



The Crucible



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

Volume: XCII No.8

April 2007

Project SEED Student Co-Authors Research Paper

Richard Troy Hull II participated in the Project SEED program at Washington & Jefferson College during the summers of 2005 and 2006.

Troy investigated the preparation of a novel beta-carboline using unique synthetic methodology. Beta-carbolines are biologically relevant as potential ligands for the benzodiazepine receptor.

Troy was ultimately successful in preparing his target molecule, and his results were included in a paper recently published in *Tetrahedron Letters* (2007, 48(4), 599-602). Troy shares authorship with eleven W&J students: Laura Tomasevich '08, Nicole Kennedy '07, Stephen Zitelli '06, Chelsey Gillen '06, Suet Lam '07, Neal Baker '06, John Rohanna '05, Jason Conley '06, Marcy Guerra '05, Mari Lynne Starr '05, and Justine Sever '06. All of the students conducted their research at W&J in the laboratory of Assistant Professor of Chemistry Michael Leonard.

Troy graduated from Washington High School in 2006 and is currently a freshman at WVU where he is majoring in chemistry and plans to pursue a career in the field.

Through Project SEED, economically disadvantaged high school students interested in science get the rare chance to work alongside scientist-mentors on real projects in industrial, academic and federal research laboratories.

These students live the daily challenges and rewards of chemistry, earning a stipend for their eight to 10 weeks of service. They discover myriad career paths as they approach critical turning points in their lives. More importantly, with guidance from their mentors, they gain confidence, a solid sense of direction and the ability to realize their potential.

Last year, the Pittsburgh area sponsored seven students at Duquesne University and one student at Washington & Jefferson College.

The SEED program would not have been possible without generous support from the Project SEED Endowment, Ferro Corporation, Westinghouse, Bayer MaterialScience LLC, PPG Industries, Eastman Chemical Company, and LabChem, Inc. We would also like to thank Tabitha Riggio, chair of the committee on Project SEED for the Pittsburgh Section of the ACS, for the integral role that she plays in fundraising for and support of these programs.

*Submitted by Michael S. Leonard
Assistant Professor of Chemistry
Project SEED Mentor
Washington and Jefferson College*

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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REALITIES and CHALLENGES of GLOBAL WARMING/GLOBAL DIMMING

April 23, 2007 - Eddy Theatre, Chatham College, Pittsburgh, PA
Free Valet Parking, Eddy Theatre Lot, off of Murray Hill Avenue

Sponsored by

Society for Analytical Chemists of Pittsburgh (www.sacp.org)
Spectroscopy Society of Pittsburgh (www.ssp-pgh.org)
American Chemical Society - Pgh Section (<http://membership.acs.org/P/Pitt/>)

11:30 AM - 1:50 PM REGISTRATION {Lobby of Eddy Theatre}

12:00 PM - 1:35 PM Movie An Inconvenient Truth (The movie is being shown in order to foster questions and discussion. The Tripartite does not advocate a particular position or political opinion.)

(Refreshments will be served during registration and movie, must be consumed in lobby)

1:35 BREAK

1:50 Introduction

2:00 Dr. M. Granger Morgan-Carnegie Mellon University, *Why Climate is Changing and What We Can Do About It*

2:50 Dr. Beate Liepert - Lamont-Doherty Earth Observatory, *The Dilemma of Anthropogenic Impact on Climate: Global Dimming and Global Warming*

3:40 BREAK

4:00 Dr. Roger A. Pielke Sr.-University of Colorado, *The Human Impact on the Weather and Climate*

4:50 Mr. John Quigley-PA DCNR, Director of Legislation and Strategic Initiatives, *Pennsylvania Perspectives, Federal Uncertainty*

5:45 Q&A FORUM

6:30 DINNER {Included}

For More Info. Contact Manny Miller millerm@pittcon.org or Kurt Rothenberger rothenberger@pittcon.org

PLEASE REGISTER BY APRIL 16, 2007

COST: \$15 (\$5 for full time student) SEND a check payable to
"SACP", 300 Penn Center Blvd, Suite 332, Pittsburgh, PA 15235, ATTN: Tripartite Symposium
For Directions & Map Go To: <http://www.chatham.edu/parents/directions.cfm>
<http://www.chatham.edu/documents/campusmap-parking.pdf>

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CHECK HERE IF NOT ATTENDING DINNER _____

Pittsburgh ACS Section ACS “ON THE ROAD” MEETING

Thursday, April 19, 2007

Waynesburg College

6:15 PM Dinner (Stover Campus Center - 3rd Floor)

8:00 PM Speaker’s Presentation (Performing Arts Center)

“The Solar Proton Storms, Their Characteristics, and Their Geophysical Effects”

Dr. Michael Kasha, Distinguished University Professor,
Florida State University, Tallahassee, Florida

Abstract:

As we bask in the warm sunshine from our Sun and admire its steadiness, we are unaware of the fact that the spherical coronal shield undergoes a catastrophic explosion on an eleven-year cycle. Some 90 billion tons of protons are ejected in six symmetrically arrayed beams, reaching the earth and beyond. This coronal mass ejection (CME) leads to some 9 or 10 major observations on the earth, the most obvious being in the form of exceptional Corona Borealis and Corona Australis. These coronas exhibit a unique structure: a shimmering green aurora from the poles to about 70 degrees N, S latitude, and a second region or red-orange steady glow from about 70 to about 40 degrees N, S latitude (e.g., to the Gulf of Mexico in North America).

The secondary red-orange auroras had been seen in ancient times in the Mediterranean areas, and never explained. The shimmering green aurora has been assigned to atomic oxygen from a singlet excited state with a microsecond range mean-lifetime. The red-orange steady aurora of several hours’ observability range we can now assign to an exceedingly metastable singlet excited molecular oxygen (‘singlet delta-g’) with a mean-lifetime of 43 minutes, an extra-ordinarily long-lived state.

Among derivative features arising from the coronal mass ejection (CME) are the extra-brilliant auroras described, proton beams 3 to over 100 Mev, molecular spallation of ozone, carbon dioxide, etc., water and oxygen formation after the molecular fragmentation, effect on the health of airplane passengers on trans-polar flights, and numerous others. The next CME is expected to be the year 2011. Hold onto your hats!

Bio:

Dr. Kasha earned his B.S. degree at the University of Michigan and his Ph.D. at the University of California, Berkeley. His memberships include the American Acad. of Sciences, National Acad. of Sciences, Brazilian Acad. of Sciences, Ukrainian Acad. of Sciences, International Acad. of Quantum Molecular Sciences, and a Fellow at the Inter-American Photochemical Society. He currently directs graduate research in five different areas. These include, Proton Transfer Spectroscopy of flavonols (Chemistry Physics Program in the Department of Chemistry and Biochemistry), Health Biophysics (Institute of Molecular Biophysics), Atmospheric and Geophysical Research (Institute of Geophysical Fluid Dynamics), Musical Acoustical Research (Center for Music Research), and Affiliate at the National High Magnetic Field Laboratory.

Dinner Reservations: A buffet dinner will cost \$15.00. Send checks by April 16, 2007 to Attn: Regina Witouski, Waynesburg College, 51 West College Street, Waynesburg, PA 15370. Questions, please call Regina Witouski at 724-852-3283 or email rwitousk@waynesburg.edu. Undergraduate students receive a discount. Please make dietary restrictions known when you RSVP.

Directions to Waynesburg College and a Campus Map are available at <http://www.waynesburg.edu> by clicking on “Parents & Visitors” and then selecting “Directions” or “Campus Map”. These directions guide you to the visitor parking lot. Another college parking lot is available adjacent to Stover Campus Center. A shuttle from the parking lots is available.

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

Call for Nominations The Pittsburgh Award

The Pittsburgh Award was established in 1932 by the Pittsburgh Section of ACS to recognize outstanding leadership in chemical affairs in the local and larger professional community. This Award symbolizes the honor and appreciation accorded to those who have rendered distinguished service to the field of chemistry.

The Award consists of a plaque presented annually at a Section dinner. Members of the Pittsburgh Section, or in exceptional cases, non-members, who have done work worthy of recognition toward increasing chemical knowledge, promoting the chemical industry, benefiting humanity, or advancing the Pittsburgh Section, are eligible for consideration.

Nominations for the Pittsburgh Award are solicited from the membership of the Pittsburgh Section. The form can be found on the section’s website. <http://membership.acs.org/P/Pitt>. Look for form PITTS_AWARD FORM.doc. Please send all nominations to Linda Peteanu at peteanu@andrew.cmu.edu, by May 15, 2007.





SPECTROSCOPY SOCIETY OF PITTSBURGH



April Meeting

Wednesday, April 18, 2007

Duquesne University,
Mellon Hall of Science
(Maurice Falk Hall)

6:00 PM - Social Hour, 6:30 PM -Dinner
(City View Cafe - 6th Floor)
8:00 PM - Business Meeting
8:15 PM - Speaker's Presentation

“Dynamic Infrared Microspectroscopic Imaging”

Dr. Andrew Sommer
Miami University of Ohio

Over the last two decades infrared microspectroscopy has been employed in a wide variety of disciplines to elucidate chemical information from small spatial domains. The method has been shown to offer excellent spatial and volumetric resolution, however, one limitation is the methods temporal resolution [1,2]. Measurements in the mid-infrared spectral region continue to be dominated by interferometers whose temporal resolution is directly tied to spectral resolution. Now that mid-IR focal-plane arrays (FPA) are readily available, spectroscopists are beginning to explore spectrographs with these elements as detectors [3-8]. The sensitivity and speed of infrared measurements made using such a planar array infrared spectrograph (PAIRS) could someday substantially surpass that of conventional FT-IR spectrometry. The coupling of an infrared microscope to such a spectrograph would be extremely valuable chromatographic detection and for the dynamic infrared studies of single cells. In a collaborative research project with Procter and Gamble we have constructed both grating and prism spectrographs and have explored their use for dynamic infrared microspectroscopic imaging.

- [1] Z. Keltner, K. Kayima, L. Lavallo, M. Canepa, A. E. Dowery, G. M. Story, C. Marcott, and A. J. Sommer, *Microsc. Microanal.* 12 (Supp. 2) 1766CD (2006).
- [2] B. M. Patterson, N. D. Danielson, and A. J. Sommer, *Anal. Chem.* 75, 6, 1418 (2003).
- [3] H. H. Richardson, V. W. Pabst and J. A. Butcher, *Appl. Spectrosc.*, 44, 822 (1990).
- [4] H. H. Richardson, V. W. Pabst and J. A. Butcher, *Appl. Spectrosc.*, 47, 1626 (1993).
- [5] P. Hamm, S. Wiemann, M. Zurek and W. Zinth, *Opt. Lett.*, 19, 1642 (1994).
- [6] D. L. Elmore, M. W. Tsao, S. Frisk, D. B. Chase and J. F. Rabolt, *Appl. Spectrosc.*, 56, 145 (2002).
- [7] C. Pellerin, C. Snively, Y. Liu, D. B. Chase and J. F. Rabolt, *Appl. Spectrosc.*, 58, 639 (2004).
- [8] C. Pellerin, S. Frisk, J. F. Rabolt, D.B. Chase, *Appl. Spectros.*, 58, 799 (2004).

Dinner Reservations: Please call John Koczko at (412) 655-8497 or e-mail jpk@unitysystems.com to make dinner reservations NO LATER THAN FRIDAY, April 13, 2007. Dinner will cost \$8.00 and checks can be made out to the SSP. If you have dietary restrictions, please let John know when you RSVP.

Parking Instructions: 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. If any difficulties arise, contact Dr. Mitch Johnson at Duquesne University.



Society for Analytical Chemists of Pittsburgh



April Meeting Former Chair's Night

Monday, April 9, 2007
Duquesne University, Maurice Falk Hall

“New Bioterrorism: The Threat and Methods for Prevention”

David R. Walt, Ph.D.
Robinson Professor of Chemistry at Tufts University &
Howard Hughes Medical Institute Professor

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

Abstract:

Biological agents pose one of the most serious challenges to modern society. The transmission efficiency of many bio-agents, combined with the ability to disseminate these materials via modern transportation systems, presents an enormous challenge. The first line of defense against such agents is detection. A variety of detection technologies are already in place but newer technologies will offer more rapid and comprehensive detection capabilities. This talk will describe the nature of the threat, discuss present and future detection capabilities, and will describe how such detectors can be integrated into systems for more holistic solutions to the threat.

Bio:

David R. Walt is Robinson Professor of Chemistry at Tufts University and a Howard Hughes Medical Institute Professor. He received a B.S. in Chemistry from the University of Michigan and a Ph.D. in Chemical Biology from SUNY at Stony Brook. After postdoctoral studies at MIT, he joined the chemistry faculty at Tufts. Professor Walt served as Chemistry Department Chairman from 1989 to 1996. Dr. Walt serves on many government advisory panels and boards and serves on the editorial advisory board for numerous journals. From 1996-2003 he was Executive Editor of Applied Biochemistry and Biotechnology. Dr. Walt is the Scientific Founder and a Director of Illumina, Inc a publicly traded Life Sciences company with over 800 employees. He has received numerous national and international awards and honors and is a fellow of the American Association for the Advancement of Science. Dr. Walt has published over 175 papers, holds over forty patents, and has given hundreds of invited scientific presentations.

Dinner Reservations: Please e-mail Carolyn Benga at crb.sacp@yahoo.com, by Thursday, April 1, 2007 to make dinner reservations. Carolyn's preference for reservations is an e-mail. 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.



**Wednesday
April 18, 2007**

**“Evolutionary Medicine: Fossils, Darwin,
and Modern Health Care”**

Dr. Christopher Beard
Carnegie Museum of Natural History
Section of Vertebrate Paleontology

Despite the title of Theodosius Dozhansky’s famous essay (Nothing in Biology Makes Sense Except in the Light of Evolution), evolutionary principles have rarely been incorporated into standard medical school curricula. As a result, many physicians are unfamiliar with the multiple ways that evolutionary biology impacts their daily practice. In this lecture, I illustrate several ways that evolutionary biology illuminates biomedical science (and vice versa). For example, our own evolutionary transformation from quadrupedal primates to bipedal hominids created numerous anatomical compromises (or “phylogenetic baggage”) that result today in chronic lower back pain, frequent injuries to the rotator cuff, and difficulties in childbirth, among other problems. Likewise, virulent microbes evolve according to the same rules that apply to all other organisms on Earth, so that knowledge of evolutionary principles can yield insights into the origin and propagation of numerous infectious diseases. Finally, I provide examples of how advances in biomedical research have illuminated the fossil record.

Bio

Dr. Chris Beard received his bachelor’s degree at the University of North Carolina at Chapel Hill, where he majored in zoology and anthropology. He received his Ph.D. from the Functional Anatomy and Evolution Program at Johns Hopkins University’s School of Medicine in Baltimore. He has served the Carnegie Museum of Natural History as a curator of vertebrate paleontology since 1989. Chris has either led or participated in expeditions to various parts of the globe including China, Myanmar, Indonesia, Kenya, France, Canada and the American West. Among his more noteworthy discoveries is Eosimias, a 45 million year old fossil primate from China that is the oldest and most primitive known relative of monkeys, apes and humans. In recognition of his work illuminating our distant ancestry, Chris was selected as a MacArthur Fellow by the John D. and Catherine T. MacArthur Foundation in 2000. Chris’s popular book *The Hunt for the Dawn Monkey: Unearthing the Origins of Monkeys, Apes and Humans* was published by the University of California Press in late 2004.

**CERMACS to Be Held in
Covington, KY**

**39th Central Regional
Meeting (CERMACS)
Scheduled for May 20 – 23
in Covington, Kentucky**

The Cincinnati Section is once again hosting CERMACS at the location of their last regional—an exciting success story with its regional record-breaking attendance of close to 1,100. Once again, they have developed a strong and innovative program and you have a chance to be part of it right now. Both advance registration and abstract submittal are now open online. Don’t miss this opportunity to participate and to take advantage of reduced fees during early registration. You can reach both by visiting the meeting website at <http://www.cermacs2007.org/>.

Topics include forensics as presented by William Dean, chief of forensic sciences, Hamilton County Coroner’s Office, the “Fantastic Four Science Guys”, Bassam Shakhshiri, David Katz, Al Hazari and John Fortman know how to make learning fun, illuminating molecules, chemical/biological sensors, and the art of brewing, hosted by the Master Brewers Association of America.

*ACS Cut and Paste
January/February 2007*

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**ACS Pittsburgh
Chemists Club**

Pittsburgh Section, American
Chemical Society

Tuesday, April 24, 2007

*Toward Resolving Almost 150 Years of the
Darwinism-Evo-Devo Debate:*

The Difference Between the Emergence and Persistence of Novelty

by

Professor Jeffrey H. Schwartz

Duranti's Restaurant

128 N. Craig St., Pittsburgh, PA

6:00 PM

Cocktail Time - Cash Bar

7:45 PM Dinner

8:00 PM Program

For reservations, please call Ed Martin by noon, Friday, April 20, 2007 at (724) 335-0904 or e-mail at esm@icubed.com.

Evolutionary developmental biology (evo-devo) contrasts with present-day Darwinism by emphasizing change via the recruitment of an existing "internal" developmental potential of an organism, rather than via the modification of an organism by a continual yet mild barrage of external demands that somehow become incorporated into its developmental program. The essence of this intellectual standoff was enacted in the early years of evolutionary biology, in the debate between Darwin and Mivart. This debate also rests on envisioning the bases of the "emergence of novelty" and the "persistence of novelty" as either one and the same, or as fundamentally different. Clearly, the expectation of each perspective leads to (and may be informed by) differences in how one perceives evolutionary change or "transformation" and in how one imbues only some, rather than all natural or experimental observations with biological credibility. I shall argue that there is a very real difference between the emergence and persistence of novelty, but also that both phenomena can be accounted for by known properties of cellular biology.

Biography

Jeffrey H. Schwartz is a professor in the Departments of Anthropology and History and Philosophy of Science at the University of Pittsburgh. He received his Ph.D. from Columbia University in 1974. He is a physical anthropologist whose research areas include the evolutionary relationships and systematics of fossil and living primates, including humans, and aspects of evolutionary theory, especially phylogenetic reconstruction and models of change. Most recently he has been involved in the first study of virtually the entire human fossil record (which is being published as a series) and has also been collaborating on a project that seeks to meld mechanisms of cell biology, the regulation of organismal development, and the pattern of the fossil record with evolutionary theory. Dr. Schwartz has done fieldwork in the United States, England, Israel, Cyprus, and Tunisia and museum research in the mammal and vertebrate paleontology collections of major museums

**Materials Characterization
Facility Manager**

The Chemistry Department at the University of Pittsburgh is seeking a manager for a new Materials Characterization Laboratory.

The successful candidate for this non-tenure stream position will have a degree in a relevant scientific discipline (Ph.D. in Chemistry or Materials Science preferred), but candidates with equivalent experience will also be considered.

In addition to expertise in operating and maintaining instrumentation, candidates must also be familiar with a wide variety of sample preparation techniques.

Experience in some or all of the following areas is desired: microscopy, soft materials characterization, hard materials characterization, and spectroscopy.

Candidates must have strong interpersonal and communication skills as well as a willingness to continuously learn new characterization skills and to participate in the generation of proposals for facility expansion.

The position will be as a
Research Assistant Professor
or comparable level.

Interested candidates should submit their resume along with the names of three references to:

Dr. Ken Migliorese,
Department of Chemistry,
University of Pittsburgh,
219 Parkman Avenue,
Pittsburgh, PA 15260
or by email
kenm2@pitt.edu.

Screening of applications will begin April 1, 2007 and continue until the position is filled.

The University of Pittsburgh is an Affirmative Action, Equal Opportunity Employer.
Women and members of minority groups underrepresented in academia are especially encouraged to apply.

ChemShorts for Kids A Dry Ice Demo

The Elementary Education Committee of the ACS Chicago Section presents this column. They hope that it will reach young children and help increase their science literacy. Please share with children and local teachers.

Kids, what causes the “smoke” from bubbling beakers and flasks in TV shows and movies? Dry ice is another name for the solid form of carbon dioxide (CO₂). It is colder than water ice but can be handled safely for short periods of time with insulating gloves. There is a video of the classic dry ice fog demonstration on-line (at http://www.metacafe.com/watch/286601/dry_ice/), with a twist. After water is added to the dry ice to create a smoky fog, hand soap is squirted into the mix. The resulting cascade of bubbles is fun, but what makes this video really interesting is the bubbles vanishing in a puff of fog when touched.

To try this at home, we recommend an adult partner only for handling the dry ice, using tongs and insulating gloves (such as leather gardening gloves). A double Styrofoam cup makes a good container, and we suggest putting this inside a secondary container (like a dishpan, for example). A ceramic coffee cup would probably also work. A single large chunk of dry ice will last longer than a number of smaller chunks, and hot water works better than cold, but just use hot water from the tap. Boiling hot water could create a hazard in handling.

Dry ice is so called because it does not melt into liquid carbon dioxide before turning into gas. The process of a liquid changing state into gas is called evaporation. When a solid changes directly into gas, the process is called sublimation.

The white cloud that forms is not smoke, but rather condensed water

vapor. Tiny droplets of water make the white cloud. The clouds almost immediately disappear because the water droplets warm right back up and re-evaporate back to form invisible water vapor. This is how fog forms: when it is humid enough and the temperature drops enough you get lots of tiny water droplets forming.

Notes:

Your adult partner can get dry ice from a specialty gas company, such as one that deals in oxygen, helium, and nitrogen, or from stores that ship perishable food. Bakeries and seafood shops can often provide a good lead, or a popular restaurant could be asked if they carry dry ice. Dry ice is cold enough to cause frostbite so protective gloves are necessary. Also, be aware that extra carbon dioxide is added to the air as dry ice vaporizes. Carbon dioxide is naturally present in air, but under some circumstances, the extra amount can present a health hazard.

Reference:

Dr. Anne Marie Helmenstine at <http://chemistry.about.com/library/weekly/aa010603a.htm>

<http://chemistry.about.com/b/a/257641.htm>

<http://chemistry.about.com/b/a/257641.htm>

Reprinted with permission from Dr. Kathleen A. Carrado, Chicago Local Section. An archive of all previously published ChemShorts is available online at <http://membership.acs.org/C/Chicago/home.html>.

*ACS Cut and Paste
January/February 2007*

CAS Indexes A Million Documents In 2006

Chemical Abstracts Service (CAS) reported it has for the first time indexed and added to the CAS databases more than a million document records in a single year, reflecting the worldwide acceleration of scientific research and patents. CAS announced this signal achievement on the eve of the 100th anniversary of the organization and Chemical Abstracts™, which was first published in January 1907.

As the world's most authoritative scientific information resource, CAS' records reflect dynamic research and patenting activity worldwide as the United States still leads but the Asian powerhouses grow stronger.

CAS database statistics for 2006 indicate the international distribution of the 1,016,669 publications indexed this year:

Languages of publication: 50

Top 3

English: 68.1%
Chinese 13.1%
Japanese 10.3%

Countries of origin: 194

Top 3

U.S. 19.4%
China (PRC) 17.6%
Japan 16.6%

Patents from 50 issuing authorities accounted for 24.4% of the publications, but contained more than 50% of the new chemical substance information recorded by CAS. The greatest number of publications were articles from CAS' extensive journal coverage in chemistry and related science, for which CAS monitors more than 9,500 titles. Additional sources included conference proceedings, symposia and other documents.

Continued on Page 9

CAS Continued from Page 8

“Throughout the lifetime of Chemical Abstracts and the CAS databases, our records have mirrored the progress of research in chemistry and related sciences,” said Matthew J. Toussant, CAS vice president, editorial operations. “It took 30 years for CA to publish its first million abstracts, and we have now exceeded that total in a little less than one year. This achievement dramatically illustrates the rapid pace of research occurring worldwide.”

To gain access to the wealth of information in CAS databases, scientists, students, and patent professionals can use a variety of CAS products and search

services. “Our comprehensive database of chemistry and related scientific information is an invaluable resource,” said Catharina Maulbecker, CAS vice president of marketing and sales. “The added value of the STN® and SciFinder® search tools enables the scientific community to apply the information to full advantage as they build upon this century of knowledge.”

More information on CAS databases and search services can found on the web at www.cas.org.

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ACS Committee on Chemists with Disabilities Ambassadors Program

The Committee on Chemists with Disabilities (CWD) Committee of the American Chemical Society (ACS) announces its new CWD Ambassadors Program. The CWD Ambassadors Program will act as a source for speakers and information for ACS Local Sections and Regions, community groups or schools on working as a chemist with a disability.

The CWD Ambassadors Program is intended to enhance the committee’s mission of promoting educational and professional opportunities in the chemical sciences and in fields requiring knowledge of chemistry for persons with disabilities and championing the capabilities of those persons to educators, employers, and peers.

If you are a chemist with a disability, or a professional in the chemical sciences with an interest in or knowledge of disability, and would like to become a CWD Ambassador, or if you would like to get more information about how the CWD Ambassadors Program could help your Section, Region or organization, please call the Department of Diversity Programs at (800) 227-5558 or e-mail: cwd@acs.org.

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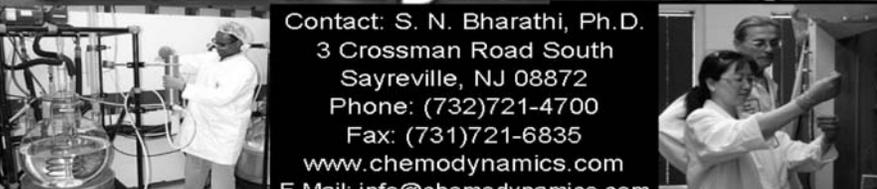
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Contact **Timothy Flood**

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Pittsburgh Area Calendar

April

- Mon. 9 **Society for Analytical Chemists of Pittsburgh (SACP)**
Duquesne University, Maurice Falk Hall
Former Chair's Night
"New Bioterrorism: The Threat and Methods for Prevention"
David R. Walt, Ph.D., Robinson Professor of Chemistry at Tufts University & Howard Hughes Medical Institute Professor
- Wed. 18 **Spectroscopy Society of Pittsburgh Technology Forum**
Duquesne University, Mellon Science Hall
"Evolutionary Medicine: Fossils, Darwin, and Modern Health Care"
Dr. Christopher Beard, Carnegie Museum of Natural History, Section of Vertebrate Paleontology
- Wed. 18 **Spectroscopy Society of Pittsburgh**
Duquesne University, Maurice Falk Hall
"Dynamic Infrared Microspectroscopic Imaging"
Dr. Andrew Sommer, Miami University of Ohio
- Thur. 19 **ACS "On The Road" Meeting**
Waynesburg College
"The Solar Proton Storms, Their Characteristics, And Their Geophysical Effects"
Dr. Michael Kasha, Distinguished University Professor, Florida State University, Tallahassee, Florida
- Mon. 23 **TriPartite Symposium**
Eddy Theatre, Chatham College, Pittsburgh, PA
"Realities and Challenges of Global Warming/Global Dimming"
- Tues. 24 **ACS Pittsburgh Club**
Duranti's Restaurant
"Toward Resolving Almost 150 Years of the Darwinism-Evo-Devo Debate: The Difference Between the Emergence and Persistence of Novelty"
Professor Jeffrey H. Schwartz

The Crucible

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