  
*“Luminescent Lanthanide Complexes and Nanomaterials Emitting in the Visible and in Near-Infrared”*  
Stéphane Petoud, Ph.D., Assistant Professor of Chemistry, University of Pittsburgh
- Wed. 19 **Spectroscopy Society of Pittsburgh (SSP) Technology Forum**  
Duquesne University, Maurice Falk Hall  
*“Probing the Universe with Quasars”*  
David Turnshek, Professor of Physics and Astronomy, University of Pittsburgh
- Wed. 19 **Spectroscopy Society of Pittsburgh (SSP)**  
Duquesne University, Mellon Hall of Science, Maurice Falk Hall  
*The NASA Discovery Mission “Deep Impact”*  
Dr. Dennis D. Wellnitz, Research Assistant, Deep Impact Mission
- 21-22 **National Chemistry Week Event**  
**“The Joy of Toys”**  
Carnegie Science Center
- Tues. 25 **ACS Pittsburgh Chemists Club**  
Duranti’s Restaurant  
*“Cellular and Molecular Magnetic Resonance Imaging”*  
Professor Eric T. Ahrens, Department of Biological Sciences, Carnegie Mellon University

## November

- Mon. 7 **Society for Analytical Chemists of Pittsburgh (SACP)**  
Duquesne University, Maurice Falk Hall  
*“Health and Environmental Implications of Engineered Nanoparticles”*  
Kevin D. Ausman, Ph.D., Executive Director for Operations, Rice University, Center for Biological and Environmental Nanotechnology

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