

# THE OCTAGON



Volume 94, No. 4, June 2011

Lehigh Valley Section of the American Chemical Society

## *In This Issue:*

<b>Iron Pigs and LVACS Announcement</b>	<b>1</b>	<b>Submissions to the Octagon</b>	<b>3</b>
<b>Meeting Minutes</b>	<b>1-2</b>	<b>2011 LVACS Officers</b>	<b>3</b>
<b>IYC 2011 "Water"</b>	<b>2</b>	<b>LVACS on Facebook</b>	<b>3</b>
		<b>News from National ACS</b>	<b>4-5</b>

## *LVACS and the IronPigs*



### *Allentown IronPigs vs. the Indianapolis Indians Play Ball! Wednesday, June 22*

The third annual LVACS at the Allentown IronPigs event will be held Wednesday, June 22; 7:05 start time - gates open at 6:05pm

Perfect for groups of 24 or more, this spacious tiered picnic area located down the left field line, provides a fun atmosphere for everyone. The buffet features a ballpark style menu and tables seat 8 guests comfortably.

Cost: \$15 per person (Children 2 and under are FREE)

Includes game ticket and the following:

\* Two hour all-you-can-eat buffet

Entrees: Hamburgers, Hot Dogs, BBQ Chicken, Baked Ziti,

Accompaniments: Lettuce, Tomatoes, Onion,

American Cheese, Mustard and Ketchup

Sides: Corn on the cob, Potato Salad, Baked Beans, Chips

Dessert: Watermelon Wedges, Cookies

Beverages: Coca-Cola, Diet Coke, Sprite, Nestea Iced Tea, Minute Maid Lemonade, Dr. Pepper

\* Unlimited soft drinks through the middle of the 8th inning

\* In-game group recognition on the IronPigs state-of-the-art videoboard

\* "Pig in a Poke" group raffle. The IronPigs will be giving away a prize pack exclusively to a group ticket holder every game!

Contact Chester, Lindsey, or Bill for tickets. Tickets are limited to first 100 requests! We have sold out both years, so don't wait till the last minute!

For more details, [ironpigsbaseball.com](http://ironpigsbaseball.com)

## *Meeting Minutes*

Thanks to Moravian for hosting April's LVACS meeting. Thanks to all student presenters during the undergraduate poster session. Great thanks to our Speaker Joseph Francisco for his talk *From Earth's Atmosphere to Planetary Engineering of Mars: An Adventure in Chemistry*. His talk was very enlightening about the molecular mechanisms of ozone depletion and development of accurate global climate models.

50 and 60 year members of the American Chemical Society were recognized. Congrats to your LVACS Senior Student honorees.

Thanks to Chester Crane for setting up May's ACS meeting at the Allentown Brew Works  
Come out to see the Iron Pigs June 22

Don't forget to "LIKE" us on Facebook. Search for "Lehigh Valley Section of the American Chemical Society"

Respectfully submitted,  
Kelly Caflin, Secretary LVACS

### ***IYC 2011 - Sustainable Chemistry - Water***



"Water, a chemical solution" is a set of four simple experiments being carried out worldwide by students from kindergarten through high school. According to the IYC 2011 web site "During the International Year of Chemistry 2011 (IYC 2011), school students around the world are invited to explore one of Earth's most critical resources, water. The results of their investigations will contribute to a Global Experiment, which will possibly become the biggest chemistry experiment ever" (<http://water.chemistry2011.org/web/iyc>).

The experiment, formally launched in South Africa last March, already has more than 200 submitted results. Slovakia leads the world with the most participating schools, while the Facoltà di Agraria di Milano, Italy has the greatest number of classes presenting results for a single institution: 21. How fast is this going? Prof. Hunt at Highcliff School in Christchurch, UK was the first to report on acidity (22/03/2011), Prof. Isaac of Ottos Comprehensive at St. Johns, Antigua followed shortly with No dirt, no germs (23/03/2011), Prof. Nikolova with the National Aprilov High School of Gabrovo, Bulgaria was reporting on the solar still challenge the next day (24/03/2011), same as the Docyard Museum studying salinity, working with Liberta Primary School of Liberta, Antigua (24/03/2011).

As classes wind down at our local college campuses, it is the perfect time to contribute to this celebration.

Make contact with a school teacher or an administrator to share this interesting news, and to invite more schools and more children to participate. The experiments are simple and enlightening with well crafted handouts available for teachers and students. Teachers may want to include the experiment in their Fall curriculum (it still will be 2011!), so hearing about it now will allow for preparations to be made over the summer. Going to a conference this spring? MARM? MolecVUE? Talk to your fellow attendees about the experiment; maybe they know a teacher who could be interested. Busy at work? Consider printing out a poster from the IYC 2011 web site and posting it in the coffee room. Make a spare and give it to your kids, or your neighbors kids, to take to school.

Nancy Blount of the ACS Office of Public Affairs stated, "The call to action to our members is to get the word of the global experiment to teachers in your community. Send them the link to the website and, if possible, offer your services if a teacher needs help in carrying out the activities." This and more valuable information can be found in Rudy Baum's editorial in C&E News, February 21, 2011 Volume 89, Number 8 p. 3 or online at <http://pubs.acs.org/subscribe/journals/cen/89/i08/html/8908editor.html>.

Thanks for reading!

Submitted by Lorena Tribe

LVACS Coordinator for the International Year of Chemistry



Members enjoying the night at the Allentown Brewworks in May. Photo submitted by Carol Libby

## *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*

**Chair:** Nigel Sanders  
Specialty Minerals Inc.  
9 Highland Avenue, Bethlehem, PA 18017  
(610) 861-3457 [nigel.sanders@mineralstech.com](mailto:nigel.sanders@mineralstech.com)

**Immediate Past Chair:** William Miles  
Lafayette College, Easton, PA  
(610) 330-5221 [milesw@lafayette.edu](mailto:milesw@lafayette.edu)

**Chair Elect:** Lorena Tribe  
218 Luerssen Building  
Penn State - Berks  
Tulpehocken Road, P.O. Box 7009  
Reading, PA 19610  
[lut1@psu.edu](mailto:lut1@psu.edu)

**Treasurer:** Al Martin  
Moravian College  
Bethlehem, PA 18018  
[martin@cs.moravian.edu](mailto:martin@cs.moravian.edu)

**Secretary:** Kelly Caflin  
PO Box 7 Portland, PA 18351-0007  
[kelley.caflin@us.army.mil](mailto:kelley.caflin@us.army.mil)

**Councilor:** Carol Baker Libby  
Moravian College,  
Bethlehem, PA 18018  
(610) 861-1629 [cblibby@cs.moravian.edu](mailto:cblibby@cs.moravian.edu)

**Councilor:** Pamela D. Kistler  
Cedar Crest College, Allentown, PA 18104  
[pdkistle@cedarcrest.edu](mailto:pdkistle@cedarcrest.edu)  
(610) 437-4471 x 3508

**Alt. Councilor:**  
T. Michelle Jones-Wilson  
East Stroudsburg University  
East Stroudsburg, PA 18301  
(570) 422-3703 [mjwilson@po-box.esu.edu](mailto:mjwilson@po-box.esu.edu)

**Alt. Councilor:** Roger Egolf  
Penn State Lehigh Valley Campus  
Fogelsville, PA 18051  
(610) 285-5110 [rae4@psu.edu](mailto:rae4@psu.edu)

**Octagon Editor & Webmaster:**  
T. Michelle Jones-Wilson (see above)  
[lvacs@ptd.net](mailto:lvacs@ptd.net)

### Have you seen Molecule of the Week?

Molecule of the Week has been a popular feature on ACS.org since 2001. Many molecules are suggested by chemists and chemistry enthusiasts. Every structure is reviewed by a scientist and displayed in 3-D and flat images with a brief description.

Each week's molecule also links to a sample record from the CAS REGISTRY, which is searched using SciFinder. Each record displays the registry number, index name and synonyms, bibliographic information, and more.

Subscribe to the RSS feed to be notified automatically when Molecule of the Week updates.

<http://feeds.feedburner.com/MoleculeOfTheWeek>

Get the iPhone app

<http://itunes.apple.com/app/acs-motw/id365892970?mt=8>

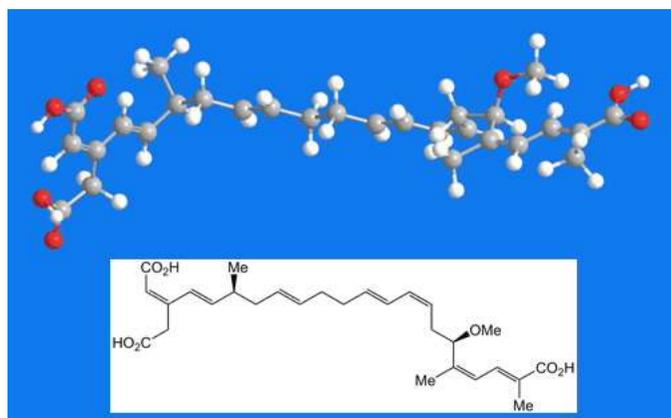
Send in a molecule suggestion!

[motw@acs.org](mailto:motw@acs.org)

### Molecule of the Week - May 30, 2011

I'm more poisonous than cyanide.

What molecule am I?



Bongkreic (or bongkrek) acid, produced in fermented coconut by a pathovar of the bacterium *Burkholderia gladioli*, is a more potent respiratory toxin than cyanide. Its first total synthesis was reported by E. J. Corey and A. Tramontano in 1984, and M. Shindo and co-workers described improved

syntheses in 2004 and 2009. Most recently, S. V. Ley used three stereospecific palladium cross-coupling reactions to accomplish an even better synthesis.

### The 2010 ACS Annual Report is Available

The 2010 American Chemical Society Annual Report is now available. <http://acswebcontent.acs.org/annualreport/> The report stresses that the Society remains financially healthy and committed to providing its more than 163,000 members with the best programs, products and services to further their careers and advance their science.

In addition to financial information, the 2010 ACS annual report features ACS-by-the-Numbers, Donor and Award Sponsor lists and the Officers' Message.

In their Officers' Message, ACS Board Chair Bonnie A. Charpentier, 2010 ACS President Joseph S. Francisco and ACS Executive Director & CEO Madeleine Jacobs concluded, "In the years ahead, we will continue to adapt and grow. We will continue to mirror our members' aspirations. Like them, we will continue to collaborate, innovate and make a difference in the world."

### Access Cutting-Edge Research from the Spring 2011 ACS National Meeting

More than 500 presentations recorded during the Spring 2011 ACS National Meeting in Anaheim, CA, are now available at [www.acs.org/meetingcontent](http://www.acs.org/meetingcontent). These presentations feature PowerPoint slides synched with audio and permit you to jump directly from slide to slide.

Reflecting the breadth of science available at ACS national meetings — including this meeting's thematic program of "Chemistry of Natural Resources" — the recorded sessions include:

- Charles Lathrop Parsons Award: Symposium in Honor of Michael E. Strem
- Click Chemistry Approaches in Carbohydrate Chemistry

- Frontier Energy Research
- Functional Materials from Natural Resources
- Natural Products and Drug Discovery
- Nuclear Energy for Today and Tomorrow
- Solar Power as an Alternative Energy Source

Visit [www.acs.org/meetingcontent](http://www.acs.org/meetingcontent)

### **Organic Microelectronics & Optoelectronics Workshop Focuses on Cutting-Edge Science**

Again this summer, the 7th Annual Organic Microelectronics and Optoelectronics Workshop will bring together a broad spectrum of chemists, materials scientists, physicists, and engineers from industry and academia. The workshop, sponsored by ACS, MRS, and IEEE, will be held July 18-20, 2011, in San Francisco, CA at the Westin San Francisco Market Street.

Visit [organicmicroelectronics.org](http://organicmicroelectronics.org) to review abstracts from invited speakers who are actively involved in developing products using organic components and to register by July 1 to take advantage of early registration rates. Call for Nominations: National Chemical Technician Award

### **The call for nominations for the 2012 National Chemical Technician Award (NCTA) is now open.**

Nominees must be currently employed as a chemical technician, and must have worked as a chemical technician for a minimum of five years. Nominees do not need to be an ACS member. The award will consist of a trip for the winner and a guest to the Spring American Chemical Society National Meeting; March 25 - 29, 2012, San Diego, CA. Additionally, the awardee will receive a \$1000.00 honorarium at dinner held in their honor in San Diego. Nomination packets must be received by the Committee on Technician Affairs (CTA), no later than September 30, 2011.

### **Check out 365 Chemistry for Life**

Part of the IYC 2011 - Chemistry 365 provides a unique topic each day. From excerpts on corrections to the Debye theory (June 1) to the chemistry of self tanners (June 2). The variety of interesting information is amazing! Visit <http://iyc2011.acs.org/>



Registration begins May 31, 2011  
Register by July 13 for best rates and selections!