Joseph Betz, NIH Office of Dietary Supplements, is November CSW Dinner Meeting Speaker

CSW will hold its November dinner meeting, honoring its 50-year members, on Thursday, November 19, at Far East Restaurant in Rockville. Dinner information and other specifics are detailed on page 2. The speaker will be Dr. Joseph M. Betz, Office of Dietary Supplements, NIH, who will present a seminar entitled, “Scientific and Regulatory Challenges to the Scientific Study of Botanicals.”

Dr. Betz joined the ODS as Director of the Dietary Supplements Methods and Reference Materials Program in 2001. In this role, he oversees efforts to promote development of validated analytical methods and reference materials for dietary supplements. Prior to joining NIH, he was Vice President for Scientific and Technical Affairs at the American Herbal Products Association. Before joining the AHPA, he spent 12 years as a research chemist at FDA’s Center for Food Safety and Applied Nutrition.

Dr. Betz is a native of Philadelphia, PA. He earned his Ph.D. in Pharmacognosy (1988) at the Philadelphia College of Pharmacy and Science. His research interests lie in the areas of analytical methods for determination of botanical quality. He has served as AOACI General Referee for Botanical Supplements and on two USP Expert Committees- Botanicals and Nomenclature and Labeling. Dr. Betz has over 50 publications in the natural products area and continues to work toward ensuring the quality and safety of botanical products. Dr. Betz is the recipient of the American Botanical Council’s first Norman R. Farnsworth award for excellence in Botanical Research and the American Herbal Product Association’s Herbal Insight Award for contributions to the Botanical Sciences.

Abstract: Sales of botanical dietary supplements in the U.S. were approximately four billion dollars last year. Despite their popularity, there remains controversy surrounding their use. Much of the controversy revolves around the fundamental questions of whether or not they are safe and effective.

According to U.S. Food and Drug Administration estimates, when the Dietary Supplement Health and Education Act (DSHEA) became law in 1994, there were about 600 U.S. dietary supplement manufacturers producing approximately 4,000 products. By the year 2000, there were more than 29,000 dietary supplement products on the market with an average of 1,000 new products being added annually. Twelve years after the DSHEA, product quality remains one of the biggest questions confronting consumers, researchers, and regulators.

Knowledge about the composition of natural products is vital to understanding their biological activity. Over the past few years, clinical studies of several popular interventions have been published, with contradictory (continued, page 2)

US National Chemistry Olympiad Invites College Mentor Position Applicants

College educators are invited to apply for a position as mentor for the US National Chemistry Olympiad program. Duties during the three-year term include helping to conduct the national study camp for high school students held at the United States Air Force Academy located in Colorado during mid-June 2011, 2012 and 2013. Generally, in their second and third year, mentors accompany four U.S. student competitors to the International Chemistry Olympiad (IChO). During the competition, the mentors will serve as members of the IChO Jury. The 2012 and 2013 IChO events are scheduled to be held in the U.S. and in Singapore, respectively.

Most students at the study camp have completed Advanced Placement Chemistry or the equivalent; therefore instruction at the camp is well beyond the level of high school general chemistry courses. The curriculum also includes considerable laboratory work.

Successful applicants (continued, p. 4)
THE CHEMICAL SOCIETY OF WASHINGTON PRESENTS:
1090th Dinner Meeting

Thursday, November 19th
6:00 pm SOCIAL HOUR (Cash Bar)
6:30 pm DINNER
5055 Nicholson Lane
Rockville, MD 20852
COST $26.00 Members and Guests
$13.00 Students
50-year Members and Spouses FREE

Banquet Menu: Appetizers: Spring roll, shrimp toast, steak on a stick.
Main dishes: Far East Shrimp, asparagus beef, cashew chicken, Szechuan string beans, vegetable delight, steamed and fried rice. Toffee and pineapple dessert.

Far East Restaurant does not have its own web site, but the following is a Montgomery County business directory listing:

8:00 p.m. Featured Speaker: Joseph M. Betz, Ph.D., Office of Dietary Supplements, NIH. Title: “Scientific and Regulatory Challenges to the Scientific Study of Botanicals”

Make reservations by Friday 12:00 noon, November 13, 2009, to the CSW office: csw@acs.org or 202-659-2650. Please designate the names in your party.

Those who make a reservation but are unable to attend should send a check for the cost of their meal to the CSW office.

Directions:
From I-270, take Montrose Road exit east; turn right onto 355, then left on Nicholson Lane. From I-495 outer loop, take Exit 34, north on 355, then right onto Nicholson Lane. From I-495 inner loop, take Exit 36, north on Old Georgetown Rd., then right directly onto Nicholson Lane. METRO: White Flint station on the red line.

Restaurant site is marked with an “A”, right.

Abstract (continued from page 1): conclusions about efficacy. Reviews of a number of botanical studies have demonstrated that many trials do not adequately characterize or describe the products being used in the studies. These deficiencies may be caused by investigators who lack understanding of the regulations governing the introduction of botanical products into the supplement marketplace as well as a lack of knowledge of the basic methodology for characterizing and describing the products. Formal policies that require documentation of the nature and composition of dietary supplements are being implemented by journal editorial boards and research funding agencies, including NIH. This push toward basic and applied analytical chemistry will help researchers, regulators, manufacturers, and ultimately, consumers.

This talk will provide a brief overview of supplement regulations, problems encountered by research agencies when reviewing grant applications, and will highlight policies for assisting investigators address these issues.
Twenty-eight 50-Year Members to be Honored at CSW November Dinner

Dr. Robert John Argauer, Kensington, MD
Dr. Charlie J. Barnes, Waldorf, MD
Mr. Stephen A. Brenner, Potomac, MD
Dr. Mark Civera, Washington, DC
Dr. Donald James Cotton, Washington, DC
Mr. Anthony F. Dorrzapf, Jr., Herndon, VA
Dr. Igor John Eberstein, Greenbelt, MD
Mr. Robert E. Farncomb, Accokeek, MD
Dr. Russell E. Farris, Clifton, VA
Dr. Alexander J. Fatiadi, Burtonsville, MD
Dr. Errol Desmond Goddard, Cambridge, MD
Dr. Alan C. Levy, Potomac, MD
Mr. Paul Lieberman, Silver Spring, MD
Dr. Jan W. Mares, Washington, DC

Dr. James V. Mengenhauser, Alexandria, VA
Mr. Robert L. Myklebust, Walkersville, MD
Mr. Clarence J. Nowack, Ocean Pines, MD
Dr. Donald G. Rea, Falls Church, VA
Dr. Herbert H. Richtol, Arlington, VA
Dr. Fred E. Saalfeld, Springfield, VA
Dr. Desmond Sheehan, Alexandria, VA
Mr. Jack M. Solomon, McLean, VA
Dr. Thomas F. Spande, Bethesda, MD
Dr. Celia White Tabor, Bethesda, MD
Dr. Warren E. Thompson, Bethesda, MD
Dr. David G. Van Ormer, Arlington, VA
Dr. Denys J. Voaden, College Park, MD
Dr. Garnett E. Wood, Washington, DC

Navigating the Intellectual Property Landscape, an ACS Webinar

Beginning and growing a business can be an exciting yet perplexing time. When the company is based upon innovation, there is even greater complexity. How does one protect the intellectual assets when both time and money are at a premium? What early stage agreements are critical to protect company knowledge and goodwill? These and other topics of interest to entrepreneurs, scientists, and business executives will be discussed.

The ACS Small & Medium Business Webinar Series will present “Navigating the IP landscape: Legal issues entrepreneurs and small business owners need to know,” a half-hour presentation followed by Q&A with speaker Gianna Arnold, Principal at Miles & Stockbridge P.C. As a scientist and a law professional, she focuses her legal expertise on helping scientist professionals, entrepreneurs, and small/medium business executives learn about the policies, procedures and corresponding agreements needed to protect the intellectual assets of start-up, early stage, and mid-sized companies.

What You Will Learn: Are your products and/or services patentable? What actions must you take to protect your intellectual property? How to protect and enforce your company’s knowledge and goodwill? How to balance the risk and cost of IP protection?

Webinar Details:
• Date: Thursday, November 19, 2009
• Time: 2:00-3:00 pm ET
• Fee: Free
• Web site to register: https://www2.gotomeeting.com/register/404780747

About The Presenter: Gianna Arnold is a Principal at Miles & Stockbridge P.C., an experienced attorney and corporate executive with first-hand knowledge and practice in matters such as entity formation, financing, business development, and mergers and acquisitions. With prior laboratory bench experience and an advanced degree in biotechnology, she focuses her legal expertise on the intersection of science, business, and law. Her practice is directed primarily to applying the policies, procedures and corresponding agreements needed to protect the intellectual assets of start-up, early stage, and mid-sized companies. She is the President of Women In Bio.

ACS Small & Medium Business Webinar now using Twitter To follow ACS programs for industry members, ask questions to the webinar presenter in advance, or to join group colleagues twittering, please search or include #acsimp hashtag in your twitter text.

Article reprinted from boilthisdown.org, a web site created by the ACS for industry chemists and chemical engineers.

It’s easy being green! Recycle this issue and all recyclable materials.
Chemical Technology Programs Earn ACS Approval

The ACS Chemical Technology Program Approval Service (CTPAS) has granted ACS approval to the Laboratory Science Technology program at two institutions: the National Technical Institute for the Deaf (NTID), one of eight colleges within the Rochester Institute of Technology; and the Chemical Technology program at Ivy Tech Community College, Indianapolis, IN.

The Laboratory Science Technology Program at NTID is the 15th chemistry-based technology program to be approved by ACS and the first approved program designed for deaf and hard-of-hearing students. It is also the first approved program to work with industry and community partners nationwide, rather than with local partners.

The program at Ivy Tech Community college is the 16th chemistry-based technology program to be approved by ACS. Just over 10% of the chemistry-based technology programs in the US have earned ACS approval.

Because chemistry-based technology students must learn a great deal of theory and technique in a relatively short period of time, programs work closely with industry and community partners to tailor the curriculum appropriately. Many technology programs also work with academic partners to give students more educational options. Such partnerships are rapidly becoming the new model for relationships among industry, academia, and the community.

CTPAS was established in 1990 to nurture, review, and grant ACS approval to associate-level chemistry-based technology programs. CTPAS evaluates programs based on such criteria as partnerships and alignment with industry/community, program assessment, and facilities and resources.

For more information on ACS approval or to see a list of approved programs, visit “Chemical Technology Program Approval” at www.acs.org/education, call 202-872-6108, or email ChemTechLinks@acs.org.

DC Area Chemistry Seminar Schedules

Listed below are chemistry-related seminar schedule web sites from area universities, that were up-to-date as of press time. More will be posted as they become updated. Contact the department to find out about general public admission, directions to campus, and parking. Viewing the PDF? Just click!

Georgetown Chem: http://chemistry.georgetown.edu/news/seminars.html
GMU Chem: http://chemistry.gmu.edu/seminar/seminar_fall2009.html
GWU Biochem: http://www.gwu.edu/~gwbio/seminars.html
GWU Chem: http://www.gwu.edu/~gwcem/seminars.cfm
Maryland Biotechnology Institute: http://www.umbi.org/home.php
Maryland Chem: http://www.chem.umd.edu/seminars
Maryland Chem Eng: http://www.chbe.umd.edu/events/seminars.html
Maryland Chemical Physics: http://www.chemicalphysics.umd.edu/10_seminars.htm

DC Area Chemistry Seminars: Editor’s Choice

Check web sites for times and locations.

Maryland Chem Eng: Dr. William Prinz, NIH, “Moving Sterols and Signals Between Organelles at Membrane Contact Sites,” November 17.

Chemistry Olympiad Seeks Mentors for Upcoming Competitions

(continued from page 1) are expected to have background in one or more of the areas of organic, inorganic, analytical, physical, or biochemistry with classroom experience and should demonstrate involvement with students in special projects or activities. Applicants must be prepared to make a three-year term commitment as outlined above. ACS pays all expenses and travel costs, as well as an honorarium.

Interested individuals may obtain an application form at: www.acs.org/olympiad or by contacting: Margaret Thatcher, Senior Program Associate, U.S. National Chemistry Olympiad Program American Chemical Society 1155 Sixteenth Street, N.W. Washington, DC 20036 (202) 872-6328

The deadline for completed applications is January 29, 2010. Applicants must also arrange to have three letters of reference forwarded to Cecilia Hernandez by February 13, 2010 at the above address.

For more information, please call Cecilia Hernandez at (202) 872-6169.

CSW Calendar

Deadline for Receipt of CSW Officer Election Ballots: Monday, November 16

December Dinner Meeting Thursday, December 10, 2009 Location TBD

January Dinner Meeting Speaker: Dr. Joseph Francisco ACS President-Elect
Going Green

With the current school year underway, it's a great time to start planning this year's green chemistry activities. ACS Student Chapters can be recognized for their efforts to go green through the Green Chemistry Student Chapter Award. To earn the award, undergraduate student chapters must complete at least three different green chemistry activities over the course of the academic year and include them in their chapter report.

Read more for ideas about green chemistry activities. From the ACS website www.acs.org, follow the links: Funding & Awards > Awards > Green Chemistry Awards > Green Chemistry Student Chapter Award.

On Saturday, November 7, the Chemical Society of Washington will be hosting a 4-hour leadership course from the ACS Leadership Development System called “Engaging and Motivating Volunteers”. The course is aimed at giving you practical tools for engaging and motivating volunteers, which you can use both in your professional career as well as in your volunteer activities such as CSW. The workshop is especially targeted toward newly involved members of CSW.

If you're interested in attending, please contact Jennifer Young for details (j_young@acs.org; 202-872-6173). The class size is limited to 20, but there may still be openings.

Solid-State Organic Chemistry, November 30 - December 1
This course is designed to impart an understanding of the structures and properties of solid organic compounds. An overview of analytical techniques used to characterize solids will be presented, followed by discussions of the nature of various types of solids on a molecular level.

Effective Supervision of Scientists and the Technical Staff, November 30 - December 1
This course will help technical managers improve their skills by teaching effective management techniques, how to motivate staff for more creative output and participation, how to improve problem-solving abilities, and how to create a positive work atmosphere.

Laboratory Safety & Health, November 30 - December 2
Learn best practices to minimize personal injury, health impairment, property loss, fines, and liability in your laboratory.

Student Chapters

ACS Short Courses in Durham, NC: Patent Fundamentals, Organic Chemistry, Laboratory Safety

In a changing economy, innovation and state-of-the-art skills are needed to get to the next level. Learn what you need to succeed in the lab and in your company with Short Courses from the ACS in Durham, NC, November 30 to December 2. Visit the website www.proed.acs.org for details on the fall schedule.

The following courses are open for registration:

Practical Approaches to Patents and Other Forms of Intellectual Property, November 30
Learn the fundamentals of writing patent applications and developing patent filing strategies.

Essentials of Organic Chemistry, November 30
This course will renew your knowledge of the basics of organic chemistry by reviewing nomenclature, oxidation reduction, typical reactions of functional groups from a mechanistic perspective, stereochemistry, and medicinal chemistry.

ACS Publications from DC Area Research Groups

This feature of The Capital Chemist is a compilation of selected publications in ACS journals, appearing recently, from area institutions.

Min Jia†, Yu Tang†, Yiu-Fai Lam†, Sarah A. Green and Neil V. Blough† (2009) “Prefluorescent Nitroxide Probe for the Highly Sensitive Determination of Peroxyl and Other Radical Oxidants,” Anal. Chem., 81, 8033–8040. († - Department of Chemistry and Biochemistry, University of Maryland)


Suppose your car has a high gas mileage efficiency of 45 MPG, and you have driven it 120,000 miles.

A) Compared to a car that gets 30 MPG, how much gasoline have you saved?
B) Assuming $2.50 per gallon, how much money have you saved?
C) Using the following assumptions: gasoline = 85% carbon, gasoline = 6.2 lbs/gallon, 100% conversion of carbon to CO₂, how much CO₂ emissions have you reduced? (Answers, page 8)
BUSINESS DIRECTORY

SERVICES

NMR Service 500 MHz
*Mass
*Elemental Analysis
NuMega Resonance Labs
numega-labs.com  P-858-793-6057

NEW ERA ENTERPRISES, INC.
NMR-IR/FTIR-UV-VIS-FL
sampling supplies & accessories
Three major catalogs / pricing to view
and download from
www.newera-spectro.com
One source for Spectroscopic
Sampling Supplies
CAGE Code: 44ME9
DUNS: 556766667
1-800-821-4667  cs@newera-spectro.com

CAREER SERVICES

★ Institute for Defense Analyses★

- Are you a PhD with a strong quantitative bent and a breadth of knowledge that you think makes you stand out from your peers?
- Are you a PhD scientist or engineer that has always been interested in the policy surrounding the government’s decisions about technology? And do you wonder about the quality of scientific advice that goes into such decisions?
- Do you have lab experience, but prefer computer based or theoretical research with interdisciplinary flavor? Or perhaps you are a theoretician, with extraordinary talents that cut across several fields?

If those questions caused you to pause and think, IDA may be the right place for you to develop a challenging and satisfying career. IDA is a place where your work could have outstanding impact. Most of our analyses support the Departments of Defense and Homeland Security as well as the Executive Office of the President and Joint Chiefs.

Please visit www.ida.org to learn more about us. To apply, e-mail your resume to http://jobs-ida.icmcs.com/jobs/1223/job, specifying Capital Chemist in addition to openings for PhDs we also have paid summer internships for rising seniors and grad students. IDA is proud to be an equal opportunity employer.

IDA

SEARCHING FOR THAT SPECIAL JOB?

There are many companies and organizations searching for chemical and biochemical personnel to fill important jobs in their organizations.

- Companies for laboratory and management positions
- Universities & Colleges for teaching positions and laboratory personnel
- Hospitals for technical and research personnel

There are several web sites that may help you search for these open positions.

- www.mbo-services.net
- http://membership.acs.org/W/WashDC/career.html

CAREER SERVICES

SERVICES

Micron Analytical Services

COMPLETE MATERIALS CHARACTERIZATION
MORPHOLOGY  CHEMISTRY  STRUCTURE

SEM/EDX • EPA/WDXA • XRD XRF • ESCA • AUGER • FTIR • DSC/TGA
Registered with FDA • DEA  GMP/GLP Compliant

3815 Lancaster Pike Wilmington DE. 19805
Voice 302-998-1184, Fax 302-998-1836
E-Mail micronanalytical@compuserve.com
Web Page: www.micronanalytical.com

Advertisers in this issue:

Eastern Scientific......................... 7
Institute for Defense Analysis........... 7
Micron Inc............................... 7
EMD Chemicals............................ 6
New Era Enterprises....................... 7
NuMega Resonance Labs............... 7

Vacuum Pump Problems?
Eastern Scientific specializes in the repair and precision rebuilding of all makes of mechanical vacuum pumps.
Free pick-up & delivery
Restrictions apply

Eastern Scientific
www.easternsci.com
781-826-3456
New Program Grants Available: ACS Local Sections Could Receive up to $500 in Starter Grants This Year

The ACS Office of Public Affairs is funding a starter grant program to encourage ACS local sections to form a Government Affairs Committee (GAC) and/or a Public Relations Committee (PRC). A GAC works to develop long-term relationships with elected officials by sharing ACS positions and engaging legislators in science-policy dialogue. A PRC works to improve the public’s perception of chemistry by speaking confidently and consistently about the value of chemists and chemistry. Ideally, a committee is comprised of three or four individuals representing academia, industry, and students; however, it may consist of only one or two individuals (see: Job Description—Local Section GAC Chair).

The program grants local sections up to $250 to form one committee or $500 to form both types of committees. The application deadline is Nov. 30, 2009.

Funds are distributed once a local section names a committee chair and identifies a potential program activity to be completed in 2010. Activities can include, but are not limited to, the following:
- Make a Washington, D.C., congressional visit
- Publicize a local section meeting
- Make a district congressional visit
- Invite a policymaker to a local section public policy symposium

Help is available! Committees do not work alone: the ACS Office of Public Affairs provides materials and helpful suggestions. In addition, the ACS Committee on Chemistry and Public Affairs and the ACS Committee on Public Relations and Communications provide resources and guidance.

To apply for a grant, please submit the following information to Brad Smith at b_smith@acs.org:
- Committee type; Committee chair name; Committee chair contact information; Local section; Local section treasurer; Local section treasurer address (for grant funds); Planned program activity (100 words or less).

Learn more about Government Affairs Committees at www.acs.org/gac and Public Relations Committees at www.acs.org/chemistryambassadors.

For more information, please contact Brad Smith at b_smith@acs.org.

Mark Your Calendars for MARM 2010

The 41st ACS Middle Atlantic Regional Meeting (MARM 2010) 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, Delaware. Many exciting and informative symposia and events are being planned.

Little program information has been finalized, but the meeting’s web site, www.marmacs.org, has already been set.

For more information, contact Dr. Martha Hollomon, at the email address: marthahollomon@comcast.net.

Visit CSW on the web at: www.csw-acs.org