



ALI "QUOTES"

Volume 18, Issue 2

THE NEWSLETTER OF THE PRINCETON ACS

March/April 2008

Website <http://www.princeton.edu/~pacs>

Monthly Dinner Meeting

Wednesday, March 26, 2008

Our guest speaker will be

Professor Stefan Bernhard
Dept. of Chemistry, Princeton University

"The Chemistry of Chocolate"

Time: 6:00 PM

Lecture: Bowen Auditorium, Room 222

Dinner: Bowen Atrium (following lecture)

Abstract

What is it about chocolate? No other food rivals its ability to tantalize and tempt us, and it is said that chocolate is a surrogate for love, a gift provided to us by the Aztec gods. This lecture will initially explore the procedures that transform the fruits of the cocoa tree (*Theobroma cacao* L.) to the chocolate products available today. A great deal of science and engineering is necessary to process the cocoa beans to control the texture and flavor of the final product. The macroscopic properties of the complex mixture that is chocolate will be related to the molecular structure of its ingredients. Later we will explore the active components, such as theobromine, that are responsible for the stimulating properties of cocoa products. Are there negative health effects related to chocolate? Is there really "death by chocolate"?

Biography

Dr. Bernhard received a Diploma in Chemistry in 1993 and Ph.D. in Chemistry in 1996 from the University of Fribourg, Switzerland. Following postdoctoral positions at the Los Alamos National Laboratory and Cornell University, he joined Princeton University as Assistant Professor in 2002. He has taught a Freshman seminar on "The

Chemistry of Chocolate" since 2006. His research interests are the synthesis of novel supramolecular systems, polymers and extended structures for materials applications. See his website for further information. (www.princeton.edu/~iridium).

Reservations:

The meeting will be held in Bowen Auditorium, room 222, Princeton University. The seminar is at 6 PM followed immediately by dinner in Bowen Atrium. Bowen Hall is located on Prospect Street, between Olden St. and Fitzrandolph St. (see princeton.edu for map). The seminar is free and open to the public. Reservations are required for dinner, which is \$25 for full members, \$15 for retirees and \$10 for students. All reservations will be billed, for the section pays on the number of reservations, not the number of attendees. Please contact Denise D'Auria at (609) 258-5202 or denised@princeton.edu by Thursday, March 20 to make or cancel reservations.



Monthly Dinner Meeting

Joint Meeting with the Trenton ACS Section

Tuesday, April 15, 2008

The guest speaker will be

Madeleine Jacobs,
CEO of the American Chemical Society,

Rider University,
Fireside Lounge
Bart Ludeke Student Center

Dinner 6:00 PM

Lecture: Immediately following lecture

Biography

Madeleine Jacobs received a Bachelor of Science degree in chemistry at George Washington University in 1968. She completed course work for a Master's Degree in organic chemistry at the University of Maryland in 1969. Jacobs received an honorary Doctor of Science from George Washington University in 2003.

Prior to her selection by the ACS Board of Directors as Executive Director and CEO, Jacobs served for eight and a half years as Editor-in-Chief of Chemical & Engineering News magazine, the weekly newsmagazine published by ACS, and two years as Managing Editor. She has held other senior management positions in a wide variety of scientific and educational organizations including the National Institutes of Health, the National Institute of Standards and Technology, and the Smithsonian Institution, where she served as the director of Public Affairs at the world's largest museum complex.

Major honors include the Smithsonian Institution Secretary's Gold Medal (1993), the New York Academy of Sciences Women History Month Award (2001), the 75th Canadian Society for Chemistry Conference Lecturer (2002), the ACS Award for Encouraging Women into Careers in the Chemical Sciences (2003), and the American Crystallographic Association Public Service Award (2004). A much-honored science journalist, she has also received more than three dozen awards for outstanding science writing from national organizations.

Reservations

Dinner buffet is \$18.00. The fee is collected at the door. Reservations are required for dinner only; all are welcome to come for the presentation. Please contact Prof. Bruce Burnham at bburnham@rider.edu or 609-896-5207, or Dr. William Carroll at mcarroll@rider.edu or 609-896-0392 y April 8 to make or cancel reservations.

Directions to Rider University

From Route 1 take I-95 South (I-295 North) to exit 7A. Follow Route 206 South for 1/4 mile. Pass the main entrance and enter through the South Entrance. Go through the guard gate and park in the lot on your right. See (<http://www.rider.edu>) for map.



Earth Day is April 22nd

The theme of Earth Day 2008 is "Streaming Chemistry". This year, we are planning to have a table at the Mercer County Improvement Authority's (MCIA) Earth Day event on Saturday April 19, 10 AM - 2 PM. It will be held at the ice skating rink at Mercer County Park. Volunteers are needed to hand out Chemists Celebrate Earth Day (CCED) materials and talk about the good things chemists have been doing

and continue to do for our environment. If you are interested in helping out or learning more please contact Schuyler Antane, Earth Day Chair, at antanes@wyeth.com.

The 2008 Community Event for CCED is "Adopt-A-Stream". In an "Adopt-A-Stream" program, groups register with the "environmental protection" office of their state or local government to clean-up and keep clean a section of a stream or aquifer. In addition to clean-up efforts, volunteers may be asked to monitor water quality and/or pollution sources. Responsibilities vary slightly from one municipality to the next. Schuyler is currently investigating ways in which the section might participate in this program. If you have ideas, or would be interested in helping out please contact him at antanes@wyeth.com.



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| Outreach: Bill Barnard Zev4US@yahoo.com | Earth Day: Schuyler Antane antanes@wyeth.com |

🕒 CALENDAR OF EVENTS 🕒

Tuesday, April 15: Joint Meeting with the Trenton ACS Section. Our guest speaker will be Madeleine Jacobs, CEO of the American Chemical Society. The meeting will be held at Rider University, Fireside Lounge at 6:00 PM.

May 1: The NJACS local section is sponsoring a symposium on **Biomaterials in Medicine and Personal Care**. The NJACS Symposium will be held on May 1, 2008 from 1:00-6:30 p.m. in Traves Hall at the Douglass Campus Center, Rutgers University, New Brunswick, NJ. Further details can be found at <http://njacs.org/ptg.html>.

Wednesday, May 21: Princeton ACS dinner meeting. Our speaker will be Dr. Thomas Kreutz, Princeton University, Princeton Environmental Institute. Meeting location TBD.

Wednesday, June 4: Princeton ACS dinner meeting and summer barbecue. Our speaker will be Dr. Edward Vicenzi

September 15-16: TRI/Princeton will be hosting the **Third International Conference on Applied Hair Science** Princeton, NJ. *Call for Papers:* TRI/Princeton requests submissions on hair science and its applications for oral presentations, technical papers, and poster presentations. Several topics will be highlighted at the Third International Conference on Applied Hair Science, including chemical, physical, and surface properties of hair; measurement of consumer-desired attributes such as luster, body, and smoothness; fundamental mechanisms of hair damage and its prevention; ethnic hair studies; and product efficacy, as well as numerous others. Abstracts for oral and poster presentations must be submitted by March 2nd, 2008. Interested applicants should email their abstracts to the Conference Organizer at info@triprinceton.org or complete the Abstract Submission Form on the conference website (<http://www.triprinceton.org/hair2008>).

The PACS Executive Committee will meet on April 18, July 18 and October 17 at Wyeth Research, Monmouth Junction from 11:30AM – 1:30PM. Interested Princeton ACS members are welcome to attend. Contact Lynne Greenblatt greenbl@wyeth.com to make a reservation.



Competition Takes Place

Chemagination, sponsored by the Princeton and Trenton Sections of the American Chemical Society, was held at Princeton University on Saturday, February 23, 2008.



Chemagination is a contest in which high school students are asked to imagine that they are living 25 years in the future and have been invited to write an article for ChemMatters, a magazine for high school students that focuses on the role of chemistry in everyday life. The subject of the article is: “Describe a recent breakthrough or innovation in chemistry and/or its applications that has improved the quality of people’s lives today.” The article is written to fit in one of four categories (either Alternative Energy Sources, Environment, Medicine/Health, or New Materials). Student teams are judged on the quality of their article and knowledge of their topic, demonstrated in an interview by judges.

Thirteen teams of 2-3 students participated in the event. Our judges, Dr. Barbara Ameer, Ms Tikva Carrick, Mr. James DeNoble and Dr. Randy Weintraub had the difficult task of selecting the winners among a strong field of entries. Prizes were awarded for first and second place in each category. First place team members received \$100 savings bonds and second place, \$50 bonds. The first place winners will go on to compete in the regional contest to be held Sunday, May 17 at the ACS Mid-Atlantic Regional Meeting (MARM 2008), Queensborough Community College, Bayside, Queens, NY.

While the judges tallied their scores, students and guests attended a demonstration on the “Chemistry of Magic” ‘performed’ by Dr. Kathryn Wagner and her able magician’s assistants, chemistry majors Trevor Rudge and Shengyang Wu.

Congratulations to the winners and thank you to everyone who helped to make this event a success. A special thank you goes out to faculty advisors Carol Peabody from Delaware Valley Regional HS, and Karen Galley and Cindy Jaworsky from West Windsor-Plainsboro HS South.

First Place Winners:

“Fusion of He-3”, Shawn Carrick, Samir Koppolu and Dan Messina, *West Windsor-Plainsboro High School South*, Alternate Energy Category

“Self-Correcting Contact Lenses”, Neeli Mishra, Anna Lee Scharfstein and Athena Xie, *West Windsor-Plainsboro High School South*, Medicine/Healthcare Category

“Oh, What Tangled Prosthetic Limbs We Weave”, Samantha Lee, Urjita Sudula and Brynja Winnan, *West Windsor-Plainsboro High School South* New Material Category

“Kelp Help”, David Hao, Piyush Poddar and Alp Yurter, *West Windsor-Plainsboro High School South*, Environment Category

Second Place Winners:

“Poop Power”, Chris Matthews and Natalie Tucker, *West Windsor-Plainsboro High School South*, , Alternate Energy Category

“Concocting a Cure for Cancer”, Sabrina Arias, Aditi Gupta and Neha Kamat, *West Windsor-Plainsboro High School South*, Medicine/Healthcare Category

“New Line of Defense: Tutellamail”, Michelle Bashaw and Kaitlyn Paston, *Delaware Valley Regional High School*, New Material Category

“Don’t Talk Trash, Use Trash!”, Lindsey Kim and Ying Ying Yu, *West Windsor-Plainsboro High School South*, Environment Category

Photo Gallery



*Participants from
West Windsor-Plainsboro High School South
(photo at left)*

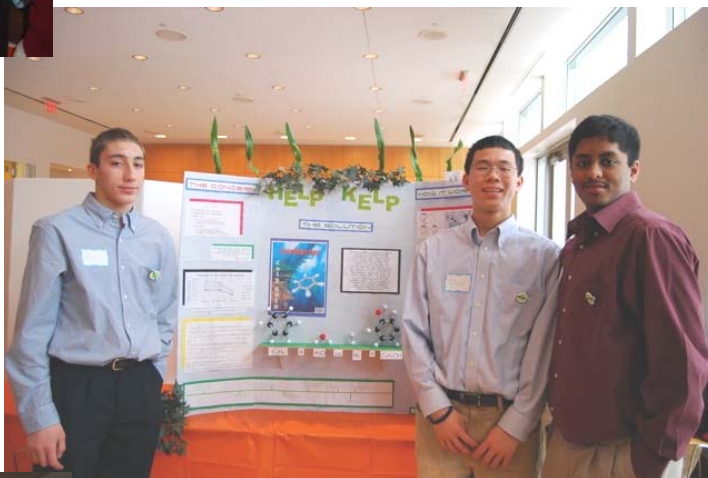


*Participants from
Delaware Valley Regional High School
(photo at right)*



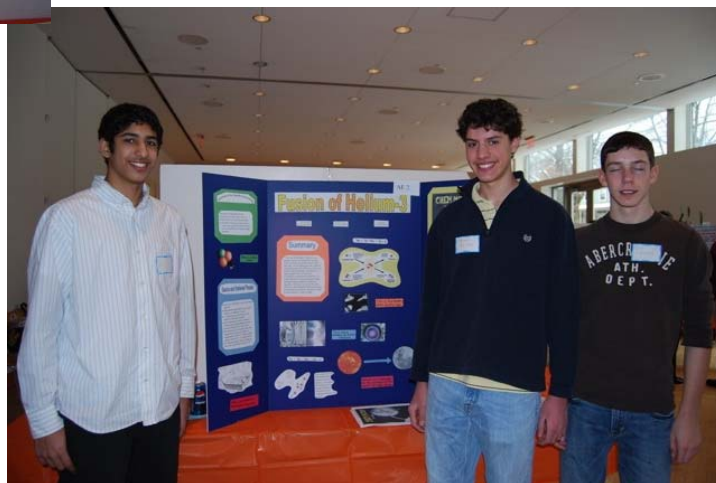
“Oh, What Tangled Prosthetic Limbs We Weave”
(photo at left)

“Kelp Help”
(photo at right)



“Self-Correcting Contact Lenses”
(photo at left)

“Fusion of He-3”
(photo at right)



MARM 2008

Queensborough Community College, Bayside, NY 11364
May 17-21, 2008

The 40th Middle Atlantic Regional Meeting (MARM 2008) of the American Chemical Society will be held from Saturday, May 17 to Wednesday, May 21, 2008. Hosted by the New York Local Section, the meeting will take place at Queensborough Community College of the City University of New York, Bayside (Queens), New York. Many symposia and events are planned around the theme of Chemistry and Health, reflecting the importance and impact of the health sciences in the New York metropolitan area. The meeting will also feature exciting plenary lectures by Ronald Breslow of Columbia University, *The Invention of SAHA, an Approved Anticancer Medicine with a Novel Mechanism of Action*, and Roald Hoffmann of Cornell University, *The Chemical Imagination at Work in Very Tight Places*.

Programming for students and teachers is scheduled for Saturday and Sunday, May 17 and 18, beginning with the 56th NY-ACS Undergraduate Research Symposium (URS) on May 17. Students who make oral presentations at the URS will be given free registration to MARM! Chemagination and Project SEED poster sessions, as well as activities planned by the Student Affiliates chapter of St. John's University are also scheduled. Chemical educators are invited to attend the free POGIL workshop, the NY Section Nichols Teacher forum, probeware workshops, and chemical demonstrations.

For further information check their website at www.marmacs.org.



Princeton Section ACS

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