ACS of Western New York

Double Bond

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

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NOVEMBER SECTION MEETING

Join us in evaluating one of the newest chemistry enterprises in the Western New York area, Resurgence Brewing Co. All members (along with one guest) are invited to this section meeting and social event on Wednesday, Nov. 5, 2014. A cover charge of $5 per person gets you and your guest in on a 1 hour Open Bar and a tour of the brewery at 1250 Niagara St., Buffalo.

WNY ACS Fall Social Event at

RESURGENCE BREWING CO.

Wednesday, November 5 at 6:30 pm

Resurgence Brewing Co.

1250 Niagara St., Buffalo

www.resurgencebrewing.com

- Please RSVP by Friday, Oct. 31 to Alice Steltermann if you (and guest) plan on attending. (888-2340; e-mail: stelter@canisius.edu)
- $5 cover charge payable at door
- We are planning a tour and will have a one-hour open bar in the Beer Garden. We will also have some snacks.
- There will be giant jenga, darts, cornhole, and other "pub games" available. Food can be purchased, but the menu is very limited (check web-site).

SLATE OF CANDIDATES FOR LOCAL SECTION POSITIONS

This issue of the *Double Bond* includes an initial slate of candidates for section officer positions with terms beginning in January 2015. Candidate biographical information is on page 2. Any member may still nominate additional candidates by contacting the editor or secretary as soon as possible (contact information is at the end of this newsletter).

Candidates:

Chair	Jeremy L. Steinbacher
Chair-Elect	Andrew S. Murkin
Vice-Chair	Jason B. Benedict Luis Sanchez
Secretary	Christopher J. Patridge
Member-at-Large	Sarah E. Evans William Sullivan

Information on voting will be published in next month's edition of the *Double Bond.*

RICHARD SELECTED AS ACS FELLOW IN 2014

Congratulations go to Prof. John Richard of the University at Buffalo Department of Chemistry, who has been named a 2014 Fellow of the American Chemical Society. The 2014 ACS Fellows were inducted during a ceremony at the 248th ACS National Meeting in August. The ACS Fellows Program recognizes outstanding achievements in and contributions to science, the profession, and the Society.

Dr. Richard is a UB Distinguished Professor of Chemistry, is a former Secretary of the ACS Division of Biological Chemistry, and was the 2009 recipient of the Western New York Section's Schoellkopf Medal.

2015 WNYACS CANDIDATE STATEMENTS

For Chair (2015):

Jeremy L. Steinbacher, assistant professor of chemistry at Canisius College, has teaching interests that include organic chemistry and materials/biomaterials chemistry. His research interests are advanced materials for the treatment of cancer, in particular, particle-based drug-delivery agents, "smart" contrast agents for magnetic resonance imaging, and bio-nanoscience and functional polymers with novel architectures.

Prior to Canisius, Steinbacher was a National Institutes of Environmental Health Sciences Post-doctoral Fellow for the Department of Chemistry and Environmental Pathology at the University of Vermont. Steinbacher obtained a doctorate and a master's in chemistry and chemical biology from Cornell University. He also holds a bachelor's degree in chemistry from Franklin & Marshall College.

For Chair-Elect (2015):

Andrew S. Murkin is an assistant professor in the Department of Chemistry at the University at Buffalo. Bridging multiple disciplines including organic chemistry, biochemistry, and biophysical chemistry, his research is centered on enzyme mechanisms and inhibitor design, with particular emphasis on transition state formation and mimicry. As part of his NSF CAREER award, he is engaged in outreach with middle schools and high schools in the greater Buffalo area.

Murkin received his B.S. in chemistry and biochemistry and his Ph.D. in chemistry at the University of British Columbia. Prior to starting his independent career at the University at Buffalo in 2009, he worked as a postdoctoral researcher in the laboratory of Vern L. Schramm at the Albert Einstein College of Medicine.

For Vice-Chair (2015):

Jason B. Benedict is an Assistant Professor in the Department of Chemistry at the University at Buffalo. His research seeks to understand and ultimately control the interaction of light and matter in crystalline materials. From photo-responsive metal-organic frameworks to low-flux upconversion materials, his research is focused on the design and synthesis of next-generation smart 'materials by design'. Jason is also active in outreach programs; he recently chaired and organized the 7th annual Western New York Undergraduate Research Symposium and will be organizing the first ever U.S. Crystal Growing Competition this fall – a fun STEM activity for students in grades K-12.

Jason received his B.S. in Chemistry from Arizona State University. He received his Ph.D. from the University of Washington in Seattle with Bart Kahr. Jason worked as a postdoctoral researcher with Philip Coppens at UB before joining the faculty in 2011. Jason is starting the fourth year of his independent career at the University at Buffalo.

Luis Sanchez received his Ph.D. in Organic Chemistry from Michigan State University in 2010. After post-doctoral work at Merck Research Laboratories and with Professor Amos B. Smith III at the University of Pennsylvania, he moved to Lewiston, NY in 2013 to become Assistant Professor of Chemistry at Niagara University. He serves as a reviewer for ACS publications and is the advisor of the ACS student chapter at NU. Besides doing research and teaching, Luis enjoys running long distances and is a lifelong theater lover. He can be contacted at lsanchez@niagara.edu.

For Secretary (2015-2016):

Christopher J. Patridge is an Assistant Professor of Chemistry at D'Youville College in Buffalo. His current focus has been developing his teaching skills in the courses aimed at students pursuing careers in the health professions. His research interests involve the synthesis and geometric and electronic characterization of novel-structured and/or low dimensional inorganic materials for electrochemical storage. Dr. Patridge received his BA from the University at Buffalo and then returned to UB to complete his Ph.D. with Sarbajit Banerjee. His thesis involved synchrotron work in absorption spectroscopy leading to a 2 year NRC postdoc with Karen Swider-Lyons in the Chemistry Division at the Naval Research Laboratory in Washington, DC. He moved back to Buffalo in 2013, with his wife and two children, to begin his academic career. The move was prompted by a desire to find a position that balanced the demands of teaching and research along with more personalized student/professor interaction that is not capable at larger institutions. He is looking forward to participating and serving the committee making a meaningful contribution to our WNYACS chapter.

For Member-at-Large (2015-2016):

Sarah E. Evans is an assistant professor of Biochemistry at Canisius College. Her teaching interests include biochemistry and bioinorganic chemistry. In her research, Evans uses metal complexes as tools to model biological events, including metal regulatory pathways in bacterial cells. Applications include investigations of the metal- and DNA-binding properties of a vital transcription factor from *Borrelia burgdorferi*, the bacteria that causes Lyme disease. Evans served as a post-doctoral fellow in the University of Maryland's School of Pharmacy. She obtained a doctorate in chemistry from the University of Maryland, Baltimore County, and a bachelor's degree in chemistry from SUNY Geneseo.

William Sullivan is a lifelong resident of WNY and has lived in Cheektowaga for the past 44 years. He is an analytical chemist with over 40 years experience, and is currently employed in that capacity by Praxair in their R&D group. He has worked for a number of area employers over those years, and has been an ACS member for 31 years.

75 YEARS AGO IN *THE DOUBLE BOND*

The 1939 *Double Bond* regularly published "Brain Teasers" of such esoteric nature that even having the answers doesn't help me to understand why they were pondering these things in the first place...

• Other things being equal, who makes the most noise--twins crying at 4 ft, or triplets crying at 6 ft?

Answer: The intensity of sound, as well as the intensity of light, varies as the square of the distance, Therefore, to the listener, the twins would be more noisy.

• A chemist prepared an organic compound by a reaction between sodium phenolate and nonamethylene dibromide. He conducted two experiments, under slightly different conditions, using the same starting materials in identical amounts each time. The phenoxy bromide was obtained in each case but in one reaction, about twice as much of the desired product by weight was isolated. Nevertheless, when the chemist came to calculate the yield, the percentage yield in each case was exactly the same. How is this possible?

Answer: The chemist calculated his yield by comparing the amount of product obtained with the amount of starting material actually used in producing it. Since he recovered unchanged starting material in each case, and since the manual operations were equally efficient, he naturally calculated the same percentage yield in each case.

• Ask your wife this one (Edit: ...or not!). How can two children be born of the same mother at the same time at the same place and still not be twins?

Answer: They could be two out of a set of triplets...

• The other day, a group of people was having a picnic on Grand Island. As the refreshment committee was about to tap the keg, a member stepped up and said, "Here is a keg of good New York beer. I have two measures, one of 5 pints and one of 3 pints. Please show how it is possible for me to put a true pint into each of the measures."

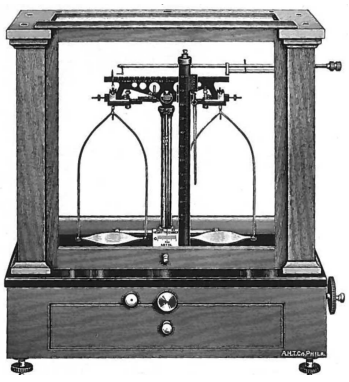
Answer: It can be arranged that only 8 pints of beer remain in the keg by first filling the 3 and 5 pint measures and allowing the remainder of the keg to run to waste (Edit: or waist). The remainder of the solution is straight forward with 6 pints of beer being drunk in the process.

• When the day after tomorrow is yesterday, today will be as far from Sunday as today was from Sunday when the day before yesterday was tomorrow. What day of the week was this?

Answer: The day of the week was Sunday. Twelve o'clock Wednesday night also answers the condition if one can imagine this instant as a day of the week.

• During the winter of 1916 there was found in a foreign territory the corpse of a soldier who had died during a previous war. If the number of days of the month of the death of the soldier is multiplied by the length of his halberd in feet, by half of the age of his chief, and by half the interval, counted in years, between the death of the soldier and his exhumation, the number found is 451,066. Find the month and the year of the death of the soldier, the length of his halberd, the name of the battle, the name of the commander of the expedition and the age at which he died.

Answer: This depends on finding the prime factors of the number 451,066 and the identification of these units. These prime factors are easily shown to be 2, 7, 11, 29 and 101. The length of the halberd must be 7 feet, and the factors 2 and 101 obviously apply to finding the year of the battle. 29 is the number of days in the month, so the month is February in a leap year. The battle, therefore, occurred in the year 1512. The battle of Ravenna was fought in Feb. 1512. Gaston de Foix was the commander for the French and he died at the age of 22. If the above solution is not unique, the Editor herewith offers his apologies (Edit: likewise...)



WNYACS Officers & Staff

ISSUE COPY DEADLINE: FIRST OF MONTH PRIOR TO PUBLICATION

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