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

Volume 85 August 2013

2013 SCHOELLKOPF MEDAL

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

to

Dr. Mark T. Swihart

in recognition of his pioneering research in the field of inorganic nanoparticle synthesis and processing, and for his outstanding record of accomplishment in scholarship, teaching, and service in the field of chemistry in Western New York

Tuesday evening the seventeenth of September two thousand thirteen

Cash bar with cold and hot hors d'oeuvres at six o'clock

Dinner at seven o'clock

Presentation to follow dinner

Samuel's Grande Manor 8750 Main Street Williamsville, NY

Formal Dress Optional R.S.V.P. by September 9, 2013

(further details are found on pages 6 and 7)

THE SCIENCE OF FRACKING IN NEW YORK

Tony Ingraffea, Dwight C. Baum Professor of Engineering at Cornell University, will speak at Canisius College on October 3, 2013. Ingraffea, whose research concentrates on computer simulation and physical testing of complex fracturing processes, is a sought-after speaker who focuses on fact-based discussions of petroleum extraction using modern methods, including hydraulic fracturing.

WNYACS members, as well as interested members of the public are invited to attend Ingraffea's talk at the Montante Cultural Center on the Canisius College campus starting at 7:00 PM. More information can be found on the WNYACS website: wny.sites.acs.org.

CALL FOR 2013 OFFICER NOMINATIONS

If you are interested in the goals and activities of the American Chemical Society, then get involved with the Western New York Local ACS Section. We are looking for local ACS members who can bring new ideas and energy to the Local Section Executive Committee. We will be filling a Member-at-Large position with a 2-year term, and we are seeking leaders for other positions.

If you are interested in becoming more active in our section, or wish to nominate someone, please contact a member of the current executive board listed at the end of this newsletter.

Nominations, including contact info for you and the nominee, should be sent to Dr. Timothy Gregg by email at greggt@canisius.edu or (716) 888-2259 by September 15, 2013.

Elected officers must be members of ACS.

Details concerning the election for 2013 officers will be posted in an upcoming issue of the *Double Bond*.

2013 SCHOELLKOPF MEDAL

The Schoellkopf Medal is the oldest award of the American Chemical Society (ACS) given by a local section. The Jury for the Schoellkopf Award of the ACS selected Dr. Mark T. Swihart, from the Department of Chemical and Biological Engineering at the University at Buffalo, SUNY, as the 2013 Schoellkopf Award recipient. Dr. Swihart will be presented with the Schoellkopf Medal in recognition of his pioneering research in the field of inorganic nanoparticle synthesis and processing, and for his outstanding record of accomplishment in scholarship, teaching, and service in the field of chemistry in Western New York.



Mark T. Swihart was raised in rural Indiana, near the Amish-Mennonite community of Goshen, where he graduated from Fairfield Jr.-Sr. High School in 1988. He earned a B.S. in Chemical Engineering (summa cum laude) from Rice University in 1992, and a Ph.D. in Chemical Engineering in 1997 from the University of Minnesota, as a National Science Foundation graduate fellow. His Ph.D. research focused on gas-phase chemical kinetics and detailed modeling of chemical vapor deposition processes. He then spent one year as a postdoctoral researcher in the Particle Technology Laboratory in the Department of Mechanical Engineering at the University of Minnesota. There, he studied the nucleation and growth of silicon nanoparticles during thermal decomposition of silane, and also worked on thermal plasma chemical vapor deposition of diamond. Professor Swihart joined the faculty of the department of Chemical and Biological Engineering at the University at Buffalo (SUNY) in 1998, and has been a full professor since 2008. From 2007 to the present he has directed a university-wide strategic initiative in Integrated Nanostructured Systems. Since 2012, he has also served as founding co-director of UB's Center of Excellence in Materials Informatics.

His current research interests include synthesis, processing, and applications of nanoparticles and other nanomaterials, with particular emphases on gas-phase synthesis of nanoparticles and on the computational modeling of nanomaterials processing. His group has been first in the world to demonstrate several applications of silicon nanocrystals (silicon quantum dots) in bioimaging. They are also widely known for their work in solutionphase synthesis of anisotropic and multi-component nanomaterials, and for their computational studies of the nucleation and growth of silicon nanoparticles in the gas phase. More recently, in collaboration with researchers from Praxair, they have developed a new process for gasphase synthesis of multi-component metal nanoparticles of well-controlled composition. He has co-authored more than 120 peer-reviewed journal manuscripts and three book chapters, has co-edited three proceedings volumes. and is a co-inventor on five issued U.S. patents. According to Google Scholar, this body of work has been cited more than 4500 times.

Dr. Swihart is a recipient of the Kenneth Whitby award from the American Association for Aerosol Research and the J.B. Wagner award from the Electrochemical Society, as well as several UB awards for research excellence. He has been named "Professor of the Year" by vote of the UB chemical engineering undergraduates four times, and has received outstanding faculty mentor awards from UB's Collegiate Science and Technology Entry Program, the Louis Stokes Alliance for Minority Participation, and the McNair Scholars program. Dr. Swihart has been a member of several journal editorial boards, and currently serves as an editor for Aerosol Science and Technology, and on the Board of Consulting Editors of AIChE Journal. He has served as research advisor to approximately forty current and former M.S. and Ph.D. students and more than seventy undergraduate researchers at UB.

Swihart lives in Amherst, New York, near the UB North Campus, with his wife Wendy and three children, Rachel (9), Jacob (11), and Sarah (13). They are members of Amherst Community Church in Snyder, NY, where Mark has led science activities during Vacation Bible School for several years. Favorites have included leaf-blower powered hovercrafts, high-flying trash-cans, a kiddie pool full of corn starch and water, and homemade pyrotechnics.



2013 SCHOELLKOPF AWARD BANQUET

Tuesday, September 17, 2013 Samuel's Grande Manor

For reservations, please call Alice Steltermann at the Canisius College Department of

Chemistry and Biochemistry (716) 888-2340

Dinner Selections:

Filet Mignon

Chicken Samuel

Boneless breast of chicken with cheese, prosciutto, basil and herbs wrapped in puff pastry

Roasted Salmon

Encrusted with macadamia nuts and finished with citrus lime sauce

Vegetarian/Vegan

Pesto linguini tossed with sundried tomatoes, vegetable medley and garlic oil

Wine served with meal

\$40 per person (\$20 per student)

Please respond by September 9, 2013.

Make checks payable to Western New York Section – American Chemical Society.



ACS ON CAMPUS COMES TO BUFFALO

ACS on Campus is an outreach program dedicated helping to students. post-docs, and faculty advance their careers. The program brings leaders in chemistry, publishing, research, science communication, and career development to university campuses to present seminars and workshops.



The University of Buffalo will host ACS on Campus on Monday, September 23 from 6:00 pm-8:00 pm at Brennan's Bowery Bar and Restaurant and on Tuesday, September 24 from 8:30 am-4:00 pm at Silverman Library. Students and faculty are invited to learn about topics such as the basics and ethics of scholarly publishing, SciFinder® and exploring a career in industry or government. A complimentary lunch will also be provided for all registered attendees. Register now for the event on the ACS on Campus website:

acsoncampus.acs.org/event/?ee=80

Please visit the website for location and speaker information as well as additional details. The event is free, but registration is required in order to attend. Questions can be sent to acsoncampus@acs.org.

Share your thoughts and pictures with the ACS on Campus community on Facebook and Twitter. Give us a shout-out with **@ACSonC** and use the hashtag **#ACSatUB**.

We look forward to seeing you on campus!

Links

Event page:

acsoncampus.acs.org/events/university-at-buffalo-09-23-2013/

Registration:

acsoncampus.acs.org/event/?ee=80

Twitter:

twitter.com/ACSonC



COUNCILORS REPORT

American Chemical Society 245th ACS National Meeting New Orleans, LA

April 7-11, 2013

Attendance Report

As of the morning (April 11, 2013), the ACS Spring National Meeting had attracted 15,596 registrants, including 8,105 regular attendees and 5,793 students. The meeting had 11,232 papers presented.

Member statistics

Society membership at the end of 2012 was 163,322 or 893 lower than the total for year-end 2011, despite recruiting 24,943 new members. The net loss occurred primarily in the regular, full member category. There was continued growth in both the student member undergraduate and international categories, which helped mitigate the overall decline in membership. The membership affairs committee approved five pilot market data tests to increase membership.

Society Finances

Despite the sluggish economy, ACS generated favorable operating results in 2012. Total revenue was \$490.7 million, which was \$6.1 million or 1.3% greater than the approved budget, and 3.9% higher than 2011. The net from operations was \$20.2 million, or \$4.3 million favorable to budget. This was largely attributable to better-than-expected performance by ACS publications and CAS, and represents the Society's 9th consecutive year of positive operating results.

2014 Member Dues

The council voted to set the member dues for 2014 at the fully escalated rate of \$154. This rate is established pursuant to an inflation-adjustment formula in the ACS constitution and bylaws.

Local section allotment formula

The council voted to approve a new formula for the distribution of allocations to individual local sections beginning in 2014. The new allocation will be divided as follows: Base Allotment (49%); Per Member Allotment (43%), and LSAC Program Funds (8%).

Divisional Activities Name Change Request

The divisional activities committee (DAC) received a request from the division of colloid and surface chemistry to change its name to the division of colloids, surfaces and nanomaterials. Six divisions have registered opposition to the proposed name, largely due to the use of the term 'nanomaterials'. DAC will ask council to vote on the new name in Indianapolis, with a recommendation to approve.

Revision to Charter Bylaws for the International Chemical Sciences Chapters

The council voted to approve changes to the charter bylaws for new international chemical sciences chapters. These changes will guide the committee on constitution and bylaws in reviewing bylaw changes before proposed changes are approved by the membership of the new chapter.

New International Chemical Sciences Chapter

The council voted, in concurrence with the board of directors, to approve the petition to charter the Romanian international chemical sciences chapter, consisting of the territory of Romania.

Election Results

The committee on nominations and elections presented to the council the following nominees for selection as candidates for president-elect, 2014: G. Bryan Balazs, Charles E. Kolb, Jr., Carolyn Ribes, and Diane Grob Schmidt. By electronic ballot, the council selected G. Bryan Balazs and Charles E. Kolb, Jr. as candidates for 2014 President-elect. These two candidates, along with any candidates selected via petitions, will stand for election in the fall national election.

Submitted to members of the WNY-ACS section, Dave Nalewajek, Councilor

70 YEARS AGO IN THE DOUBLE BOND

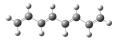
The following excerpt appeared in the June/July, 1943 Double Bond

The Office of Price Administration on June 14 offered a comforting thought to its rationing board members. It follows:

"Who said sacrifice? Our forefathers did without sugar until the 13th century, without coal fires until the 14th century, without potatoes until the 16th, without coffee, tea and soap until the 17th, without pudding until the 18th, without gas, matches and electricity until the 19th, without canned goods until the 20th, and we have had automobiles only for a few years. Now, what was it we were complaining about?

The memorandum didn't mention that they got along without OPA until 1942.

--Chicago Tribune



WNYACS Officers & Staff

WNYACS Section Chair 2013

Timothy Gregg Canisius College (716) 888-2259 (w) greggt@canisius.edu

Chair Elect 2013 Sarbajit Banerjee University at Buffalo, SUNY (716) 645-4140 (w) sb244@buffalo.edu

Vice-Chair 2013 Jeremy Steinbacher Canisius College (716) 888-2343 (w) steinbaj@canisius.edu

Secretary 2013-2014 Mary O'Sullivan Canisius College (716) 888-2352 (w) osulliv1@canisius.edu

Treasurer 2012-2013 Andrew Poss Honeywell (716) 827-6268 (w) andrew.poss@honeywell.com

Councilor 2011-2013 Peter Schaber Canisius College (716) 888-2351 (w) schaber@canisius.edu

Councilor 2013-2015 David Nalewajek Honeywell (716) 827-6303 (w) david.nalewajek@honeywell.com

Newsletter Editor Timothy Gregg Canisius College (716) 888-2259 (w) greggt@canisius.edu Schoellkopf Award 2013 Jeffrey Rose DuPont (716) 879-4597 (w) jmr222@mac.com

Education Committee
Ronald Spohn
Praxair
(716) 879-2251 (w)
ronald_spohn@praxair.com

Chemistry Olympiad Mariusz Kozik Canisius College (716) 888-2337 (w) kozik@canisius.edu

National Chemistry Week
David Nalewajek
Honeywell
(716) 827-6303 (w)
david.nalewajek@honeywell.com

Senior Chemists
Joseph Bieron
Canisius College
(716) 888-2357 (w)
bieron@canisius.edu

Member-at-Large South 2013-2014 William Sullivan Praxair (716) 879-7794 (w) william sullivan@praxair.com

Member-at-Large North 2012-2013 Sarah Evans Canisius College (716) 888-2342 (w) sarah.evans@canisius.edu

> Newsletter Assistant Editor Alice Steltermann Canisius College (716) 888-2340 (w) stelter@canisius.edu

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