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

Volume 91 September 2019

# THE 89<sup>TH</sup> JACOB F. SCHOELLKOPF MEDAL

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

# Jochen Autschbach

Tuesday evening, the seventeenth of September two thousand nineteen

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

Dinner at seven o'clock

Presentation to follow dinner

# The Hotel Lafayette

391 Washington St. | Buffalo, NY 14203

Formal dress optional R.S.V.P. by September 10, 2019



Visit the WNYACS website: <a href="https://wnyacs.org/">https://wnyacs.org/</a>

# 2019 SCHOELLKOPF AWARD DINNER

For reservations, please call
Alice Steltermann at the Canisius College
Department of Chemistry & Biochemistry
(716) 888-2340

Dinner Selections:

Prime Rib with au jus

Chargrilled Chicken Breast with red peppers, spinach, & provolone

Cheese Tortellini with sundried tomato cream sauce

Vegan Tofu Pepper

Wine served with meal

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

Name:	
Guest Name(s):	
Number of Prime Rib	
Number of Chargrilled Chicken	
Number of Cheese Tortellini	
Number of Vegan Tofu Pepper	
Amount	\$

# THE 2019 JACOB F. SCHOELLKOPF MEDAL



The award jury has selected Jochen Autschbach, Professor in the Department of Chemistry, University at Buffalo, to receive the 2019 Jacob F. Schoellkopf Medal

...in recognition of his pioneering contributions to the development of quantum mechanical methods for predicting the spectroscopic properties of heavy-element molecules and for his outstanding dedication to teaching and mentoring.

Jochen Autschbach grew up in Germany (or West Germany, as it was called until 1990) in the small city of Siegen, north of Frankfurt. After finishing high school, Jochen did 18 months of national service, helping individuals living in an institution for mentally disabled people. In 1990, he enrolled at the University of Siegen to study Chemistry. Jochen completed a 'Diplom' degree in Chemistry in 1996. (This degree is comparable to the level of a chemistry graduate student in the US who has completed all coursework and candidacy requirements.) Remaining in Siegen, under the guidance of Prof. W. H. Eugen Schwarz, Jochen then spent three years researching relativistic effects on atomic orbitals and chemical bonds, by performing quantum theoretical calculations and writing some of the code used for this research. In 1999, Jochen obtained a doctor of natural sciences (Dr. rer. nat.) degree. He then tried to find a position in the chemical industry, but due to an economic recession, and Jochen's field of specialization, there were hardly any positions available.

To buy time, Jochen became a postdoctoral researcher with Prof. Tom Ziegler at the University of Calgary, Canada, in the Fall of 1999. This turned out to be a pivotal decision. In Calgary, Jochen developed and applied density functional methods for calculating NMR J-coupling constants, optical rotation, and circular dichroism spectra. Jochen enjoyed his postdoc research so much that he decided to pursue an academic career. He met his future wife, Eva, also a chemist, soon after his

arrival in Calgary. In November of 2002, Jochen moved to the University of Erlangen in Germany where he was expecting to spend three to five years as a Emmy-Noether Fellow of the German science foundation, while Eva was pursuing a PhD at the Max Planck Institute for solid state research ('Festkoerperforschung') in Stuttgart. On his travel to Erlangen, Jochen had a stopover in Buffalo for an interview at the University at Buffalo (UB), and soon received an offer that was too good to turn down. He joined the UB Department of Chemistry in August of 2003 as an Assistant Professor, was promoted to Associate Professor with tenure in 2007, and became Full Professor in 2009. In 2018, he was appointed as John D. & Frances H. Larkin Foundation Chair in Chemistry.

Jochen's research is in theoretical and computational chemistry, and focuses on response properties of molecules and extended systems, dynamic phenomena, relativistic quantum chemistry, and chemical bonding, with applications in spectroscopy, magnetic resonance, optical activity, and nonlinear optics. As of 2019, Jochen has published over 300 original research articles and book chapters and given over 100 invited conference talks and seminars. He has just completed the manuscript for a comprehensive textbook on quantum theory for students and researchers working in chemistry, chemical engineering, and other chemistry-related fields. Jochen's research has received financial support from the National Science Foundation since 2005 and the US Department of Energy since 2009.

When he is not working, Jochen enjoys making dinner for Eva and their small children, reading, hiking, watching stand-up comedy, and - on vacation - scuba diving. The couple continues to enjoy great chemistry.



"I'M ON THE VERGE OF A MAJOR BREAKTHROUGH, BUT I'M ALSO AT THAT POINT WHERE CHEMISTRY LEAVES OFF AND PHYSICS BEGINS, SO I'LL HAVE TO DROP THE WHOLE THING!"

WNYACS Double Bond page 3 of 5 Vol. 91, September 2019

### COUNCILOR'S REPORT

258<sup>th</sup> ACS National Meeting San Diego, California August 25-29, 2019

# **Summary of Governance Issues and Actions**

The following summary is provided to highlight key actions of the ACS Council meeting held August 28, 2019, and the Board of Directors meetings held August 23-25, 2019, at the 2019 ACS fall national meeting in San Diego, California.

# Election Results: Elected Committees of Council

- By electronic ballot, the Council elected Anne M. Gaffney, Lydia E. M. Hines, Will E. Lynch, and Sally B. Peters for three-year terms (2020-2022), and Dee Ann Casteel for a one-year term (2020) on the Council Policy Committee (CPC).
- By electronic ballot, the Council elected Michelle V. Buchannan, Charles E. Cannon, Alan A. Hazari, Amber S. Hinkle, and Thomas H. Lane for three-year terms (2020-2022) on the Committee on Nominations and Elections (N&E).
- By electronic ballot, the Council elected Lisa M. Balbes, D. Richard Cobb, Emilio X. Esposito, Jason E. Ritchie, and Stephanie J. Watson for three-year terms (2020-2022) on the Committee on Committees (ConC).

# Other Council Actions

# **Continuation of Committees**

 On the recommendation of the Committee on Committees, and with the concurrence of the Council Policy Committee, Council approved the continuation of the Committees on International Activities and Professional Training, contingent on approval by the Board of Directors.

# **Establishment of an International Chemical Sciences Chapter**

 On the recommendation of the Committee on International Activities, and with the concurrence of the Council Policy Committee, Council approved the creation of an ACS International Chemical Sciences Chapter in the Republic of Georgia, contingent on approval by the Board of Directors.

# **Redistricting of a Local Section**

• On the recommendation of Nominations & Elections, the Council voted that the Pittsburgh Local Section be transferred from District II to District III in order to bring District III's member population into compliance with bylaw requirements.

[Ed. note: The Western New York Section is in District 1]

#### Resolutions

The Council passed resolutions

- in memory of former Ex. Director John Kistler Crum;
- in memory of other deceased Councilors;
- in recognition and celebration of the 100th birthday of Gerald Meyer, and his 80 years of service to the Society. Gerald was actually in attendance at this meeting and looked great for his age. We should all be so fortunate.
- in gratitude for the officers and members of the San Diego Local Section - host Section for the 258th National Meeting, the divisional program chairs and symposium organizers, and ACS staff; and
- acknowledging Bonnie A. Charpentier's service as ACS President and presiding officer of the Council.

# Highlights from Committee Reports

# San Diego Meeting Attendance

The theme of the 258<sup>th</sup> ACS National Meeting was "Chemistry and Water." As of Tuesday evening, August 27, attendance was:

Attendees	7,488
Students	3,095
Exhibitors	995
Expo only	430
Guest	401
Total	12,409

# **Budget and Finance**

The Society's 2019 financial performance through July 31<sup>st</sup> yielded a Net from Operations of \$30.1 million. This is \$10 million favorable to the Approved Budget, and \$1.7 million less than the same period in 2018. Total revenues are right on budget at \$338 million. Total expenses are \$308 million, which is \$10 million favorable to budget.

The committee considered two 2020 program funding reauthorization requests, and on its recommendations, the Board subsequently approved funding for the *ChemIDP* and the *International Student Chapters Programs* in the 2020 Proposed Budget.

The committee considered new program funding requests for 2020 as well. The Board subsequently approved funding for the *Green and Sustainable Chemistry Education Resources* pilot for inclusion in the 2020 Proposed Budget.

The Society is expected to end the year in compliance with each of the five Board-established financial guidelines. Additional information can be found at <a href="https://www.acs.org">www.acs.org</a>, at the bottom of the page, click 'About ACS', then 'Financial'.

WNYACS Double Bond page 4 of 5 Vol. 91, September 2019

### **Nominations and Elections**

The Committee on Nominations and Elections solicits Councilors' input of qualified individuals for President-Elect and/or Directors for future consideration. Suggestions can be sent to <a href="mailto:nomelect@acs.org">nomelect@acs.org</a>.

Ballots for the 2019 fall national election will be distributed starting on September 30<sup>th</sup>, with a voting deadline four weeks later on October 25<sup>th</sup>. ACS members eligible to vote and with an email address on file will receive an <u>electronic ballot</u> with the option to request a paper ballot. Those members with no email address on file will be sent a paper ballot with the option to vote electronically. The ACS election vendor, Survey & Ballot Systems, will send three email reminders during the voting period to those who have not voted as of the reminder dates. N&E encourages all ACS members to vote for President-Elect and the Constitutional Amendment. Election information may be viewed at <a href="https://www.acs.org/elections">www.acs.org/elections</a>.

### The Board's Committees

The Board received and discussed reports from its committees on Budget and Finance, Professional and Member Relations, Strategic Planning, Executive Compensation, and Pensions and Investments, as well as the ACS Governing Board for Publishing, the Task Force on the Future of Meetings, and the Society Programs Globalization Board liaison. In particular,

- On the recommendation of the Society Committee on Budget and Finance, the Board voted to set the advance member registration fee for national meetings held in 2020 at \$505 – this amount is equal to the 2019 fee, adjusted for inflation – and to approve or reauthorize several program funding requests. (It's getting very expensive to attend the National Meetings)
- The Board received a status update from the Task Force on the Future of Meetings. The task force has been charged with performing a "deep dive" on the current portfolio of ACS meetings and conferences, identifying current offerings, evaluating governance and staff support structures, revenue streams, financial targets, and business models, and recommending actions that will ensure the sustainability and future relevance of that portfolio.
- On the recommendation of the Joint Board-Council Committee on Publications and an Editor Selection Committee, the Board voted to approve the appointment and reappointment of editors-in-chief for ACS journals. Their names will be announced once they have been notified and practical arrangements for their service to ACS have been finalized.

If you need more info on any of these summary items, shoot me an email.

Dave Nalewajek, Councilor david.nalewajek@gmail.com

# 80 YEARS AGO IN THE DOUBLE BOND

The June/July, 1939, edition of the Double Bond included an essay on Yachting by Bjarne Klaussen. In hopes of extending summer, here are excerpts from "Small Talk on Small Boats"

Yachting is a sport which to me is the most interesting and the most worthwhile hobby in the world. A whole life of study will never bring perfection and a feeling that you know it all, but I claim that in sailing you need to know more about more things than in any other sport. It is an intriguing and fascinating business and after you are bitten it leaves you satisfied but slightly queer for the rest of your life.

To be a yachtsman all you need is money. Any one of you, and I am not talking to any member off our own profession because cash is usually needed, who has a bankroll can buy a motor boat and overnight become an important and dominating skipper, without consulting anyone, without having to take any tests, without needing any licenses whatsoever, and although you are required to equip your boat with red, green and white lights, you can be completely color-blind, in fact you can be completely blind and no one cares...

In starting out into the harbor we have to be a little careful about the flags we fly. The Yacht Ensign must always be flown aft on a motor boat. On a sail boat at anchor it must also be flown aft but when under sail it must be at the main peak. The Club Pennant on motor boats must be at the bow but if the boat has two masts it must be flown from the top of the foremast. On sail boats the Club Pennant is always flown from the masthead. If you are very swanky you fly a small blue square from the starboard spreader when the owner is not on board. If some of your friends are taking your vessel out they can fly a small blue square with a white diagonal stripe from the starboard spreader. This means then that the owner is absent but the guests are having a good time. At meal time you fly a white square from the starboard spreader which is very convenient if you ever want to pick up a free meal. The best flag of them all is the cocktail flag which is usually a white flag with the outline of a cocktail glass in the center. As soon as you are ready to prepare the cocktails you fly this flag at your starboard spreader to let it be known that you are officially about to drink a cocktail and you do not mind having visitors come on board. If too many of your friends take advantage of this courtesy and you run short of supplies, you simply reverse the cocktail flag with the top of the cocktail glass looking downward which means that the rest of your friends must immediately come on board with fresh supplies...

### **Western New York ACS Local Section Contact Information:**

**WNYACS Section Chair 2019** 

Timothy Cook University at Buffalo, SUNY (716) 645-4327 trcook@buffalo.edu

Chair Elect 2019 Ekin Atilla University at Buffalo, SUNY (716) 645-4130 ekinatil@buffalo.edu

Vice-Chair 2019 Luis Velarde University at Buffalo, SUNY (716) 645-4243 lvelarde@buffalo.edu

Secretary 2019-2020 Christopher Patridge D'Youville College (716) 829-8096 patridge@dyc.edu

Treasurer 2018-2019 Robert Stewart Honeywell (716) 827-6842 robert.stewart@honeywell.com

Councilor 2017-2019 Peter Schaber Canisius College (716) 888-2351 schaber@canisius.edu

Councilor 2019-2021 David Nalewajek Honeywell (716) 675-5468 david.nalewajek@gmail.com

**Member-at-Large** 2018-2019 Dominic Ventura D'Youville College

(716) 829-7545 venturad@dyc.edu

Newsletter Editor Timothy Gregg Canisius College (716) 888-2259 greggt@canisius.edu Andrew Murkin University at Buffalo, SUNY (716) 645-4249

Schoellkopf Award Chair 2019

amurkin@buffalo.edu

Education Committee
Co-Chairs
Dominic Ventura
D'Youville College
(716) 829-7545
yenturad@dyc.edu

Rachel Ventura University at Buffalo, SUNY (716) 645-1494 rdibbell@buffalo.edu

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

National Chemistry Week
David Nalewajek
Honeywell
(716) 675-5468
david.nalewajek@gmail.com

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

Member-at-Large 2019-2020 David Stewart D'Youville College (716) 829-7589 stewartd@dyc.edu

Member-at-Large 2018-2019 Lindsay Rose Niagara County Community College (716) 614-6866 lrose@niagaracc.suny.edu

Younger Chemists Committee

Jeremy Steinbacher

Canisius College

(716) 888-2343

steinbai@canisius.edu

Newsletter Assistant Editor Alice Steltermann

Alice Steltermann Canisius College (716) 888-2340 stelter@canisius.edu

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 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 Dept. of Chemistry and Biochemistry, Canisius College, 2001 Main Street, Buffalo, New York 14208, by the FIRST day of the month. Notice for change of address or email should be made through **ACS Member and Subscriber Services** at (800) 333-9511, mailto:service@acs.org or the website: www.acs.org/content/acs/en/contact.html.

The NF=B Double Bond (aka Double Bond) is published from September through June by the WNY Section of the ACS. Contact information is at our website: <a href="wnyacs.org/">wnyacs.org/</a>. Member subscriptions are included in the annual National ACS dues. Permission to reprint is granted for this publication.