



# Double Bond

The Newsletter of the Western New York Section of the American Chemical Society

Volume 78

November 2006

## DECEMBER MEETING

TUESDAY, DECEMBER 5, 2006

**RICH RENAISSANCE NIAGARA ATRIUM**  
One Robert Rich Way  
Buffalo, NY 14213

*SPEAKER:*

**SHRI SHARMA, RICH PRODUCTS**

**6:30 PM Cash bar**

**7:00 PM Dinner:**

Shrimp Bisque

Tuscan Chicken or  
Slow Roasted Salmon w/ dill sauce or  
Vegetable Gratin

Peach Melba

**8:30 PM**

**Talk by Dr. Shri Sharma**  
**Rich Products**

**All are welcome!**

Dinner: \$28/person Students: \$14

To make entrée choice by Nov. 28,

contact Alice Steltermann:

(716) 888-2340 or e-mail: [stelterm@canisius.edu](mailto:stelterm@canisius.edu).

## 2007 SCHOELLKOPF AWARD NOMINATIONS

Please consider nominating one of your colleagues for this prestigious award.

See page 29 for details

## LOCAL SECTION ELECTION RESULTS

The results of our local section elections are in. The people elected to fill executive positions for 2007 are as follows:

Chair	Greg Shafer
Vice-chair	Sherry Chemler
Secretary	Mary O'Sullivan
Councilor	David Nalewajek
Member-at-Large	William Sullivan

Congrats to the successful candidates, and good luck in the upcoming year.

## FROM THE EDITOR

Greetings Western New York,

Well, the leaves have finally fallen. It's too bad the October storm brought so many branches down with them. The storm and flooding did give some of us a long-overdue excuse to upgrade landscaping around the house and to clean some junk out of the basement. I always wanted to be a natural products chemist, and molds are a rich source of complex terpenes and polyketides, but this is a bit much. We are now much more accomplished at the application of antimicrobials and more tolerant of runaway fragrance chemistry.

More to the point the WNY Section is planning a December meeting. The details are included in this issue of the Double Bond, so come make the scene.

Seasons greetings,

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## 2007 SCHOELLKOPF AWARD NOMINATIONS

The Jacob F. Schoellkopf Medal is the oldest award of the American Chemical Society given by a Local Section.

The purpose of the award is to recognize a person who has fostered the objectives or activities of the American Chemical Society. The medalist's contribution might be a discovery pertaining to chemistry, or an invention of a plan, process, or device useful, valuable, or significant in the theory or practice of chemistry, or distinguished service to the Western New York Section or its successor.

Please consider nominating one of your colleagues for this prestigious award.

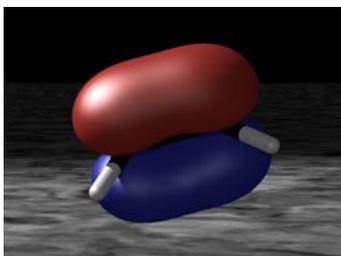
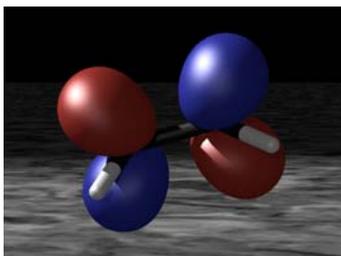
Any nominations received after the deadline date will be considered for the 2008 Award.

This year's Schoellkopf Committee Chair is Dr. Peter Schaber. For further information you may contact Pete directly at 888-2351 or [schaber@canisius.edu](mailto:schaber@canisius.edu).

**Deadline: January 15, 2007**

Please send all nominations for the Schoellkopf Award to:

Dr. Mary O'Sullivan  
Secretary-WNY Section ACS  
Department of Chemistry  
Canisius College  
2001 Main Street  
Buffalo, NY 14208



## SUMMARY OF COUNCILOR GOVERNANCE ACTIONS/REPORTS

AMERICAN CHEMICAL SOCIETY  
232<sup>nd</sup> ACS NATIONAL MEETING  
SAN FRANCISCO, CA  
SEPTEMBER 10-14, 2006

The following report summarizes key actions of the ACS Council and Board of Directors at the 2006 fall national meeting.

### ACTIONS OF THE COUNCIL

#### **Election Results**

- The Committee on Nominations and Elections presented to Council the following slate of nominees for membership on the Committee on Committees for the 2007-2009 term: Theodore M. Brown, H. N. Cheng, Milagros Delgado, Alan M. Ehrlich, Roland F. Hirsch, Neil D. Jespersen, Melanie J. Lesko, Vincent M. Mautino, Les W. McQuire and Charles F. Rowell. By written ballot the Council elected H. N. Cheng, Milagros Delgado, Neil D. Jespersen, Les W. McQuire and Charles F. Rowell.
- The Committee on Nominations and Elections presented to Council the following slate of nominees for membership on the Council Policy Committee for the 2007-2009 term: Martha L. Casey, Dwight W. Chasar, M. Elizabeth Derrick, Thomas R. Gilbert, Joe W. Hightower, Barbara J. Peterson, Robert A. Pribush, and H. David Wohlers. By written ballot the Council elected Martha L. Casey, M. Elizabeth Derrick, Thomas R. Gilbert and Joe W. Hightower.
- The Council Policy Committee presented to the Council the following slate of nominees for membership on the Committee on Nominations and Elections: V. Dean Adams, G. Bryan Balazs, Merle I. Eiss, Marie G. Hankins, Charles P. Rader, Barbara A. Sawrey, Sharon P. Shoemaker, Herbert B. Silber, Ellen B. Stechel and Don B. Weser. By written ballot the Council elected Merle I. Eiss, Barbara A. Sawrey, Sharon P. Shoemaker, Herbert B. Silber and Ellen B. Stechel.

#### **Candidates for President-Elect and Board of Directors**

- The candidates for the fall 2007 ACS national election were announced as follows:

**President-Elect 2007**

Bruce E. Bursten, University of Tennessee,  
Knoxville  
Yorke E. Rhodes, Retired - New York University,  
New York  
Bassam Z. Shakhashiri, University of Wisconsin,  
Madison  
James A. Walsh, Retired - John Carroll University,  
Florida

**Directors-at-Large – 2007-2009**

William H. (Jack) Breazeale, Jr. College of  
Charleston, South Carolina  
Dennis Chamot, National Research Council,  
Washington, D.C.  
Peter K. Dorhout, Colorado State University, Ft.  
Collins  
Paul R. Jones, University of North Texas, Denton  
Valerie J. Kuck, Retired - Bell Labs, New Jersey  
Dorothy J. Phillips, Waters Corporation,  
Massachusetts  
Marinda L. Wu, Science is Fun! Company,  
California

**Director, District I 2007-2009**

Thomas R. Gilbert, Northeastern University, Boston  
Anne T. O'Brien, Consultant (Retired – Wyeth-  
Ayerst Research), Tarrytown

**Director, District V 2007-2009**

John E. Adams, University of Missouri, Columbia  
Judith L. Benham, Retired – 3M Company,  
Minnesota

**Petitions for Consideration**

- The Council received three petitions for consideration: Petition on Election Procedures 2006; Petition on Multi-Year Dues; and a Petition on Rules for Nominating Members of Nominations and Elections for National Offices. A brief discussion ensued on the Petition on Rules for Nominating Members of Nominations and Elections for National Offices. Action is expected on these petitions at the 2007 spring national meeting in Chicago.

**Committee Review and Committee Change in Status**

- As part of a regular review, the Council VOTED to continue the Committee on Public Relations and Communication, the Committee on Environmental Improvement, and the Committee on International Activities subject to concurrence by the Board of Directors. The Council also VOTED to support the request of the Committee on Community Activities that its status be changed from an "other committee"

of the Board to a joint Board-Council Committee. The purpose of the Committee on Community Activities is to improve the public perception of chemistry by providing programs to connect chemists with their communities.

**Governance Review**

- The Council received a report from the Council Policy Committee on activities related to Governance Review. The Board-CPC Governance Review Task Force generated 23 ideas following initial interaction with the Board, Council, Committees and other interested members. A joint meeting of the Board of Directors and CPC was held at this meeting to prioritize the 23 ideas into three categories: to advance the idea as worthy of further consideration by the cognizant committee and/or interested groups; to refine the idea which will be sent back to the Governance Review Task Force for further consideration; or to place the idea in a "stop" category as an idea that will receive no further consideration as part of the governance review. Councilors received a listing of the 23 ideas organized into the three categories as prioritized jointly by the Board and CPC.

**Registration Report and 2007 National Meeting  
Registration Fee**

- As of September 12, 2006, the ACS fall national meeting had attracted 15,603 registrants. Totals in select categories are as follows: Regular attendees 9,373; Students 3,350; Guests 510; Exhibit Only 504; and Exhibitors 1,666. The Committee on Meetings and Expositions reported that national meeting financial targets continue to be met, and therefore recommended to the Board of Directors that there be no increase in national meeting registration fees for 2007.

**The Society's Membership**

- The Committee on Membership Affairs reported that through August 2006, a record 12,137 new applicants have been added to the Society's membership, and that the Member-Get-A-Member campaign is well on its way to the goal of 1,000 new members in this year.

**Special Discussion Item**

- A special discussion item was again put on the Council agenda. The discussion focused on ensuring the American Chemical Society's future by engaging younger members throughout the Society's volunteer leadership. ACS President E. Ann Nalley framed the discussion by presenting the results of a

councilor survey on the topic and many councilors offered useful comments and suggestions.

### **Review of the Chemical Professional's Code of Conduct**

- The Committee on Economic and Professional Affairs submitted its latest version of the Chemical Professional's Code of Conduct for Council review. This document offers guidance for Society members in various professional dealings, especially those involving conflicts of interest.

### **ACTIONS OF THE BOARD OF DIRECTORS**

#### **The Board's Committees and Task Forces**

- The Board of Directors voted to recommend a nominee for both the 2007 Perkin Medal and the 2007 Othmer Gold Medal. The Perkin Medal, the highest award of the Society of Chemical Industry, is awarded for outstanding contributions to American industrial chemistry. The Othmer Gold Medal recognizes a chemical scientist of multiple talents and achievements and is awarded by the Chemical Heritage Foundation. The Board also received a report from the ACS Petroleum Research Fund Steering Committee. The Steering Committee has been charged with developing a set of focusing proposals that will be important to the future success of the Fund.
- On the recommendation of the Board Committee on Professional and Member Relations, the Board voted the following:
  - To approve revisions to the Guidelines for Society Cosponsorships with other organizations;
  - To proceed with "phase one" plans to arrange the 2008 ACS/AIChE joint meeting, which involves working within the framework of the cosponsorship guidelines, engaging the support of the relevant technical divisions, and developing a suitable budget;
  - To approve the request for cooperative cosponsorship of Pacifichem 2010, to be held December 14-19, 2010, in Honolulu, Hawaii, contingent upon approval of an acceptable budget for the conference.
- The Board received and expressed support for a report presented by its Contingency Planning Working Group. The Contingency Planning Working Group was charged with developing a set of actions that could be undertaken if risks became reality for the Society. The Board's Task Force on the Timing of Committee Appointments also presented a report. This task force was asked to

review the timing of committee appointments and seek opportunities to engage the Board Chair and President earlier in the appointment process. The Board also discussed plans for a third conference in Malta entitled, *Frontiers of Chemistry III: Research and Education in the Middle East* and agreed to recommend inclusion of \$50,000 for this meeting in the 2007 budget. The conference will take place in December 2007.

#### **The Society's Mission**

- On the recommendation of the Committee on Planning, the Board voted to adopt a revised ACS mission statement: *"To advance the broader chemistry enterprise and its practitioners for the benefit of Earth and its people."*

#### **The Society's Publications**

- The Board voted to approve the reappointment of several of its journal editors.

#### **The Society's Staff**

- The Board received a report from the Executive Director/CEO and several of her senior staff members on the activities of the Publications Division, Chemical Abstracts Service, Human Resources, the Web Presence Project, and the Society's General Counsel. On the recommendation of the Committee on Executive Compensation, the Board agreed to a proposed list of 2007 organizational objectives. The Board also received a status report from its consultants, who are helping to review the Society's executive compensation system. The compensation of the Society's executive staff receives regular review by the Board.

#### **The Society's Finances**

- The Board, through the Committee on Budget and Finance, voted to approve funding requests for the Society's Green Chemistry Institute and for workshops with Hispanic and Native American-serving institutions and to include these funding amounts in the Society's 2007 proposed operating budget.

The Board also received a report from the Program Review Advisory Group (PRAG). PRAG is charged with reviewing programs of the Society (with some exceptions) on a periodic and regular basis.

If any member would like additional information on any of these topics, feel free to call (827-6303) or e-mail ([David.Nalewajek@Honeywell.com](mailto:David.Nalewajek@Honeywell.com)) at your convenience.

Submitted by  
Dave Nalewajek, Councilor.

**THIS MONTH IN CHEMICAL HISTORY - PART I**

Harold Goldwhite, California State University, Los Angeles

Prepared for SCALACS, the Journal of the Southern California, Orange County, and San Gorgonio Sections of the American Chemical Society

The name of Jean Baptiste Perrin may not resonate strongly with most chemists, which is a pity. Perrin made contributions to science late in the 19th century and in the early decades of the 20th that were essential to understanding the fine structure of matter. The ideas that flowed from Perrin's contributions are discussed in every general chemistry course. The following biographical sketch is drawn in part from material on the Nobel Foundation's website; Perrin won the Nobel Prize in physics in 1926.

Jean Perrin was born in Lille, France, in September 1870. He studied at the Ecole Normale Supérieure in that city, was appointed to an assistantship in physics, and began studying the novel and exciting fields of cathode and X-rays. He earned his doctorate in 1897 and received a post in physical chemistry at the Sorbonne in Paris in the same year. Most of his professional career was spent at the Sorbonne where he was appointed Professor in 1910. He held that post for the next 30 years.

In 1895 in a paper in *Comptes Rendus*, based on the research he later presented for his doctorate, Perrin provided evidence supporting the idea that cathode rays were particulate rather than wave-like. This was a topic of intense interest and debate at this time. Evidence for wave-like behavior had included observations that cathode rays, like X-rays, could penetrate thin sheets of aluminum. In an elegant set of experiments Perrin collected the cathode rays in a hollow cylinder and showed that negative charge steadily accumulated on the collector. The cathode rays were also retarded by negative electric charge. In 1897 J.J. Thomson, building on these experiments of Perrin, carried out his definitive studies of cathode rays that indicated the existence of electrons in atoms.

Chemists unfamiliar with the history of their subject are usually unaware of the intense debate within the scientific community about the reality of the existence of atoms at the end of the 19th and the beginning of the 20th century. Among the most skeptical of the necessity of physical atoms was the father of physical chemistry, Wilhelm Ostwald. Perrin's work on Brownian motion finally convinced the skeptics. Observations on colloidal suspensions, in which the colloid particles moved constantly and in apparently random directions, were interpreted by Perrin in 1909 as due to the uneven

bombardment of the particles by the molecules of the liquid medium in which they were suspended. Perrin developed the theory of this motion. By observations on the rates of movement of the particles and their distribution by depth at equilibrium he was able to deduce values of Avogadro's Number that agreed with those derived from totally different lines of experiment. In effect Perrin had "observed" the discontinuous nature of matter, and this was the subject of the citation for his Nobel Prize.

Perrin wrote many articles and several influential books. The most widely read was his book on "Atoms", first published in 1913 and translated into several languages, which sold over 30,000 copies. He was awarded many honors in addition to his Nobel Prize; honorary memberships in half-a-dozen national societies; honorary doctorates from 8 universities; major scientific prizes in England, Italy, and France. He was also influential in scientific politics, creating the organization that is still at the center of French science, the Centre National de la Recherche Scientifique (CNRS); and helping to found a major science museum in Paris, the Institute of Astrophysics, and the Institute of Physico-Chemical Biology.

Perrin served his country as an officer in the Corps of Engineers in World War I and when France fell in World War II in 1940 he escaped to the United States and died in New York in April 1942. His body was repatriated to France on the battleship *Jeanne d'Arc* in 1948 and was reburied in the Pantheon in Paris, which is dedicated to the memory of the most outstanding citizens of France.



## CALL FOR NOMINATIONS

## THE PATTERSON-CRANE AWARD

Do you have a colleague whom you feel should be acknowledged for their work in chemical information? The Dayton and Columbus Sections of the American Chemical Society, which sponsor the Patterson-Crane Award, would like to hear from you. The biennial award consists of a \$2,000 honorarium and a personalized commendation and is to be presented in the Spring of 2007 at an awards dinner to be held in Columbus, Ohio. The recipient is expected to give an address at the time of the award presentation.

Award Criteria Nominees, who need not hold ACS membership, should demonstrate outstanding achievement in the field of chemical information science. Contributions of international significance may relate to:

- Design, development, production, or management of chemical information systems or services.
- Electronic access to and retrieval of chemical information; critically evaluated data compilations.
- Information technology applications in chemistry or other significant chemical documentation, including production of original works, editorial work, or chemical library work.

Nominations for the award must be in writing and may be sent either hard copy or via email. They should discuss the nominee's contributions to the field as well as an evaluation of accomplishments. Materials supporting the nomination should include a biography and bibliography of publications and presentations. Seconding letters are required and may also be sent either hard copy or via email.

Send the nomination materials to Dr. Theresa Huston, Chair of the Patterson-Crane Award Committee, (thuston@cas.org or CAS, P.O. Box 3012, Columbus OH 43210) for receipt by 31 January 2007. To receive more information about this award, contact Dr. Huston (614-447-3600, ext. 3354).

Nominations will be judged by a seven-member selection committee consisting of Dayton and Columbus Section members as well as the Chair of the American Chemical Society's Division of Chemical Information.

The Patterson-Crane Award is international in scope and given in honor of two outstanding members of the Sections: Austin M. Patterson (1876–1956) and E.J. Crane (1889–1966), who were both Editors of Chemical Abstracts Service.

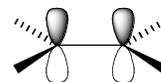
## 60 YEARS AGO IN THE DOUBLE BOND

The following is excerpted from *The Double Bond*,  
December 1946.

PROFESSIONAL RESPONSIBILITY  
W. C. FERNELIUS

In the past, we have often been critical of the illogical and unscientific way in which solutions to public and political issues were attempted. Now we are being asked for our solutions. We must all be cautious and be sure that we use the same sort of logic in arriving at conclusions outside our own field as we insist must be done in our field. If we are really successful in bringing to the public and governmental councils a basic understanding of the importance of science we must expound *the method of the controlled variable* and be careful lest our own actions are governed by prejudice. Further, each of us as a chemist, must do his part in breaking down the widely held idea that we are a group apart from the rest of society. Each of us will be much benefited by holding membership in a few organizations other than scientific societies. Try it; very likely you will enjoy these associations...

Professional responsibilities are not matters which are to be considered only on the job or in a meeting of one's colleagues. These responsibilities are with us always and cannot be put aside at any time. The attitude of the public towards our profession is being influenced by all of our contacts even though they may seem to be very remote from professional matters... *There is great need for local study and action...* Are you aiding the newspapers in accurately reporting the news when it involves chemistry? Are you aiding your local high schools in vocational guidance? Do you have some scheme for encouraging promising students of chemistry in your locality? All these and many more are ways in which each of us individually can do his part. Try it. You'll probably have more real fun than you think.



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**ISSUE COPY DEADLINE: FIRST OF MONTH PRIOR TO PUBLICATION**

The Western New York Section of the American Chemical Society (ACS) and its editors assume no responsibility for the statements and opinions advanced by the contributors. Views expressed in the editorials are those of the authors and do not necessarily represent the official position of the Western New York Section of the American Chemical Society. All materials to appear in the next issue of *Double Bond* must be received by the Editor, in care of the Chemistry Department, Canisius College, 2001 Main Street, Buffalo, New York 14208, by the FIRST day of the month. Notice for change of address should be made through ACS Member and Subscriber Services at (800) 333-9511 or the website, [www.chemistry.org/contactus.html](http://www.chemistry.org/contactus.html).

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