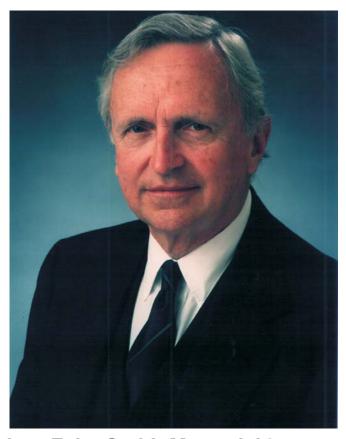


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March 2010 Volume 95, No. 3



Edgar Fahs Smith Memorial Lecture Dr. Ronald Breslow

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ADVANCE NOTICE

APRIL MEETING

NB: Wednesday, April 7, 2010 **Scholastic Achievement Awards**

Speaker and Location TBA

See the APRIL issue of the Catalyst for details, call the Section Office at (215) 382-1589 or email PhilaACS@aol.com.

2010 Eastern Analytical Symposium



November 15 - 18, 2010
Garden State Exhibit Center, Somerset, New Jersey

CALL FOR PAPERS

Deadline - April 15, 2010

The Eastern Analytical Symposium and Exposition is the second largest conference and exposition for laboratory science in the U.S. dedicated to the needs of analytical chemists and those in the allied sciences. We offer high quality cutting-edge technical sessions and state-of-the-art short courses, workshops and seminars. We invite you to be a part of the program by contributing a paper for oral or poster consideration. Please note that all abstracts must be submitted electronically via the EAS web site at www.EAS.org under the Symposium tab. The abstract submission deadline is April 15.

To submit a contributed paper for the 2010 EAS Technical Program, please submit abstracts through our web site at www.EAS.org/asubmit between March 1 and April 15, and follow the instructions for abstract submission.

Invited speakers must not submit abstracts to EAS until requested.

Please carefully review the following information:

- All contributed abstracts must be submitted through our web site at www.EAS.org between March 1 and April 15, 2010. No faxed, e-mailed, or mailed abstracts will be accepted.
- Please note that no one author may submit and present more than two posters.
- All abstracts must be a maximum of 250 words or less.
- All abstracts will be acknowledged via e-mail.
- The title of the presentation and the list of authors that you submit are final, and may not be changed.
- The abstract that you submit will be considered to be your final abstract that will be printed in the abstract book for the 2010 Eastern Analytical Symposium.
- Presenting authors of contributed submissions will be notified in June 2010 of the status of the abstract and its session assignment.

TOPICS AREAS

Bioanalysis

Capillary Electrophoresis

Chemometrics

Chromatography Conservation Science Environmental Analysis

Forensic Analysis

Gas Chromatography

HPLC

Immunochemistry Industrial Hygiene

Ion Chromatography
IR Spectroscopy

Laboratory Management LC/MS Mass Spectrometry

Laboratory Automation

Microchemistry
Microscopy

Near Infrared (NIR) Spectroscopy

NMR Spectroscopy Pharmaceutical Analysis

Process Analytical Science

Quality by Design

Quality/Regulatory/Compliance

Raman Spectroscopy

Sample Preparation Science Education

Sensors

Separation Sciences

Size Exclusion Chromatography

Solid State Analysis Space Analytics

Supercritical Fluid Chromatography

Surface Science

Very High Pressure LC/Ultra High

Pressure LC

Vibrational Spectroscopy

Contact information:

EAS Hotline 732-449-2280 Eastern Analytical Symposium & Exposition, Inc.

EAS Faxline 732-612-1123 P.O. Box 185

EAS E-mail askeas@EAS.ORG Spring Lake, NJ 07762

www.EAS.org

ACS Philadelphia Section Founded April 15, 1899

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Advertising: Vince Gale, MBO Services, P.O. Box 1150, Marshfield, MA 02050 phone: (781) 837-0424 email: cust-svc@mboservices.net.

From The Chair



Judith Summers-Gates

Hopefully.... we are on our way to Spring!! And what better way to get primed for the new season than to mark your calendars for April 22nd to participate in Chemists Celebrate Earth Day 2010! This year's theme is "Plants -The Green Machines!" and I am issuing a challenge to our Student Members and affiliate groups to see how much we can accomplish locally toward replenishing our environment and revitalizing our local section activities. More information can be found in this issue of the Catalvst and on this website: www.acs.org Hlt252265302 Hlt252265303 Hlt25226535 5 Hlt2522653 $\overline{5}$ 6/BM 1 \overline{BM} $\overline{2}$ BM 3 BM 4 e \overline{H} lt $\overline{2}$ 522 65293 Hlt252265294aBM 5 BM 6 rthday. As a reminder.... our Section had a winner in the Illustrated Haiku contest last year so we have to defend our "title" this year when the format will change to an Illustrated Poem of any structure limited to 40 words. The deadline for local submissions to me will be April 16th (more info will be

forthcoming shortly on our Section website).

I would also like to ask for volunteers to coordinate our CCED efforts in the future. We still sorely miss our dynamic past coordinator, Deb Kilmartin, and it is time for someone to pick up where she left off and get everyone excited about what can be done by people who are interested in protecting the environment and being "GREEN."

I am also hoping for many volunteers to judge at the Delaware Valley Science Fair on April 7th. For more information and to register to judge, please go to their homepage at: http://www.drexel.edu/dvsf/. Come launch the scientists of tomorrow and remember why you got into science yourself!

Also in the spirit of renewal...What do you think of the new electronic Catalyst? This new format offers us a wealth of possibilities and we would like to hear from YOU on what you would like to see in YOUR newsletter in the future... For starters, I would like to inaugurate a "Diversity" column and I have invited fellow Chair of our local NOBCChe Section, Dr. James Tarver, to kick it off with me in both sections' publications. We would like to highlight what is of interest to ALL chemists in our region and share some of the great activities and resources that we have in common and collaborate on programming in the future. How about some of these as suggestions for future *Catalyst* features:

- Chem Demo of the Month
- Student Member submissions
- "Ask a Chemist"....
- Letters to the Editor
- WCC and YCC columns
- Grad Students' Perspectives
- "Seedlings"—items from and of interest to Project Seed students
- This Month in Chemical History...
- Name/Identify that Molecule—an analytical problem to solve with a prize
- Chem Safety column
- Puzzles/Games/Chem Humor
- "You Might Be A Chemist If..."
- "Odd" Job of the Month...
- "Kitchen Chemistry—the chemistry behind cooking"
- Home Brewers/Wine Makers Column
- Chem Photo of the Month Share your ideas and submit content that YOU'D like to see in YOUR newsletter!



MARCH MEETING

THE PHILADELPHIA SECTION, AMERICAN CHEMICAL SOCIETY and THE UNIVERSITY OF PENNSYLVANIA

present the

2010 Edgar Fahs Smith Memorial Lecture

Thursday, March 4, 2010

Dr. Ronald Breslow
Department of Chemistry, Columbia University

Filling the Gaps in the Likely Origin of Prebiotic Homochirality on Earth

6:00 PM

Carolyn Hoff Lynch Lecture Hall Chemistry Building, University of Pennsylvania 34th and Spruce Streets Philadelphia, PA

The lecture is free

Social Hour: 5:00-6:00 in the Alumni and Faculty Hall of Fame, Chemistry Building, University of Pennsylvania

Dinner following the lecture at the Drexel Faculty Club, 5th Floor, MacAlister Hall, 33rd and Chestnut Streets.

Dinner cost: \$35; Students with reservations and ID: \$18

RESERVATIONS should be made by calling Mrs. Harper at the Section office, (215) 382-1589, or emailing PhilaACS@aol.com by 5:00 PM Tuesday, February 25. Cancellations, if necessary, cannot be accepted after NOON on Thursday, March 2. UNCANCELLED RESERVATIONS WILL BE BILLED.

PARKING is available for \$14 in the Drexel University garage on Ludlow Street. From Market Street go south on 34th; it is the first left. A University of Pennsylvania garage on 34th Street just past Ludlow is \$15. Metered street parking may also be available.

The Board of Directors will meet at 4:00 in the Makineni Room of the Chemistry Building (Room 260 in the Cret wing), University of Pennsylvania.

SPEAKER'S ABSTRACT AND BIOGRAPHY

Dr. Ronald Breslow Columbia University

Filling the Gaps in the Likely Origin of Prebiotic Homochirality on Earth

Abstract: With the discovery that meteorites such as the Murchison bring alpha-methvl amino acids with excess L (S) chirality, we have addressed what has to happen next. We find that they can be used to synthesize normal amino acids under credible prebiotic conditions, and with an excess of L chirality. We also have shown that equilibrium solubilities can be used amplify tiny excess chiralities to ratios as high as 95/5 in solution, and even more when kinetic processes are used. Again the systems are credible for the prebiotic earth. We also describe the likely origin of the meteoritic amino acids.

We have also addressed the homochiralities of sugars such as ribose that are D in configuration. We have shown that nucleosides such as adenosine with small excesses of D-ribose can also be amplified by equilibrium solubility processes, in some cases to as much as a 200/1 ratio of D to L starting again with small excesses. Most re-

cently, we have addressed the origin of small excesses of D-glyceraldehyde, the simplest chiral sugar and the likely seed from which the other D sugars could have been formed. We find that some L amino acids can catathe formation glyceraldehyde with a small D excess, and that this can be amplified. We have thus interrelated the chiralities of amino acids with those of the sugars, tracing it all back to the meteorites.

Biography: Ronald Dr. Breslow is Professor of Chemistry at Columbia, one of 12 University Professors, and a former Chairman of the Department. He is a member of the US National Academy of Sciences, the American Academy of Arts and Sciences, and the American Philosophical Society, a Foreign Fellow of the Indian National Science Academy, an Honorary Member of the Korean Chemical Society, an Honorary Member of the Royal Society of Chemistry of Great Britain, a Foreign Member of the Royal Society of Britain, a Fellow of the World Innovation Foundation. an Honorary Member of the Chemical Society of Japan, and an Honorary Professor of the University of Science and Technology of China.

In research he has synthesized the cyclopropenyl cation, the simplest aromatic system and the first aromatic compound prepared with other than six electrons in a ring, established the phenomenon of anti-aromaticity, and discovered the chemical mechanism used by thiamine (vitamin B-1) in biochemical reactions. He has synthesized molecules that imitate enzymatic reactions, including the development of remote functionalization reactions and of artificial enzymes. Recently he has developed a new group of cytodifferentiating agents with use in cancer chemotherapy.

His scientific awards include the American Chemical Society Award in Pure Chemistry, the Fresenius Award, the Baekeland Medal, the Centenary Medal, the Harrison Howe Award, the Remsen Prize, the Roussel Prize in Steroids, the James Flack Norris Prize, the Richards Medal, the Arthur C. Cope Award, the Kenner Award, the Nichols Medal, the National Academy of Sciences Award in Chemistry, the Allan Day Award, the Paracelsus Medal of the Swiss Chemical Society, and the US National Medal of Science.

He was named one of the top 75 contributors to chemical enterprise in the past 75 years by a poll conducted by Chemical & Engineering News, and won the Priestley Medal, the New York City Mayor's Award in Science, the Bader Award in Bioorganic Chemistry and the Esselen Award for Chemistry in the Public Interest. In 2003 he received the Robert Welch Award in Chemistry, and in 2004 he received the Willard Gibbs Award, and in 2006 he received the Othmer Gold Medal and the Paul Gassman Medal. In 2007 he received the Organic Syntheses Award.

He has also received the Mark Van Doren Medal of Columbia University and the Columbia University Great Teacher Award. He was President of the American Chemical Society in 1996. The American Chemical Society has established the annual Ronald Breslow Award in Biomimetic Chemistry.

BOOSV OOR RAVINGS

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NEWS ATOMS

Michael Klein joins Temple University's College of Science & Technology as Laura H. Carnell professor of science and founding director of the Institute for Computational Molecular Science.

Raymond J. Gorte, Russell P. and Elizabeth C. Heuer professor of chemical and biomolecular engineering, and professor of materials science and engineering in the School of Engineering and Applied Science of the University of Pennsylvania, was presented the R.H. Wilhelm award in Chemical Reaction Engineering. The award is sponsored by Exxon/Mobil Research and Engineering Company and presented by the American Institute of Chemical Engineers in recognition of leadership and innovation in the chemical engineering field.

DEATHS

George A. Richter, Jr., retired research director formerly with Rohm and Haas, January 2 at 90. He worked at American Viscose on confidential programs related to the Manhattan Project. He joined Rohm and Haas in 1951 where he directed a research lab and performed patent analysis. He was the company's liaison with the Food and Drug Administra-

tion, retiring in 1981. In retirement he wrote and published a book *Evolving Order: Critical Path to Human Survival*.

Douglas E. Potter, retired chemical engineer, January 3 at 79. He was employed by Polaroid, Owens Corning Fiberglas and DuPont before joining CertainTeed Corp. He retired from CertainTeed after serving as corporate vice president and president of the fiberglass reinforcement division.

Richard Edwin Heckert, retired CEO with DuPont, January 3 at 85. After working on the Manhattan Project he joined DuPont in 1949 as a research chemist at the Experimental Station. He was named a director and senior vice president of the firm in 1973. In 1981 he became president, COO and vice chairman of the executive committee. He moved up to become vice chairman, deputy chairman, and in 1986 was named chairman and CEO.

At DuPont Heckert initiated the corporate marketing committee, was involved in the acquisition of Conoco, and was committed to research and safety. He lobbied for the chemical industry in Washington DC. He was actively involved with philanthropic

and cultural organizations such as United Way, the Carnegie Institute, Longwood Gardens, the Nature Conservancy, the Delaware Council on Economic Education, and the Buffalo Bill historic center in Wyoming.

Professionally he served as chairman of the National Association of Manufacturers. advisory director of Marsh & McLennan, director of Remington Arms, and chairman of the Society of Chemical Industry. Heckert was an avid outdoorsman who loved hunting, fishing, golf, and vegetable gardening.

Pankaja Kooveli Kadaba, former research professor of medicinal chemistry and

pharmaceuticals, January 14 at 81. Born and educated in India, she joined the faculty of the college of pharmacy at the University of Kentucky in 1968 where she was engaged in developing drugs for epilepsy and stroke. She authored over 10 patents and more than 70 technical articles.

Kadaba was a visiting professor at the University of Ljubljana, and in 1983 she chaired a symposium at the Ninth International Congress of Heterocyclic Chemistry in

Tokyo. In 1993 she founded K&K Biosciences to continue her work in drug discovery research. The firm began in Lexington, KY and was later relocated to Cheyney University. She was an avid artist with acrylic paintings and collages.

Delaware Valley Science Fairs

The Delaware Valley Science Fairs will be coming up before you know it. Judges and mentors are always needed. Check the website www. dvsf.org for more information and to volunteer.

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616th BOARD OF DIRECTORS

MEETING

December 16, 2009

William Penn Inn

Ambler, PA

Present: E. Davis, A. DeMasi, C.J. Bruner, D. Cichowicz, M. Cichowicz, A. Dent, R. Gates, J. Summers-Gates, K. Thrush-Shaginaw, V. Tortorelli, M. Matthews, S. Miller, W. Smith, T. Straub.

Excused: J. Tierney, D. Thomas, K. Yoder, D. Cook.

Also Present: L. Harper, H. Whalen, J. Crawford, A. Heldon, D. Hausner.

This is the edited version of the minutes. A full copy of the minutes can be obtained from the Section Office.

The meeting was called to order at 5:35 PM per Chair Gates. The minutes for the November meeting were approved as amended.

COMMITTEE REPORTS:

Nominations (E. Davis): E. Davis proposed the following on behalf of the Nominations Committee:

Board approval for Eric Williamsen, current MARM Alternate representative, to maintain this position. All were in favor.

Board approval for Melissa Cichowicz to serve as the Organic representative on the Awards Committee. All were in favor.

Ella requested recommendations for the Medicinal Chemistry slot.

Rick Ewing was proposed and approved. Ella and Melissa Cichowicz will solicit nominees to serve as the representative for Chemical Engineering.

Publications: M. Matthews reported that providing the link to *the Catalyst* online in a monthly email blast will cost approximately \$40 per month. The same email blast can be used to communicate other Section issues. Section member email addresses will be kept secure.

Women Chemists Committee:

K. Thrush Shaginaw reported that the November 21st P.A.G.E.S.TM session at Chestnut Hill College had record attendance and participation. 133 6th grade girls representing 39 schools and 58 volunteers participated. The signature consent required by the National Girls Collaborative Program may have been the cause for fewer "no-shows" than in the past. The March 17th Program at CHF is being sponsored by GlaxoSmith-Kline.

December Demos: T. Straub reported that over 100 people attended the December Herb Bassow memorial demonstrations at La Salle University.

OFFICERS REPORTS:

Chair Gates: No report.

Chair-Elect Summers-Gates: The January meeting will be held on January 21st at Temple University. D. Hausner has assisted with

much of the planning. Participants and guests will be charged \$15.00 per person to cover the costs of the event. Some funding will be needed to cover the costs of the printed program but these may be offset by the registration fee. Awardees will receive a copy of the Merck Index. The \$15.00 fee will be waived for judges. Sponsors for High School students will be notified that they are responsible for the registration fee.

Abstract submissions are due on January 11, 2010.

Secretary (A. DeMasi for John Tierney): No report.

Treasurer (C.J. Bruner): The latest version of the budget provided by G.. Cowperthwaite was not discussed or approved as it was partially based on the November treasurer's report which contained some errors. It also appears that the budget did not carry forward any line items which had not been charged as of the end of November, thus ignoring line items which would have been addressed in December. Some discrepancies were singled out and the Treasurer was asked to address these and any others prior to the January Board meeting:

It was noted that a Treasurer's report has not been approved since May 2009. The Board also reminded C.J. Bruner to be sure to transfer enough funds to cover expenses through the end of January 2010.

E. Davis reported that National has indicated that the Section will receive approximately \$5000 for the National meeting in Philadelphia in 2008.

OTHER BUSINESS:

- 1. Gratuities for Penn Staff Gratuities to staff at Penn up to \$200 were approved.
- 2. Salary Committee R. Gates moved that the Board approve an increase in salary for L. Harper in appreciation of her excellent service. All were in favor.
- 3. W. Smith communicated that D. Cook is currently the Chair of the Committee writing guidelines for High School Chemistry. The Board offered congratulations to Deb for leading this critical endeavor.
- 4. E. Davis thanked Robert Gates for his service as Chair of the Philadelphia Local Section on behalf of the Board.

There being no other business, the meeting adjourned at 6:55 PM. Respectfully submitted,

Anne DeMasi Acting as Secretary

WINNING POSTERS FROM THE JANUARY MEETING

Graduate Students

<u>Daniya Lukmanova-Keglman</u> and Jennifer B. Palenchar, Villanova University: *The Examination of Four Trypanosome* 6-Phosphofructo-2-Kinase/Fructose-2,6-Bisphosphatase Parlogs by RNA Interference.

Jessica A. Geer, Jhenny Galan, Zhiwe Liu and Vojislava Pophristic, University of the Sciences: *Investigating Intramolecular Hydrogen Bonding in Aromatic Oligoamide Foldamers*.

<u>Venkata Velvadapu</u>, Bharat Wagh, Tapas Paul and Rodrigo Andrade, Temple University: *Discovery of Novel Macrolide Antibiotics*.

<u>Ram Edupaganti</u> and Franklin A. Davis, Temple University: *Asymmetric Synthesis of Substituted Homotropinone Alkaloids*.

Undergraduate Students

Aseem Malhotra, LiNa Loo, Wei Wu, Wei-Heng Shih, Wan Y. Shih, Gregory P. Adams, Hossein Borghaei and Eric Borguet, Temple University: Surface Characterization of Piezoelectric Microcantilever Sensor (PEMS) via Atomic Force Microscopy and Fluorescence.

<u>Benjamin W. Redan</u>, Tracy C. Bariexca, and Joe A. Vinson, University of Scranton: *Polyphenols increase the antioxidant capacity of liver, heart, kidney, prostate, and brain.*





CHEMICAL CONSULTANTS NETWORK MARCH 10, 2010 MEETING

Visit our <u>NEW</u> web page at www.chemconsultants.org

Date & Time: Wednesday, March 10, at the Cynwyd Club, Bala Cynwyd, PA; Networking, 5:30 PM; Dinner, 6:30 PM; Talk and Business Session, 7:30 PM

Topic:

Databasing and Contact Management Systems for Consultants

Abstract: In today's world of vast and ever increasing information sources, all businesses struggle to keep up with an overwhelming amount of data and information. The software most typically used to manage and handle these data is Microsoft Office – Outlook, Access, Excel and more. Office is used to deliver, query, analyze and present data every day, yet the majority of businesses use only a fraction of the power of this software.

I will discuss how to effectively use software to manage client and project information and communications, from more effective use of Outlook to off-the-shelf Client Relationship Management software (CRMs) to custom database development. If time permits, I will also discuss options for email marketing and applications for improved business productivity.

Biography: Anne Toohey, owner and primary consultant at DataBasics Solutions since 2004, has over 25 years of experience with office applications, workflow analysis and redesign. Prior to her entrepreneurial stage, Anne spent 13 years at Xerox Corp developing her career in Information Technology and Services industry as she rose to the level of Marketing Manager in Printing Systems. Anne earned her BA in History with a minor in Computer Science at the University of Virginia in 1983. She enjoys one-on-one client interaction and finds personal satisfaction in implementing a solution to integrate, automate and improve business processes and productivity.

Location: The Cynwyd Club, 332 Trevor Lane, Bala Cynwyd, PA 19004. From I-76 drive S on City Line Ave. (US Rte. 1). Turn right on Conshohocken State Rd. (Rte. 23); stay in right lane. After second light watch for white left-turn arrows painted on street (about .14 mi/750 ft). Do not follow Rte. 23 left at turn but instead go straight ahead onto Llandrillo Rd. (passing to right of Valley Press printing). In one block bear left onto Trevor Lane at stop sign. Clubhouse and parking are on the left. Please park in lot if space is available; otherwise park on Trevor Lane. If lost, call the club at 610-667-4524, ext. 2. MAP

Reservation: To make or cancel a dinner reservation, email CCNReservations@aol.com or call the ACS office at 215-382-1589 (leave message on voicemail if necessary). Fee, including food and beverages (wine, beer & sodas), is \$25 by the deadline, Thursday, March 4, \$35 afterwards. Late reservations and walk-ins subject to availability. No-shows will be invoiced. Please advise of any special food requirements. There is no charge for talk only; registration is suggested using contact information above.



You are cordially invited to participate in MARM 2010 Registration and Abstract Submission are now open!

The 41st Middle Atlantic Regional Meeting (MARM 2010) of the American Chemical Society will be held from Saturday, April 10 to Tuesday, April 13, 2010. Hosted by the Delaware Local Section, the meeting will take place at the historic Hotel du Pont in Wilmington, DE. Many exciting and informative symposia and events are being planned. The advance registration deadline is March 28.

Visit the website at http://www.marmacs.org

Meet your colleagues Accelerate your career Renew, Reward, Re-energize Make sure you attend Networking Opportunities Catalyst for success Top speakers Be part of it!

Be part of this special event with speakers from industry, education and government at a variety of TECHNICAL AND POSTER SESSIONS.

Symposia focused on - Analytical, Biological, Physical, Organic, and Inorganic Chemistry; Fluorine Chemistry, Forensic Chemistry, Bench to Pilot Plant, Medicinal Chemistry; Chemical Engineering; Computers in Chemistry; Chemistry and Government Policy; Chemistry and the Pharmaceutical Industry; Patent Law; Science Education; Career Day; Polymer, Colloid, and Emulsion Chemistry; Nano Science and Technology, and Material Science; Sustainability, Green Chemistry, and Policy

MEETING HIGHLIGHTS will include a Sunday dedicated to Science Education and Careers. There will be Workshops, Short Courses, Vendor Exhibitions, WCC, Student member events, YCC events, Silver Circle – ChemVets, and additional symposia from other societies.

General Chair: Martha Hollomon, marthahollomon@comcast.net

Program Chair: Narmada Gunawardena, <u>narmada.gunawardena@astrazeneca.com</u>

Treasurer: Xiaoli Wang, <u>xiaoli.wang2@astrazeneca.com</u> or call 302-885-6138 Exhibits Chair: Allen Denio, <u>MARM2010.exhibits@gmail.com</u> or call 302-455-0389

BOOK REVIEW

Handbook of Mathematical Relations in Particulate Materials Processing by Randall M. German and Seong Jin Park. 454 pages, 61/4 by 91/2 inches, casebound, John Wiley & Sons., 2008. ISBN 978-0-470-17364-0, \$120 from John Wiley & Sons, Inc., 111 River St., Hoboken NJ 07030.

and other hard materials. The die-wall mathematical relations pre- strength, characterization, particle packing and powder testing. Powder processes include compaction, injection molding, slurry shaping, polymer pyrolysis, sintering, isostatic processing, and forging among others.

The handbook presents the terminology in alphabetical or-

This is simply a useful hand- der, from Abnormal Grain book for those involved in Growth to Zeta Potential, with powder handling technology. brief descriptions of the math-The types of powders include ematical relations and conceramics, powdered metals, stants involved. Some examcermets, carbides, minerals, ples are BET surface area, friction. laser sintering, sented pertain to atomization, pycnometer density, Stokes' milling, production, powder law, thermal expansion coefficient, and wetting angle among many others.

> The handbook serves as a quick reference with standalone definitions of terminology used in materials processing.

—Alan Warren

Take the Mystery Out of the Job Search: Get Support from the ACS Career Experts!

ACS Careers Job Club Webinar Forums feature moderators Lisa Balbes, PhD and James Burke, PhD, ACS Career Consultants with a combined 40 years of experience in assisting hundreds of job seekers in the chemical industry. The launch is Tuesday, March 9, 2010, with a 20-minute topic presentation followed by a Q&A session. Subsequent forums will be held the second Tuesday of every month from 1 to 2 PM ET. Please visit www.acs.org/careers to register for this free service!

President Obama Announces National Lab Day

On November 23, President Barack Obama announced the establishment of National Lab Day, an effort supported by ACS and 190 other organizations representing more than 6.5 million science, techengineering, nology. math (STEM) professionals.

The first National Lab Day is tentatively set for early May 2010 and will be part of a large, ongoing STEM initiative called "Educate to Innovate." ACS and other organizers hope National Lab Day will help stimulate more hands-on science learning by fostering enduring collaborabetween individual tions STEM professionals, teachers, and students. ACS Chemistry Ambassadors are already making these connections. To join the effort or learn more. visit www.acs.org/chemistryambas sadors

and www.nationallabday.org



NOMINATIONS INVITED FOR THE 2010 PHILADELPHIA SECTION AWARD AMERICAN CHEMICAL SOCIETY

The Philadelphia Section invites its members and regional and topical groups to consider recommending candidate(s) for the Philadelphia Section Award.

This Award recognizes an individual, "who, by conspicuous scientific achievement through research, has made important contributions to man's knowledge and thereby aided the public appreciation of the profession." Any member of the American Chemical Society, Philadelphia Section, may be nominated for this award. Recent awardees include: Eric Borguet (Temple University 2009), John J. Baldwin (Vitae Pharmaceuticals 2008), Robert J. Levis (Temple University 2007).

INSTRUCTIONS FOR SUBMITTING NOMINATION

- (1) The nominator should provide detailed biographical data of the nominee, showing educational and employment data, a list of publications and a record of other accomplishments pertinent to consideration for this award.
- (2) One or two seconding letters (at least one of which should be from a person in an organization other than that of the nominee) should be requested in support of the nomination.
- (3) Nominators and seconders should be identified with addresses and telephone numbers so that they can be contacted, if necessary, for additional information.
- (4) Unsuccessful nominees from previous years may be renominated. In fairness to the nominee, however, renominations must be accompanied by an updating of the nominee's biographical data and list of accomplishments in order to make the nomination competitive. Unsuccessful nominees who have been considered three years in a row should not be renominated for the fourth year in succession without prior consultation by the nominator with the chair of the Awards Committee.

Nomination forms are available from the Section Office. Contact the Administrative Secretary, Mrs. Libby Harper at:

Philadelphia Section, ACS
Department of Chemistry
University of Pennsylvania
Philadelphia, PA 19104-6323
(215) 382-1589; email PhilaACS@aol.com

The completed packet of nomination materials may be emailed to PhilaACS@aol.com or nine COMPLETE SETS may be sent by April 1, 2010 to Dr. John Tierney, Chair, Awards Committee, at the section office address above.



Do you have an interesting career in chemistry or chemical engineering?

Would you like to inspire students to consider a career based on chemistry?



Peter Cutts Photography

Be part of

Chemistry's Past and Your Future

An event for high school students to explore chemistry and chemical careers



March 17, 2010

Chemical Heritage Foundation 315 Chestnut Street Philadelphia, PA 19106



Volunteers are needed to talk about their careers with small groups of students.

Available student session run 9:30 am – 10:15 am, 10:30 am – 11:15 am, 12:45 pm – 1:30 pm, and 1:45 pm – 2:30 pm.

To volunteer contact: Kathy Thrush Shaginaw, Philadelphia Section ACS Women Chemists Committee Chair katt@verizon.net or 215-736-9285

For more information visit: http://www.chemheritage.org/events/event-detail.asp?id=530

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Chemists Celebrate Earth Day

a program of the American Chemical Society

April 22, 2010



Theme

"Plants – The Green Machines!"

Unifying Event

Where is your green machine?

The 2010 Unifying Event for Chemists Celebrate Earth Day is planting your green machine. Local sections may celebrate the chemistry of and uses of plants, by planting their own green machine. Send us photos of the plant and your section in action and tell us what you machine does to energize, produce, and clean the planet. Sign our on-line pledge form and be counted! This activity will bring the community together for a fun-filled day!

K-12 Contest

Illustrated Poem Contest

Students are asked to write and illustrate a poem using the Chemists Celebrate Earth Day 2010 theme, "Plants: The Green Machines!" Detailed rules and guidelines are published at the Chemists Celebrate Earth Day website (www.acs.org/earthday).

Please submit poems of 40 words or less of any style.

Educational Resources

www.acs.org/earthday

Hands-on activities, safety guidelines, correlation with science education standards, and related articles have been posted on the Chemists Celebrate Earth Day website; book and electronic resource lists will also be available. Web-based interactive activities will be accessible as well.

Journal of Chemical Education

The *Journal of Chemical Education* dedicated their February 2010 issue to green chemistry, environmental chemistry, and the celebration of Earth Day. The *Journal* is packed with references to make your celebration a success!

Chemists Celebrate Earth Day Products

Promotional products for Chemists Celebrate Earth Day such as pencils, mole temporary tattoos, mole plush toys, and patches are available for purchase through the ACS online store.

www.acs.org/store

American Chemical Society – Office of Community Activities 1155 Sixteenth Street, NW – Washington, DC 20036 earthday@acs.org – 800-227-5558, ext. 6078

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All committees are looking for new members and several are looking for "take charge" chairs. Some, like the Teller's Committee, involve minimal work—one night per year and pizza provided. Others, like positions on Publications or Social Committees, involve one or two hours per month.

Committee details can be found at: http://www.membership.acs.org /p/philadelphia

or by calling Mrs. Libby Harper at the Philadelphia section office 215-382-1589.

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For further information and other options for promoting your company's products and services visit:

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CAREER OPPORTUNITY



Are you a math or science professional thinking about a career change?

The E=mc² program at Temple University's College of Education could be for you! E=mc² stands for Educating Middle-grades Teachers for Challenging Contexts. It is designed to train midcareer and early retiree mathematics and science professionals as much-needed teachers for high-need schools. E=mc² provides a streamlined certification process to teach middle school students in Pennsylvania, and you can continue in your current job while you complete most of the program. Plus, qualified E=mc² participants receive a five thousand dollar tuition subsidy, with potential for more! Accepted candidates are required to teach in a public school for 3 years in one of Temple's partner districts. The College of Education at Temple University is a nationally-recognized leader in urban education and provides several pathways to teaching.

For more details and how to apply, go to www.temple.edu/education/emc2 or email emc2@temple.edu.

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CELEBRATING



Become an Indispensible Employee with Training from the ACS

Register today for one of the following ACS Short Courses coming to Philadelphia – June 21-25, 2010.

June 21-22

▶ Introduction and Use of Standard Methods for Environmental Regulatory Analysis and Compliance

- Pharmacokinetics and Pharmacodynamics:
 Principles and Applications in
 Pre-Clinical Drug Development
- Organic Synthesis: Methods and Strategies for the 21st Century Chemist
- Introduction to Process Analytical Technology

June 23-24

- ▶ Chemical Engineering for Chemists
- Drug-like Properties: Optimizing Pharmacokinetics and Safety in Drug Discovery
- Essentials of Medicinal Chemistry and Pharmacology

June 23-25

 Experimental Design for Productivity and Quality in Research & Development

June 24-25

Analysis and Interpretation of Mass Spectral Data



Register now at www.ProEd.acs.org

Early Registration ends May 3rd; Advanced Registration ends June 1st. Group Discounts are also available.

American Chemical Society



PHILADELPHIA SECTION, ACS

2010 CALENDAR OF EVENTS

Date	Event	Locations
Thursday, March 4 2:00-3:00 PM	ACS Webinar: Ed Askew, Askew Scientific Consulting: Online Monitoring for Water and Wastewater Processes – Global Sustainability at Your Fingertips	Register at https://www2.gotomeeting.com/register/338640195
Thursday, March 4	Edgar Fahs Smith Lecture: Dr. Ronald	University of Pennsylvania
NB: First Thursday	Breslow, Columbia University	Philadelphia, PA
Monday, March 8	Delaware Valley Mass Spectrometry Discussion	Villanova University
	Group: Dr. Bill Simonsick, DuPont: MS	Villanova, PA
	Analysis of Polymers	http://science.widener.edu/svb/msdg/
Wednesday, March 10	Chemical Consultants Network: Anne Toohey,	Cynwyd Club
	DataBasics Solutions: Databasing and Contact	Bala Cynwyd, PA
TT 1 N. 1 11	Management Systems for Consultants	www.chemconsultants.org Register at
Thursday, March 11	ACS Webinar: Michael Trova, AMRI:	
2:00-3:00 PM	Developing Career Skills to Compete in a Global Economy	https://www2.gotomeeting.com/register/658331530
Wednesday, March 17	Chemistry's Past and Your Future: An Event for	Chemical Heritage Foundation
wednesday, March 17	High School Students to Explore Chemistry and	http://www.chemheritage.org/events/event-
	Chemical Careers	detail.asp?id=530 or katt@verizon.net
Thursday, March 18	ACS Webinar: Woody Sherman, Schrödinger:	Register at
2:00-3:00 PM	Staying Ahead of the Game: Recent Innovations	https://www2.gotomeeting.com/register/464892763
2.00 2.00 1.01	in Computational Methods for Drug Discovery	intpol//www.sigotomecomigicomercegistes//toto/2/oc
March 21-25	2010 Spring National Meeting	San Francisco, CA
Thursday, March 25	ACS Webinar: Martin Staubus, Beyster	Register at
2:00-3:00 PM	Institute: How to Grow Your Small Business into	https://www2.gotomeeting.com/register/544943954
	a Large Corporation – the Story of SAIC and the	
	Secret Sauce of Employee Ownership	
Thursday, March 25	Philadelphia Organic Chemists Club: Dr. Peter	University of Pennsylvania
	Bernstein, AstraZeneca: The Challenge of CNS	Philadelphia, PA
	Drug Discovery: 5-HT1B Ligands as Potential	http://www.pocclub.org/
	Agents for the Treatment of Anxiety and	
	Depression	
April 10-13	Middle Atlantic Regional Meeting (MARM)	Hotel DuPont
		Wilmington, DE
Wednesday, April 7	C4J4 AJ	http://www.marmacs.org
NB change in day & date	Student Awards	TBA
Saturday, April 17	P.A.G.E.S. TM Program for Sixth-grade Girls	Chestnut Hill College
Saturday, ripili 17	1.1.3.2.5. 110grain for Sixur-grade Offis	Philadelphia, PA
Thursday, April 22	Chemists Celebrate Earth Day	www.acs.org/earthday
Thursday, May 20	Teaching Awards and Public Support of	TBA
	Science Award to PA Representative James	
	Roebuck	
Thursday, June 17	Honoring Our 50-year Members	TBA
August 22-26	2010 Fall National Meeting	Boston, MA