



ALI "QUOTES"

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

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Education Night &

Joint Meeting of the Princeton and Trenton ACS Sections

Wednesday, November 10, 2010

our guest speaker will be

Michael C. Cann, PhD

Chemistry Department, University of Scranton

"Green Chemistry: Chemistry for the Long Haul"

**Lecture at 6:00 pm in Bowen Hall Auditorium, Princeton University,
with dinner following in Bowen Hall Atrium**

Abstract

As concerns over such issues as food, water, energy, climate change and waste production escalate, sustainability is rapidly moving from the wings to center stage on the world agenda. Chemistry, the central science, must play a central role in moving humanity onto a sustainable path. Green Chemistry (environmentally benign chemistry or sustainable chemistry) is the paradigm that will aid in the development of this sustainability. Green chemistry not only focuses on pollution prevention, but also the efficient use of resources, use of renewable resources, and energy conservation. This presentation will highlight the ethos of green chemistry, the twelve principles of green chemistry, and specific examples of green chemistry from the winners of the Presidential Green Chemistry Challenge Awards.

Biography

Michael Cann is originally from the Saratoga region of upstate New York and attended Marist College where he earned his BA in chemistry in 1969. Mike received his MA and PhD in organic chemistry from Stony Brook University in 1972 and 1973. He was a post-doctoral fellow at the University of Utah (1973-74), and a Lecturer at the University of Colorado-Denver (1974-75). Since 1975 he has been a chemistry faculty member at the University of Scranton where he is also the Co-Director of Environmental Science. His areas of interest include microwave-assisted reactions, byproducts from biodiesel production, green chemistry, and sustainability.

Mike has developed web-based green chemistry teaching modules and books dealing with real-world cases in green chemistry. He is the co-author of an environmental chemistry text and Chemistry in Context 7th edition. He is the editor of a book series Sustainability Contribution through Science and Technology and he runs an annual workshop on sustainability for Scranton faculty.

He has taught a number of undergraduate courses including general chemistry, organic chemistry, environmental chemistry, topics in environmental science, internship in environmental science and elements of chemistry, and graduate courses in mechanistic and structural organic chemistry.

Reservations

The meeting will be held in Bowen Auditorium, room 222, Princeton University. The seminar is at 6 pm followed by dinner in Bowen Atrium, Princeton University. Bowen Hall is located on Prospect Street, between Olden St. and Fitzrandolph St. (see princeton.edu for map). Parking is available in nearby lot 3 or North garage. The seminar is free and open to the public. Reservations are required for dinner, which is \$15 (\$10 for students). Please contact Denise D'Auria at denised@princeton.edu or (609) 258-5202 or by Wednesday, November 3 to make or cancel reservations.



Monthly Dinner Meeting & Year End Celebration

Wednesday, December 8, 2010

our guest speaker will be

Randy Weintraub, PhD

**“Ode to the Evolving Lamppost:
Bio-Analytical Chemistry Advances,
Enabler in Life Sciences Problem-Solving”**

Time: 6:00 pm
Lecture: 20 Washington Rd (*formerly Frick Lab*),
Princeton University, room 120
Dinner: The Ferry House, 32 Witherspoon St,
Princeton, NJ, following lecture

Reservations

The meeting will be held at 6:00 pm at 20 Washington Rd (formerly known as Frick Laboratory), Kresge Auditorium (room 120), Princeton University. It is located on the corner of Nassau Street and Washington Rd. Following the seminar, dinner will be at The Ferry House, 32 Witherspoon St, Princeton, NJ. The seminar is free and open to the public. Reservations are

required for dinner, which is \$25 for members, and \$15 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 denised@princeton.edu or (609) 258-5202 or by Wednesday, December 1 to make or cancel reservations.



From The Chair....

Randy Weintraub,
Section Chair-Elect 2010

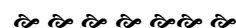


I'm proud and honored to be incoming Princeton ACS Local Section (PACS) Chair for 2011. I've enjoyed this year contributing as Chair-Elect and as a new member of the PACS Executive Board. The Board is a dedicated, accomplished, fun and diverse group of people. We work together to make PACS run and serve the interests of our Section and the mission of ACS. Along with other PACS members that chair sub-committees and other volunteers giving time and passions at meetings and events we keep our Local Section vibrant. If you haven't yet been involved that much, there's a welcome seat at the table for you!

I'm excited about PACS' coming year of lecture-dinner meetings with guest speakers that will enlighten, stimulate thinking and maybe even entertain us. But most of all they will bring us together on a regular basis to share our bond through our experiences in our profession and our curiosity and passion for knowledge and progress. Our Section will continue joint meetings and events with Trenton and North Jersey Sections, Central Jersey AIChE and American Women in Science. Our schools and community outreach events being planned also offer opportunities for all of us to get involved, enjoy the camaraderie of Section members, develop ourselves, and make a difference.

From the grade school science student, to science and chemistry teacher, to industry scientist, to Professor Emeritus, and all in between, your local Princeton ACS Section is a place to stimulate interdisciplinary innovation and collaboration, develop professional and personal skills, network, mentor, and have a good time!

Respectfully yours,
Randy



ACS Launches “Prized Science”

Did life on Mars become life on Earth? What technology worked invisibly behind the headlines to make the Human Genome Project possible? How did wisps of material barely 1/50,000th the width of a human hair become forerunners of a new genre of medicines?

Those topics highlight the premier episode of a new video series, *Prized Science: How the Science Behind ACS Awards Impacts Your Life*, launched recently by the American Chemical Society (ACS), the world's largest scientific society. Rich with high-definition graphics and animations, and commentary, suitable for classroom use and other audiences of students and non-scientists, the videos are available without charge at the *Prized Science* website (acs.org under awards or see our website at www.princeton.edu/~pacs/), as well as YouTube, iTunes, and on DVD.

Prized Science's launch episode is a three-part HD video featuring the research of Richard Zare, PhD winner of the 2010 Priestley Medal, highest honor bestowed by ACS. Zare is the Marguerite Blake Wilbur Professor in Natural Science at Stanford University. The video highlights Zare's work on the possibility that life existed on Mars; in developing the technology that helped scientists decode the human genome; and in pioneering efforts to enlist nanoparticles in medicine.



50-Yr and 60-Yr Members Honored!

Our annual recognition of our 50yr and 60 yr members took place at our dinner meeting on September 22nd. This year, in addition to being our guests for dinner, our honorees were invited to say a few words about their careers. We were delighted that three agreed to do so. Their careers were varied but main themes that emerged were a love of chemistry and discovery, and a willingness to make changes and pursue career-broadening opportunities as they came along.

ACS Member for 60 years:

Dr. James Amick
Dr. William Brown

ACS Member for 50 years:

Dr. Volker Arendt
Dr. Joseph Burakevich
Dr. Derk Huibers
Dr. Maitland Jones
Mr. Reeve Norton

Congratulations to our honorees from the Executive Committee of PACS!



Photo: In attendance were William Brown, Reeve Norton, Derk Huibers and Joseph Burakevich (starting 2nd from left) to receive their Certificates of Recognition from Kitty Wagner, Section Chair (far left).

And a Few Words from our Honorees.....

Joe Burakevich

I received my BS degree in chemistry from Saint Peter's College in 1960 and PhD in organic chemistry from Stanford University. My PhD research involved synthesis of a specific organic compound in order to study its stereochemistry and conformation by means of optical rotatory dispersion and circular dichroism.

Since I had completed the Army ROTC program at Saint Peter's College, I was commissioned as a 2nd Lieutenant upon graduation. Therefore, I had to perform military service after attending Stanford. I served my active military duty as a research chemist and Army officer performing laboratory synthesis at The Army Chemical Research Center at Edgewood, Maryland. I ended the two-year service as a US Army Captain.

After military service, I was employed in industrial chemical research in a number of areas:

- Agricultural chemical research - The attempted development of a new plant growth regulator - a compound that accelerated the growth of vegetable plants. Unfortunately, it did not achieve commercialization.
- Swimming pool sanitizers - Studies regarding their effectiveness.
- Manufacture and safety of inorganic peroxygens.
- Improving the manufacturing processes for commodity chemicals.

I greatly appreciate having a career in chemistry. Obviously, a chemical career rewards one with a knowledge of the fundamental composition and properties of the material items in life. Chemists understand the essentials of gases, minerals, metals, fuel, manufactured commodities, plastics, electronics, living things, and on, and on, and on.... Such knowledge continually broadens our perspectives in life.

Derk Huibers

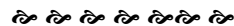
I am honored to be recognized as a 50-year member of the American Chemical Society. I signed up in 1960, when I had my first job in chemical process development at the Lucidol Division of Wallace and Tiernan in Tonawanda, NY. (It is of interest to note that both Wallace and Tiernan went to the Lawrenceville School; their names are on the wall in the auditorium.) I discovered an easy process to make azodicarbonamide (ADA) agent, used to blow little nitrogen bubbles in PVC plastic sheets to give it a leather-like feel, by chlorinating a urea solution. It led to my first patent.

It occurred to me then that I was wasting my chemical engineering education. I wanted to do some real engineering and joined Lummus, an engineering construction company. In 1965, I was selected to go to Italy to improve a process for caprolactam (CL), the raw material for nylon-6. The process involved the reaction of hexahydrobenzoic acid (HHBA) with nitrosyl sulfuric acid (NSA), discovered by Werner Muench, a German chemist working in the laboratory of Snia Viscosa, an Italian fiber company.

In 1966, I decided to join Airco in Murray Hill, NJ as manager of process engineering where I worked on fueling the Saturn V rocket with liquid hydrogen and oxygen. As a result of this involvement I was invited to become US citizen.

End 1968, I met with the CEO of the Dutch company which is now called AKZO Nobel. He wanted to expand the company in the US and he hired me to help in this effort. I became manager of new venture development, also involved with acquisitions such as Armour Chemicals and Materials. We had significant economic setbacks caused by the 1973-74 oil embargo. The resulting oil shortage eventually led me to Hydrocarbon Research in Lawrenceville, NJ where I worked on developing new catalysts for converting coal to oil. The H-Coal project was sponsored by the newly created Department of Energy. I also started a biochem lab to convert cellulose via glucose into chemicals like ethanol, sorbitol and glycerol. Ethanol blended with gasoline was called gasohol in those days.

I stayed in cellulose in 1983 by joining the Princeton R&D department of Union Camp. While supervising the chemical pilot plant, my main task was to redesign the distillation plants for tall oil (Savannah, Georgia) and turpentine (Jacksonville, Florida). An important component of turpentine is beta-pinene which can be converted to myrcene, a raw material for geraniol, an important odor component. I designed a pyrolysis furnace to make myrcene, high temperature and short residence time by steam dilution, analogous to the ethylene manufacturing furnaces designed by Lummus. My final project at Union Camp was the recovery of beta-sitosterol. The Fins discovered that this component lowers cholesterol. It is now used by J&J in the manufacture of Benecol, a cholesterol lowering margarine. I eat it every day.



ACS
Chemistry for Life™

News From National

The 240th ACS National Meeting was held in Boston, MA, August 22-26, 2010. The Council met on Wednesday and some of the actions or news reported were:

Election Results

- Council elected Janet L. Bryant, H. N. Cheng, Amber S. Hinkle, V. Michael Mautino, and Yorke E. Rhodes to the Committee on Committees for the 2011-2013 term.
- Council elected John E. Adams, Alan M. Ehrlich, Mary Virginia Orna, and Dorothy J. Phillips to the Council Policy Committee for the 2011-2013 term.
- Council elected Jeannette E. Brown, Martha L. Casey, D. Richard Cobb, Lissa Dulany, and Angela K. Wilson to the Committee on Nominations and Elections for the 2011-2013 term.

Meeting Registration Report

- As of August 24, 2010, the ACS fall national meeting had attracted 14,059 registrants. Totals in select categories were as follows: Regular attendees 8,211; Students 3,230; Guests 393; Exhibit Only 733; and Exhibitors 1,492.

Membership Activity

- The 2010 membership numbers are on track to meet year-end goals. The Student Member community has continued to grow since creation of this new member category in June 2009. The number of Student Members was 12,815 as of July 31, 2010.

ACTIONS OF THE BOARD OF DIRECTORS

- On the recommendation of the Committee on Budget and Finance, the Board VOTED to approve an advance member registration fee of \$355 for national meetings held in 2011. The Board also considered three program funding requests, and on the recommendation of B&F VOTED to take the following actions:
 - to include funding for the ACS Global Research Experiences, Exchanges and Training (GREET) program in the Society's 2011 Proposed Budget;
 - to include funding for the State Government Affairs Program in the Society's 2011 Proposed Budget and 2012-2013 Forecast; and
 - to include funding for the Department of Professional Education in the 2011 Proposed Budget and 2012-2013 Forecast, subject to annual review.
- The American Chemical Society and the German Chemical Society (Gesellschaft Deutscher Chemiker – GDCh) agreed to enter a three-year collaboration alliance with a strategic focus on communicating the value of chemistry to the general public and the role chemistry plays in addressing global challenges, as well as to identify and support other mutually beneficial services to ACS and GDCh. The signing of this memorandum of understanding took place during a special ceremony at the Board's regular session.
- The Board also received reports from several international guests representing the following scientific societies: the Federation of African Societies of Chemistry, the Federation of Asian Chemical Societies; the Chemical Society of Thailand, the Korean Chemical Society; the Mexican Chemical Society; the Royal Society of Chemistry, and the German Chemical Society.

YCC Awards Deadline Approaching



Greetings from the ACS Younger Chemists Committee (YCC)!

Please check out the YCC website for information on two awards for Younger Chemists. The **deadline has been extended to Nov 5th** for both the Younger Chemist Leadership Development Awards and the CIBA/YCC Young Scientist Travel Awards. Both of these awards have received only a few applicants to date and are outstanding opportunities for propelling your career development! Apply now!

Application information:
<http://ycc.sites.acs.org/awards.htm>

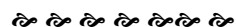
Younger Chemist Leadership Development Award

Each year the YCC organizes a Leadership Development Workshop that is geared toward younger chemists and is held in conjunction with the ACS Leadership Institute as part of the ACS Leadership Development System. Fifteen Younger Chemist Leadership Development Awards for ACS members (under 35 years of age) are awarded annually. The Younger Chemist Leadership Development Award helps young chemists develop into highly skilled leaders in the Society and in their chosen profession. The application deadline for the 2011 Younger Chemist Leadership Development Award is November 5th, 2010.

CIBA/YCC Young Scientist Travel Award

YCC and the CIBA Foundation are proud to support the CIBA/YCC Young Scientist Travel Award. This travel award provides funding for young and early-career chemists to travel to and participate in an ACS national or regional meeting. The travel award is intended for young scientists (under 35) who currently have a post-doctoral appointment OR are within the first seven (7) years of their professional career. CIBA/YCC Young Scientist Travel Awards are awarded twice a year. Applications for travel to a spring ACS national or regional meeting are due November 5th, 2010. □

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\\ \\ 2010 - 2011 EVENTS & NOTICES \\ \\

Friday, October 22	National Chemistry Week Activities Night Princeton University, 20 Washington Rd (formerly Frick Laboratory) 7-9 pm. The theme this year is "Behind the Scenes with Chemistry".
November 11, 2010, 10:30 am	Chemical Consultants Network: Joint Meeting with The Joseph Priestley Society The Chemical Heritage Foundation, 315 Chestnut Street, Philadelphia, PA 19106. The meeting will begin at 10:30 a.m. with a Chemical Consultants Network - Joseph Priestley Society Joint Networking Reception, followed by lunch at 12:15 pm. Speaker Ryan Dirx, Vice president, Research and Development, Arkema, Inc., will take the podium at 1:00 pm. The meeting will adjourn at 2:00 pm: There is a \$25 charge for the lunch and meeting. Registration is required: Log onto www.chemheritage.org and click "Events & Activities," or send an e-mail to eventregistrations@chemheritage.org , or call 215-873-8208; or contact Bob Kenworthy, Affiliate Consultant: 215-873-8292; Fax: 215-629-5392; bkenworthy@chemheritage.org . Reduced-rate parking is available at the Bourse garage on 4th Street between Market and Chestnut, and is based on availability. Pick up a parking voucher at the CHF registration desk.
Wednesday, December 8	Chemical Consultants Network Meeting; the Cynwyd Club, Bala Cynwyd, PA; Networking, 5:30 PM; Dinner, 6:30 PM; Talk and Business Session, 7:30 PM. Carol Wenom, Whitaker Technical Service, will speak on "Strategies for Making Every Marketing Call a Home Run". To make or cancel a dinner reservation, e-mail CCNReservations@aol.com or call the ACS office at 215-382. Fee is \$25 by the deadline, Thursday, December 2, \$35 afterwards. There is no charge for talk only.
Wednesday, December 8	Princeton ACS Dinner Meeting and Year-End Celebration Speaker will be incoming PACS Chair, Randy Weintraub, PhD. Topic: "Ode to the Evolving Lamppost: Bio-Analytical Chemistry Advances, Enabler in Life Sciences Problem-Solving". 6:00 pm at 20 Washington Rd (formerly known as Frick Laboratory), room 120, Princeton University; dinner will be at The Ferry House, 32 Witherspoon St, Princeton, NJ. Contact Denise D'Auria at denised@princeton.edu or (609) 258-5202 or by Wednesday, December 1 to make or cancel reservations.
January 13	Princeton ACS Dinner Meeting: Joint with AWIS-CJC Speaker will be Mr. Neil Gussman, Chemical Heritage Foundation
February (date tbd)	Princeton ACS Dinner Meeting Speaker will be Professor Joshua Rabinowitz. Chemistry and Intergrative Genomics, Princeton University
March 16	Princeton ACS Dinner Meeting Speakers will be Dr. Swati Nagar, Department of Pharmaceutical Sciences, Temple University and Dr Upendra Argikar, Institutes of Biomedical Research, Novartis Pharmaceuticals
April (date tbd)	Princeton ACS Dinner Meeting Speaker will be Professor Edward Taylor, Department of Chemistry, Princeton University
May (date tbd)	Princeton ACS Dinner Meeting: Joint with the Trenton ACS Section Speaker will be Professor Joesph Delfino, Environmental Engineering Sciences, University of Florida
Thursday, June 16	Princeton ACS Dinner Meeting and YCC Event Speaker will be Dr. Danielle DiNallo, Global Analytical and Sensory Measurement, International Flavors and Fragrances.

ACS Webinars™
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Connect with subject matter experts and global thought leaders in chemical sciences, management, and business on relevant professional issues every Thursday from 2-3pm ET. After a short presentation, the remainder of the hour belongs to you for live Q&A!

November 11, 2010 Lead Yourself and Your Team through Mergers, Acquisitions, and Restructuring

Layoffs. Restructuring. Outsourcing. Right sizing. Sound familiar? Learn how to make smart choices in your career during the transition! *John Ferguson, Vice President of Change Management/Mergers & Acquisitions at PRITCHETT.*

November 18, 2010 How Chemical Policy Reform Can Spur Green Chemistry Learn about the latest Green Chemistry policy developments and how they may affect chemical professionals, chemical industries, and the future of green chemistry! *Richard Denison, Ph.D., Senior Scientist at Environmental Defense Fund.*

December 2, 2010 Venture Capital Outlook in 2011 – Crystal ball, smoke screen, and the reality

Join an expert panel to learn the future of venture capital in 2011!

David Porter, Apposite Capital.

December 16, 2010 Chemicals & the Economy Year End Updates – Impact and Outlook for Executives and Scientists

Learn how understanding the economy and chemical industry trends can help you better plan for your career and business! *Paul Hodges, International eChem.*



Discoveries! Are published by ACS Office of Public Affairs on a monthly basis. They are an opportunity for you to put more positive stories about chemistry in the headlines. Do you know of a school or organization that would like to publish these or post on a website? For more information contact Louise Lawter, PACS Public relations Chair at princetonacs@gmail.com.

Oil dispersants used in Gulf of Mexico unlikely to be endocrine disrupters and have relatively low toxicity to cells

Environmental Science & Technology

Government scientists are reporting that eight of the most commonly used oil dispersants used to fight oil spills, such as the massive episode in the Gulf of Mexico, appear unlikely to act as endocrine disrupters — hormone-like substances that can interfere with reproduction, development, and other biological processes. The tested dispersants also had a relatively low potential for cytotoxicity (cell death), with JD-2000 and SAF-RON GOLD showing the least potential. The scientists are with the U. S. Environmental Protection Agency and the National Institutes of Health Chemical Genomics Center. Their findings appear in ACS' semi-monthly journal *Environmental Science & Technology*.

Richard Judson and colleagues note that more than 1.5 million gallons of dispersants have been used so far in the Deepwater Horizon spill. These detergent-like chemicals break up oil slicks into small drops. Scientists are concerned that some dispersants contain ingredients that turn into endocrine disrupters in the environment, and could harm marine mammals, fish, and humans. But only limited toxicity testing data is available on currently-used dispersants, and this is only results from the first round of EPA dispersant testing, they state.

ACS Virtual Career Fair November 2-3, 2010

Interview and network – without travel costs or hassles! FREE Registration! www.acs.org/vcf

Using our new interactive platform, you'll be able to interview via text or video chat, attend webinars, and network with professionals worldwide—from the convenience of your own desktop. ACS membership is not required to participate.

Don't forget to Vote!

Cast your ballots for the
2011 Princeton ACS Executive Committee Members

Ballots must be received by November 10, 2010



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