

# THE OCTAGON



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Lehigh Valley Section of the American Chemical Society

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*Next Meeting*  
**833<sup>rd</sup> Meeting of the LVACS**  
**Tuesday, April 24, 2012**  
**East Stroudsburg University**

## **Undergraduate Awards Night and Undergraduate Research Poster Session**

**Location:** East Stroudsburg University

**Reception and Poster Session:** 5:00-6:00 PM 1<sup>st</sup> floor lobby Hoeffner Science and Technology Center

**Dinner:** 6:15 pm -3<sup>rd</sup> Floor Atrium Hoeffner Science and Technology Center

**Evening Presentation:** 7:15 PM - 107 Hoeffner Science and Technology Center

**Menu:** Reception, Imported and Domestic sliced cheese and fresh sliced fruit tray, Assorted Crackers and Flatbreads, Vegetable Crudités served with Ranch Dip, Iced Tea and Ice Water Station  
Dinner Buffet, Crisp Mixed Greens with Cucumbers, Tomatoes, and Red Onion Served with Choice of Two Dressings, Rustic dinner rolls and Focaccia Breads with butter roses, Chicken Marsala, Three Cheese Ravioli with a Light Blush Sauce,

Vegetable Medley with Broccoli, Carrots, Baby Corn, Red Peppers and Cauliflower, Basil Whipped Potatoes.

Dessert, Marble Cheesecake with Raspberry Coulis, Old Fashioned Homemade Granny Apple Pie Topped with Cinnamon Whip Cream Frizzled with Caramel Sauce, Full Coffee Station, Iced Tea and Ice Water

**Cost:** members \$28, students & retirees \$15 (Awardees will be guests of the section.)

**Reservations:** Michelle Jones-Wilson by 4 PM Friday April 20. Please confirm attendance at dinner if you are participating in the poster session. Please include your name, affiliation. Registration is by email [mjwilson@po-box.esu.edu](mailto:mjwilson@po-box.esu.edu) Please put LVACS Registration in the subject line. (Note: email registrations will be confirmed by a return email.)

**Directions:** Directions to ESU can be found on the web at <http://www4.esu.edu/today/map/index.cfm>. A campus map is available at the same location. Parking is Available behind the Science and Technology Center which is located on Normal and Ransberry Streets. If parking before 5 PM please print the first page of this Octagon and place it in your windshield to avoid ticketing.

**Webinar Attendance:** If you can't make the drive to ESU you can still attend the meeting "virtually". A webinar connection will be available for the business meeting and presentation. Further information will be posted on the information the week prior to the event as well as provided via email.

## **Program**

### **Speaker: Dr. Paul Bouis**

Paul Andre Bouis was born in Nice, France and immigrated to the United States when he was six years old. The son of a Chemist /Perfumer he was destined to a life in Chemistry. Currently Paul is retired but still involved in the world of Chemistry as chair of the Reagent Chemicals Committee for the American Chemical Society. He is also part of the Lehigh University emeritus program. Last year he was selected as a Fellow of the ACS. Paul holds a BS in Chemistry from the Virginia Military Institute and a Ph.D in Physical Organic Chemistry from the University of Tennessee. Paul has authored chapters on radioactivity, chromatography and other Analytical Chemistry Techniques. He is the editor of the Environmental Engineers Handbook. He spent the majority of his career as an Industrial Chemist during which time he worked in Organic Synthesis, Rare Earth analysis and purification, Analytical method development for sample prep and the purification of Biomolecules. He holds numerous patents in these fields and has given seminars and presentations at regional, national and international venues. Paul is a past Chair of the Lehigh Valley ACS.

**Title: "A life of Chemistry: Was it justified?"**

### ***Undergraduate Research Poster Session Sponsored by The Lehigh Valley Section of The American Chemical Society***

**Tuesday April 24, 2011, 5:00-6:15 PM  
East Stroudsburg University**

### **Who may participate?**

Undergraduates attending a college or university within the Lehigh Valley section of the ACS.

Research may have been done at the student's home institution with a chemistry or chemical engineering faculty member or during a summer research experience elsewhere.

### **To participate**

Students wishing to present their work must submit an abstract by April 13, 2012, as a Microsoft Word attachment to [mjwilson@po-box.esu.edu](mailto:mjwilson@po-box.esu.edu). Abstracts must be submitted by the student; submissions from the faculty advisor will not be accepted. Please indicate "LVACS Poster Session" in the subject line of your email header. Early submission is encouraged.

### **Abstract format**

Times New Roman font - 12 point, single spaced  
TITLE (all capitals)

Authors' names, authors' institutions and addresses  
Abstract of research, 150 words maximum

### **Travel Award**

One poster session participant will be chosen to receive a \$250 award to support travel to present research at a national or regional ACS or AIChE meeting.

### **Other requirements and information**

- The poster session is held before the dinner meeting and our annual student awards night.
- Poster presenters must provide their own pins and poster board. Easels will be provided for displaying the posters.
- Abstracts will be acknowledged by an email message that will include details about location, set-up time, and the travel award.
- If you do not get a response within two days of abstract submission contact Michelle Jones-Wilson, or have other questions, [mjwilson@po-box.esu.edu](mailto:mjwilson@po-box.esu.edu).
- East Stroudsburg University encourages persons with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation, have any questions regarding physical accessibility or would like more information, contact Michelle Jones-Wilson at [mjwilson@po-box.esu.edu](mailto:mjwilson@po-box.esu.edu).

**HOLD THE DATE !**



The Lehigh Valley Section of the American Chemical Society invites you to....

*Chemical Careers!*  
**A Night at SteelStacks**

**ARTSQUEST**

**ArtsQuest Center at SteelStacks**

**Fowler Blast Furnace Room and Loft**

**101 Founders Way, Bethlehem, PA**

**Tuesday, May 22<sup>nd</sup> 2012**

**5:00 PM – 9:00 PM**

**Program**

Reception

5:00 PM – 6:30 PM

Appetizers / cash bar

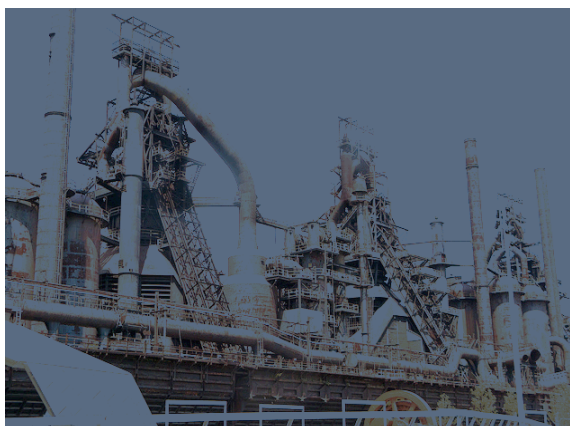
⇒ Networking

⇒ Entertainment by Lehigh Valley Charter High School for the Performing Arts

Meeting

6:45 PM – 9:00 PM

Dessert / Coffee



**For More Information  
Contact Nigel Sanders,  
Past Chair, 610-861-3457**

⇒ Panel Discussion on New Opportunities in Chemically-related Employment Opportunities (Panelists from industry, investment/venture and government)

## ***LV-ACS Scholarship for Organic Chemistry***

The Lehigh Valley Section of the American Chemical Society will award its annual Scholarship for Organic Chemistry this May. To be eligible, students should be below the junior level, currently enrolled in organic chemistry at an institution in the section, and a chemistry, biochemistry, or chemical engineering major. The competition entails taking the ACS Organic Chemistry Examination (45%), a letter of recommendation from the student's organic chemistry professor (10%), and an essay on a topic in organic chemistry (45%). The value of the scholarship is \$1000. Additionally, the top essay will receive \$100. Details about the exam, letter, and essay follow below. Students should indicate their interest in the scholarship in advance of 27 April 2012 to Dr John Freeman, [jfreeman@po-box.esu.edu](mailto:jfreeman@po-box.esu.edu).

**ACS Organic Chemistry Examination:** The exam will be administered on Saturday, 28 April 2012, at Moravian College, Bethlehem, PA from 9:00-10:30 AM. Students should report to the entry foyer of Collier Hall of Science by For directions see <http://www.moravian.edu/default.aspx?pageid=17> Juice and bagels will be available at 8:45 AM.

**Letter of Recommendation:** Professors writing a letter of recommendation on behalf of a student who is applying for the Lehigh Valley ACS Scholarship should speak to the student's skills in lecture and laboratory in Organic Chemistry I and Organic Chemistry II. Please provide the course grade for Organic Chemistry I and comment on performance on written exams, proficiency in organic lab, and participation in recitations, problem sessions or course-related group work. If possible, address the student's quantitative skills by commenting on her or his performance in quantitative analysis or its local equivalent. The letter of recommendation must be submitted in a sealed plain envelope and signed by the professor over the seal. The student will be required to bring the sealed letter to the ACS Organic Chemistry Exam at Moravian College on 28 April 2012.

**Essays:** The student should choose a molecule, a group of molecules, or a process in organic chemistry

to write about. The essay should be written at a level to interest and educate a general chemist who has completed sophomore-level organic chemistry. Synthesis, mechanism and structural elucidation should be covered for the chosen molecule (or representative examples of a chosen group). If a process is chosen, the physical and chemical basis for its success should be explained. Judicious use of structures is expected. The essay should address the impact of the molecule or process on society and the student's personal interest in it. The essay should run from 1600 to no more than 1800 words in Times New Roman 12 point font with one-inch margins on all sides. Each page should have a header with the student's last name, brief essay title and page number. An additional page with references must be included. References should follow the style of *The Journal of the American Chemical Society* (an article from a recent issue can serve as a model). The winning essay will be published on the section website with a link in the *Octagon*.

The essay will be rated on:

- 30% - Appropriate depth of coverage of the molecule(s) or process.
- 30% - Appropriate depth of coverage on the impact on society and student's interest.
- 20% - Ease of reading, including grammar, spelling, and logical flow of the material.
- 10% - appropriate use of structures and figures.
- 10% - Appropriate use of references.
- 5% - Penalty for failure to adhere to the formatting rules provided.

## ***Local Chemist Recognized***

**Women Chemists Committee announces inaugural Rising Star Award and winners - Muhlenberg College's Christine Ingersoll is recognized.**

The Women Chemists Committee (WCC) of the American Chemical Society (ACS) has established the WCC Rising Star Award, to recognize exceptional mid-career women chemists across all areas of chemistry on a national level. To be given annually,

beginning in 2012, this new award is also intended to help promote retention of women in science. The inaugural winners are:

2012 WCC Rising Star Award Winners (alphabetical by state)

Dr. Annaliese K. Franz of Davis, Calif., University of California, Davis

Dr. Sarah E. Reisman of San Marino, Calif., California Institute of Technology

Dr. Malika Jeffries-El of Ames, Iowa, Iowa State University

Dr. Lisa Regalla of Minneapolis, Minn., DragonflyTV SciGirls

Dr. Gretchen Schroeder of Ewing, N.J., Bristol-Myers Squibb

Dr. Laurie E. Breyfogle of Milford, Ohio, Procter & Gamble

Dr. Christine M. Ingersoll of Allentown, Pa., Muhlenberg College

Dr. Karin Balss of Spring House, Pa., Johnson & Johnson

Dr. Megan Bourg Sassin of Fredericksburg, Va., Naval Research Laboratory

Dr. Julia Laskin of Richland, Wash., Pacific Northwest National Laboratory

Recent data show that in 2008, women earned 50 percent of Bachelor's degrees and 36 percent of Doctoral degrees in chemistry. However, the Commerce Department's Economics & Statistics Administration recently reported that although women make up 48 percent of the total U.S. workforce, they represent only 24 percent of science, technology, engineering, and mathematics (STEM) jobholders, with only 26 percent of women with STEM degrees in STEM jobs. The research also shows that women at the middle level of their science and technology based careers are leaving the chemical enterprise in large numbers, creating a "leaky pipeline." According to "Climbing the Technical Ladder: Obstacles and Solutions for Mid-Level Women in Technology," a significant

number (29 percent) of women are planning to leave their mid-level positions at technology companies in the next twelve months to pursue other options.

"We may be making progress in terms of encouraging women into STEM fields, with higher numbers achieving both Bachelors and Doctoral degrees," said Nancy Jackson, Ph.D., President of the American Chemical Society, "but the actual number of women in mid-career positions continues to decline. I am pleased to see the WCC address this important issue and the WCC Rising Star Award gives us another opportunity to highlight successful women chemists and help promote retention in the chemical enterprise."

As part of the 85th Anniversary celebration for the WCC next year, the inaugural winners will be acknowledged during a symposium to highlight their work on Monday, March 26, 2012, at the 243rd national meeting of the American Chemical Society meeting in San Diego.

The Women Chemists Committee (WCC) serves the membership of the American Chemical Society with its mission to be leaders in attracting, retaining, developing, promoting, and advocating for women in the chemical sciences.



### ***MARM 2012 -- Save the Date & Call for Abstracts***

**What:** Middle Atlantic Regional Meeting of the American Chemical Society (MARM 2012)

**When:** May 31 -- June 2, 2012

**Where:** University of Maryland – Baltimore County, Baltimore, MD

**You are cordially invited to participate in MARM 2012.**

Visit the website at: <http://www.marmacs.org/2012>

Registration and Abstract Submission are now both open at the website!

The 43rd Middle Atlantic Regional Meeting (MARM 2012) of the American Chemical Society will be held from Thursday, May 31 to Saturday, June 2, 2012. Hosted by the Maryland Local Section, the meeting will take place at the University of Maryland Baltimore County in Baltimore, MD. Many exciting and informative symposia and events are being planned.

- Meet your colleagues
- Renew, Reward, Re-energize
- Networking Opportunities
- Top speakers
- Accelerate your career
- Make sure you attend
- Catalyst for success
- 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**: <http://www.marmacs.org/2012/program.html>.

Symposia will focus on: • Analytical, Biological, Physical, Organic, and Inorganic Chemistry • Chemistry of Renewable Energy • Environmental Chemistry of Water, Air, and Soil • Food and Sensory Chemistry • Nanotechnology: Materials and Environmental, Health, and Safety • Advances in Separations and Characterization of Biologicals • Fluorescent Molecules for Imaging and Measurements • Metabolic Engineering of Microorganisms.

Meeting Highlights will include: • A presentation by Remsen Awardee Dr. Daniel G. Nocera • Workshops on Career Development • Chemical Entrepreneurship • Analytical Instrumentation Methods • Education Events-Vendor Exhibitions, • WCC Luncheon • Student member events • YCC events.

The deadline for submitting abstracts to participate in sessions is April 15.

Organizing Committee:

General Chairs: Paul Smith (pjsmith@umbc.edu),  
Stephanie Watson (stephanie.watson@nist.gov)

Program Chairs: Brad Arnold (barnold@umbc.edu),  
Ken Cole, (kenneth.cole@nist.gov)

Treasurer: Angela Sherman (ASherman@ndm.edu)

Exhibits: Takashi Tsukamoto (ttsukamoto@jhmi.edu)

***Short Course - High Polymer Latexes***

Professor Mohamed El-Aasser, Professor of Chemical Engineering and Vice President of International Affairs at Lehigh University is the organizer of our 43rd annual one-week short course, "Advances in Emulsion Polymerization and Latex Technology", to be held Lehigh University during the week of June 11 – 15, 2012. This course is designed for engineers, chemists, other scientists and managers who are actively involved in emulsion work and for those who wish to develop expertise in the area.

The course is an in-depth study of the synthesis and properties of high polymer latexes. The subject matter includes a balance of theory and applications as well as a balance between chemical and physical problems. Lectures, given by leading academic and industrial workers, begin with introductory material and review, and progress through recent research results. The course fee is \$1,550.00 for the entire week, but there are certain discounts that are available.

Further information can be obtained from:

Dr. Eric Daniels

Emulsion Polymers Institute, Lehigh University

111 Research Drive, Bethlehem, PA 18015

Phone: (610) 758-3602 FAX: (610) 758-5880

E-mail: [Eric.Daniels@lehigh.edu](mailto:Eric.Daniels@lehigh.edu)

The course website may be found at:  
[http://fp2.cc.lehigh.edu/inemuls/epi/Lehigh\\_sc.htm](http://fp2.cc.lehigh.edu/inemuls/epi/Lehigh_sc.htm)

## *Submissions to the Octagon*

LVACS members, we want to know about what you do! Please submit pieces of interest to the chemistry community for publication in the Octagon. Articles about chemistry or science in the Lehigh Valley are always welcome. Let us know about upcoming events, educational opportunities or job openings.

The Octagon is published eight times per academic year, September through May. Each issue generally arrives three weeks before a section meeting. Thus the deadline for submissions is approximately one week earlier. Please email the editor at [lvacs@verizon.net](mailto:lvacs@verizon.net) for specific questions about deadlines for any issue. Email submissions to [lvacs@verizon.net](mailto:lvacs@verizon.net)

### **A note about formatting:**

Please submit text as simple .txt files, or you may paste the text into an email. If you use later versions of MS word please do not submit documents as .docx files. I cannot always read all content in .docx formatted files. It would be best to use the "save as" option, generally found under the file menu, to save the document as .txt. Also images embedded (pasted) in MS word (particularly later versions) are problematic to extract and put in the newsletter while retaining good image quality. Whenever possible, please submit images in a standard format such as .jpg, .jpeg, .gif, .tiff or .bmp as individual files, rather than embedded within a document. If the placement of images is critical you could submit two versions (one embedded so that I can see where you would like images placed) and the other as separate files so that I may maintain figure resolution.

## *LVACS Officers - 2010*

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(610) 861-3457 [nigel.sanders@mineralstech.com](mailto:nigel.sanders@mineralstech.com)

**Chair Elect:** Tara Baney  
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