



Double Bond

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

Volume 82

November 2010

2010 SCHOELLKOPF AWARD

The Western New York Section of the
American Chemical Society
invites you to be present at
the eightieth presentation of the
Jacob F. Schoellkopf Medal

to

Dr. Paschalis Alexandridis

*For fundamental discoveries on block copolymer
thermodynamics, structure, and dynamics, and for
development of functional products utilizing self-
assembly methodologies.*

**Tuesday evening the thirtieth
of November, two thousand and ten**

Cash bar with cold and hot hors d'oeuvres at six o'clock
Dinner at seven o'clock
Presentation to follow dinner

Salvatore's Italian Gardens Restaurant
6461 Transit Road, Depew, NY

*Formal dress optional
RSVP by November 20, 2010*

See page 11 for reservation details

LOCAL SECTION ELECTIONS

This issue of *The Double Bond* includes your ballot for executive board elections with terms beginning in 2011, as well as brief biographical statements from the candidates. **Please turn to page 10** and help out in your local chemistry community by returning your ballot promptly.

Hurry! The voting deadline is December 6, 2010.

12TH ANNUAL CHEMLUMINARY AWARDS

A Salute to ACS Volunteers

The 12th Annual ChemLuminary Awards celebration was held in conjunction with the ACS National Meeting in Boston, MA on August 24.

The Western New York local section was recognized at the Awards celebration, with the Student Chapter at Canisius College receiving a ChemLuminary Award for Best Student Chapter National Chemistry Week Event. WNYACS councilor, David Nalewajek, Senior Principal Scientist at Honeywell International, accepted the award on behalf of the Canisius students.

On September 16, 2010, Nalewajek presented the award to students and their advisors at Canisius College.



2010 JACOB F. SCHOELLKOPF MEDAL

The Schoellkopf Medal is the oldest ACS local section award in the nation, and was named in honor of chemical industry entrepreneur Jacob F. Schoellkopf, founder of National Aniline Works. The Jury for the Schoellkopf Award selected Dr. Paschalis Alexandridis, UB Distinguished Professor in the Department of Chemical and Biological Engineering at the University of Buffalo, SUNY as the 2010 Schoellkopf Medal recipient. In making the selection, the jury cited Dr. Alexandridis

for fundamental discoveries on block copolymer thermodynamics, structure, and dynamics, and for development of functional products utilizing self-assembly methodologies.



Paschalis Alexandridis received his Ph.D. (1994) in chemical engineering from Massachusetts Institute of Technology (MIT), followed by postdoctoral research in polymer physical chemistry at Lund University in Sweden. He has served as guest researcher at the Fritz-Haber Institute of the Max-Planck Society in Berlin, Germany, and at the Tokyo University of Science, Japan.

Fundamental research in Alexandridis' group focuses on elucidating the interconnection between molecular interactions, structure of organized molecular assemblies, and their functional properties. Self-assembly, the spontaneous nanoscale organization of functional molecules like surfactants and block copolymers, and directed assembly, hierarchical organization of assemblies and nanoparticles via the application of external fields, are common threads in Alexandridis' research. Ongoing research addresses structured fluids and solvent effects, block copolymer phase behavior and structure, polymer-nanoparticle composites, and nanomaterials synthesis. The capabilities developed by Alexandridis and his coworkers on conferring structure at the nano- and microscale find applications in the health, environment, and energy fields. His research has been supported by government agencies and foundations such as NSF, NIH, NIST, PRF, and by industry, e.g., Dow Chemical, Bausch & Lomb, Kao Corp., and Procter & Gamble.

He has edited two books, "Amphiphilic Block Copolymers" published by Elsevier, and "Mesoscale

Phenomena in Fluid Systems" published by the American Chemical Society, has coauthored over 120 peer-reviewed journal articles and book chapters, about 60 conference proceedings, and is named as co-inventor in 10 patents related to pharmaceutical formulations, superabsorbent polymers, and nanomaterials synthesis.

His publications have received over 6,000 citations to date, with a Hirsch index of 42. Alexandridis has delivered about 90 lectures in universities, national laboratories, and industry, 30 invited talks in national and international scientific conferences, and over 200 contributed conference papers.

Alexandridis' numerous research awards and honors include the Bodossaki Foundation Academic Prize in Applied Science (2005), the international Sigma Xi Scientific Research Society Young Investigator Award (2002), the UB Exceptional Scholar Award (2002), the Japan Research Institute of Material Technology Award (2001), the National Science Foundation CAREER Award (1999), and the American Oil Chemists' Society Outstanding Presentation Award (1994).

At UB, Alexandridis is deeply committed to the education and professional development of his students; 42 undergraduates have carried out research in his lab over the past 12 years, many of whom have gone on to pursue graduate studies at UB or elsewhere. For his teaching and mentoring efforts, Alexandridis has received the SUNY Chancellor's Award for Excellence in Teaching (2006), a Certificate of Recognition from the UB Career Planning/Placement Office (2002), and the American Society for Engineering Education Dow Outstanding New Faculty Award (1999).

Alexandridis' professional activities include service on a number of committees and boards, including the board of directors of the American Institute of Chemical Engineers (AIChE) Nanoscale Science and Engineering Forum. He has been active in organizing conferences for AIChE, where for many years he has been responsible for programming in the "Interfacial Phenomena" area, and for the American Chemical Society (ACS) where he contributed to the organization of the annual ACS Colloid and Surface Science Symposium in 2002, 2003, 2004, and 2010. He is a senior member of AIChE, and a member of the ACS divisions of Colloid and Surface Chemistry, Polymeric Materials: Science and Engineering, and Polymer Chemistry. At UB, Alexandridis has served as Senator for two terms, a member of the School of Engineering and the university-wide Tenure and Promotion Committees, and is currently the Director of Graduate Studies in chemical engineering.

WNYACS LOCAL SECTION ELECTIONS

Ballots must be emailed or postmarked by
December 6, 2010

**Ballot for Officers of the Western New York
Section of the American Chemical Society for 2011**

Chair (vote for 1)
Jeffrey M. Rose

Chair-Elect (vote for 1)
Ronny Priefer

Vice-chair (vote for 1)
Timothy M. Gregg

Secretary (vote for 1)
Mary O'Sullivan

Councilor (vote for 1)
Peter Schaber

Member-at-Large (vote for 1)
William Sullivan

Please **SELECT** and **COPY** the above ballot text to an email and type X's beside the names of the candidates you wish to vote for.

Forward the email to: greggt@canisius.edu by the **Voting Deadline: December 6, 2010.**

To vote on paper, print and detach the ballot on this page, mark your votes with an X and send the ballot to:

Dr. Timothy Gregg
Dept. of Chemistry and Biochemistry
Canisius College
2001 Main St.
Buffalo, NY 14208

CANDIDATE BIOGRAPHIES**For Chair:**

Jeffrey M. Rose is a Buffalo native. He attended Canisius College and graduated *Summa Cum Laude* in 2003 with a B.S. in chemistry. While at Canisius, Jeff served as an organic chemistry teaching assistant for several semesters. In addition, he helped lead an active ACS Student Affiliates Chapter through a two-year presidency. For his graduate studies, Jeff attended Cornell University and worked in the research group of Prof. Geoffrey W. Coates. His research was focused on the development of new polyolefin architectures through the design of late-metal catalysts. While at Cornell, Jeff was honored in 2004 with the *Bayer Teaching Excellence*

Award and in 2008 with the *Tunis Wentink Prize* for outstanding graduate student. Jeff was also involved in Cornell's West Campus Residential Initiative through his role as a Graduate Resident Fellow for the Alice H. Cook House. Jeff graduated from Cornell with his Ph.D. in June 2008. He currently works as a Division Chemist at the DuPont Yerkes Site in Tonawanda.

For Chair-Elect:

Ronny Priefer received his Doctorate in Chemistry at McGill University in 2003. From 2003-2004 he worked in the medicinal chemistry group at Neurochem Inc. in Montreal focusing on Alzheimer's and epilepsy. From 2004-2005 he was employed as a contract research scientist at Starks Associates in Buffalo until starting at Niagara University in the fall of 2005 as Assistant Professor in Organic Chemistry. Early this year he was promoted to Associate Professor. His research focuses on total synthesis, thin film self-assembly multilayers, development of new antimicrobial agents, type II diabetes, cubane derivatives, and new synthetic organic methodologies. He has appeared on local television programs and a recent PBS special. He is the founder/director of the Niagara University Scientific Outreach for Chemistry (NUSOC).

For Vice Chair:

Timothy M. Gregg graduated with a bachelor's degree from Brown University and received his Ph.D. from The University of Arizona, where he worked on organic synthesis methodologies involving cyclopropyl ketones. After a postdoctoral fellowship in the lab of Robert H. Abeles, at Brandeis University, he renewed his interest in 3-membered rings as an NIH postdoctoral fellow and then Research Assistant Professor at the University at Buffalo. He has been Assistant Professor at Canisius College in the Department of Chemistry and Biochemistry since 2005. Tim's interests include organic reaction mechanisms and new methods for organic synthesis. He has served as the WNYACS local section newsletter editor for the past five years, and maintains the local section website at wny.sites.acs.org.

For Secretary:

Mary O'Sullivan has been the Secretary of the WNYACS for the past 10 years. She is a Professor in the Department of Chemistry and Biochemistry at Canisius College, where she teaches organic chemistry and conducts research aimed at developing novel anti-parasitic agents (specifically, anti-trypanosomal agents). Before moving to Buffalo, Mary was an Associate Professor of Chemistry at Indiana State University.

For Councilor:

Peter Schaber is past Chairman and Professor of Chemistry and Biochemistry at Canisius College. He received his B.S. in Chemistry from Canisius College in

1975, and his Ph.D. in Inorganic Chemistry from the State University of New York at Buffalo in 1980, under the direction of Dr. Robert D. Beremen. From there he accepted a postdoctoral fellowship at Argonne National Laboratory and conducted research under the direction of Dr. J. J. Katz. Dr. Schaber has published over two dozen articles on a wide range of topics in synthesis, crystallography and analysis. In his 25 years at Canisius College, he has been successful in securing over \$850,000 in external grants to support curriculum modification, instrument acquisition and chemical research. He has held the position of Science Advisor to the Food and Drug Administration, Buffalo District, and has acted as a consultant to several additional governmental agencies (NASA, Erie County Crime Lab etc.), and local, national and international industrial firms. Dr. Schaber has been an ACS member since 1975 and has held the positions of treasurer, vice-chair, and chair in the WNY Section. Dr. Schaber was the Program Director when the WNYACS won its first national Phoenix Award in 1980 for "Best High School Program" during National Chemistry Week.

For Member-at-Large:

William Sullivan is a lifelong resident of WNY and has lived in Cheektowaga for the past 39 years. He is an analytical chemist with over 29 years experience, and is currently employed in that capacity by Praxair in their R&D group. He has worked for a number of employers, and has been an ACS member for 27 years.

INTERNATIONAL YEAR OF CHEMISTRY (IYC)

ACS needs your ideas!

Through the IYC-2011 initiative "365: Chemistry for Life," a different aspect of chemistry will be highlighted every day on www.acs.org. Submit ideas for a favorite element, compound, discovery, process, chemist, or chemistry innovation at www.acs.org/iyc2011, by September 17, 2011. Suggestions should fall into one of four categories:

Energy	Environment
Materials	Health

Selected submissions will receive recognition and an IYC-2011 pin and t-shirt.

IYC-2011 toolkits are now available. Visit our website to view and download templates, guidelines and ideas for planning and celebrating IYC 2011. Don't see what you need? Let us know at iyc2011@acs.org.

Subscribe to the International Year of Chemistry Bulletin Now! Sign-up to receive the monthly IYC Bulletin intended for those individuals involved in grassroots promotion, planning and execution of IYC programs, events and initiatives. Visit our website to learn more about our many activities and initiatives celebrating IYC-2011.

**2010 JACOB F. SCHOELLKOPF
AWARD DINNER**

For reservations, please call Alice Steltermann
at the Canisius College Department of
Chemistry and Biochemistry at 716-888-2340.

Dinner Selections:

Filet Mignon

Penne ala Roma - vegetarian (sauteed in olive oil,
wild mushrooms, garlic, tomato, artichokes and Italian
spices)

Fresh Poached Salmon (served with a lobster dill
sauce)

Wine served with meal.

\$40.00 per person (\$20.00 per student)

Tickets may be picked up at the door.

Please respond by November 20, 2010.

Make checks payable to:

Western New York Section - American Chemical Society

PRESIDENT HONORS FOUR ACS MEMBERS

Four ACS members are among 10 people honored by President Barack Obama as winners of the National Medal of Science and the National Medal of Technology & Innovation for 2010. The medals are the highest honors given to scientists and engineers by the US government. Stephen J. Benkovic, Pennsylvania State University (Central Pennsylvania local section); Esther M. Conwell, University of Rochester (Rochester local section); and Marye Anne Fox, University of California San Diego (San Diego local section) were awarded the National Medal of Science. Helen M. Free, Miles Laboratories (St. Joseph Valley local section) was awarded a National Medal of Technology & Innovation. Free was president of ACS in 1993. Her work on dip-and-read diagnostic strips was named a National Historic Chemical Landmark this year. They will receive their medals at a White House ceremony later this year. See a C&EN story about the awards at pubs.acs.org/cen/news/88/i43/8843news1.html.

60 YEARS AGO IN THE DOUBLE BOND

The following is from the November, 1940 Double Bond



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