

52nd Annual St. Louis Section ACS Symposium and Banquet

first published 30 October 2022

On October 14 of this year, a symposium and banquet were held in honor of Professor James K. Bashkin, this year's 52nd annual St. Louis Section ACS Awardee, for his outstanding contributions to the chemistry profession and demonstrated potential to further the advancement of the chemical profession. The symposium "Nucleic Acid Function, Probes and Therapeutics," organized by Dr. Bashkin with the help of Professor Keith Stine, Chair of the Department of Chemistry and Biochemistry, was attended by over 50 people in Benton Hall 103 at the University of Missouri – Saint Louis and about 20 other people by Zoom. The attendees were welcomed by Dr. Tabbetha Bohac, Chair-Elect of the St. Louis Section of the ACS, who spoke of the great contributions of the local section to the local community.

She then introduced Dr. George Gokel, Distinguished Professor Emeritus of Science and of Chemistry and Biochemistry of the University of Missouri-St. Louis, who then introduced Dr. Bashkin. Dr. Gokel spoke of his long acquaintance with Dr. Bashkin and his numerous scientific contributions, from environmentally friendly industrial processes to co-founding a company aimed at curing cervical and other HPV (Human Papilloma Virus)-related cancers.

Dr. Bashkin then gave a presentation on "Pyrrole-Imidazole Polyamides as Drug Candidates-Revising the Canon," detailing a quest to develop HPV DNA-targeted drugs based on polyamides. These minor groove-binding drugs had been highly touted as being sequence-specific, only for Dr. Bashkin and his research team to find that they were not in some cases. Despite their poor specificity, however, they were found to be non-toxic to human cells and able to knock down viral replication to nearly zero and are thus exciting candidates for treating cervical cancer. Dr. Gokel then introduced Professor Gregory M. K. Poon from Georgia State University, who talked about structural determinants of high and low specificity transcription factor binding.

After the coffee break, Professor Jennifer Heemstra, the Charles Allen Thomas Professor and Chair of Chemistry at Washington University, gave an animated talk on "A Chemical Toolbox for A-to-I RNA Editing," where she described how her group was able to develop an assay for a modified RNA nucleotide where others had failed. She was then followed by Dr. Tomasz Heyduk, Professor of Biochemistry and Molecular Biology at Saint Louis University School of Medicine, who spoke on "Nucleic Acids: Templates for Transcription and Building Blocks for Biosensors" and whose talk was focused on understanding how DNA sequence influences the start of transcription of DNA into RNA. There was a reception following the symposium where attendees could congratulate the award winner and meet with the speakers.

Photos courtesy of Jim O'Brien



Tabbetha Bohac, Chair Elect, opening the symposium.



Jim Bashkin giving the award lecture



Symposium attendees



Symposium participants (left to right, Jen Heemstra (Wash U), Gregory Poon (Georgia State), Jim Bashkin (UMSL), George Gokel (UMSL), and Tomasz Heyduk (St. Louis University).



Reception following the symposium with UMSL organic chemistry Professor Eike Bauer speaking with UMSL undergraduates Nora and Sarah Stith and Gracie Schmidt

The symposium and reception were immediately followed by the Award Banquet at the Glen Echo Country Club, attended by almost 70 guests. The banquet started with a cocktail hour featuring an open bar and various appetizers. The attendees were then summoned to dinner by Dr. Tabbetha Bohac, chair-elect of the St. Louis ACS Section, who introduced Dr. Bashkin and his wife, Shelley Shray, and their son Sam. Also in attendance were the Chancellor of the University of Missouri – St. Louis, Dr. Kristin Sobolik and her husband, Professor Scott Peterson, and the Provost, Dr. Steve Berberich. After thanking Dr. Bashkin and the other speakers for a great symposium, she called attention to various elected members of the local section (seven in attendance) and former St. Louis Section ACS award winners (nine in attendance).

Everyone was then treated to an excellent dinner of salad, sirloin, salmon, and tiramisu. While people were getting ready to enjoy their dessert, Professor George Gokel recounted many stimulating interactions he had had with Dr. Bashkin and why he was especially deserving of the award. Then Prof. Stine presented Dr. Bashkin with the St. Louis Section ACS Award plaque and a check for \$1,500. In perhaps what may be a first, Prof. Bashkin regaled the attendees with a couple of songs which he accompanied with a guitar. He then transitioned to his award talk entitled "I'll Go to St. Louis for a Few Years and See How Things Work Out (1984, J. K. Bashkin, Cambridge, MA)" in which he traced his past leading from his childhood in Tucson, Arizona to his current position as Professor at the University of Missouri-St. Louis.

At one point, he showed a picture of himself as a young child going to school with what appeared to be a large lunchbox, which he pointed out was actually a briefcase. It was no surprise then to learn that he graduated from UC Irvine with a degree in Chemistry at the early age of 18, after which he went to Oxford University to pursue a Ph.D. in organometallic chemistry. It was when he was at Harvard working with iron clusters that he made his fateful decision to come to St. Louis for what turned out to be more than a few years, and it involved going back and forth from industry to academia multiple times. He described working on numerous challenging projects such as environmentally friendly industrial chemical processes, metal ion catalyzed RNA cleavage, and eventually co-founding a company to develop drugs against cervical cancer. He shared many pictures of family, students, postdocs, and colleagues whom he thanked, serving as a reminder that science doesn't take place in a vacuum. After his talk, Jim was surprised by receiving another St. Louis Award created by former postdoc Umshanker ("Pop") Sampath. Keith Stine then brought the evening to a close and thanked everyone for attending and the staff and chef of the Glen Echo Country Club for the fine service and dinner, though many stayed on to reminisce long after.

Photos courtesy of Jim O'Brien



Dr. Bashkin receiving the St. Louis Award from Keith Stine of the St. Louis Section.



Rebecca and Carlos Castaneda, Rachel Schafer, Nicole Miller, Jim Bashkin, Annie Migdal.



Kevin Koeller, Mikhail Berezin, and Darlene Koeller.



St. Louis Award Winners in attendance (left to right) Keith Stine, Lol Barton, Jim Bashkin, Leah O'Brien, Kevin Moeller, James Chicos, John Taylor, Alexei Demchenko, and George Gokel.

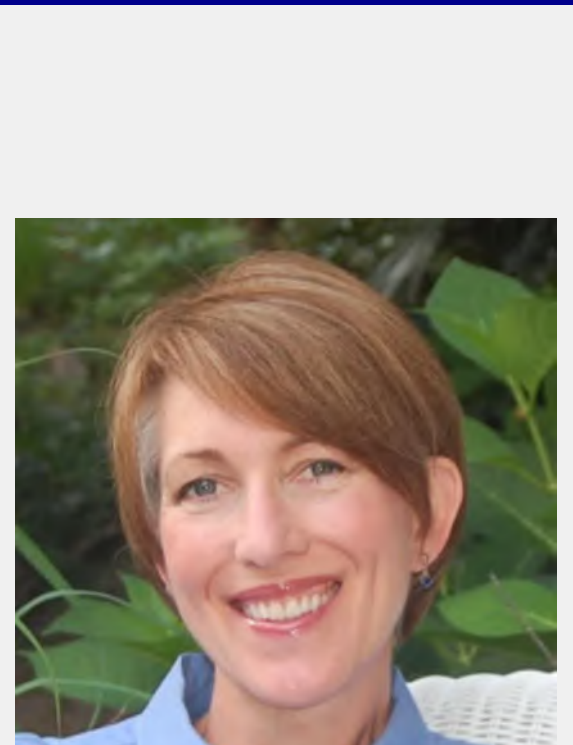
Dawn Mason to deliver lessons from explosions

first published 31 October 2022

The Department of Chemistry at SIUE will host Dr Dawn Mason for the 6th Annual Kevin A. Johnson Memorial Lecture on Wednesday November 9 2022, at 7:00 pm in the Science East building lower lecture hall (SE 1136).

Dawn is a graduate of the University of Missouri and earned her PhD in Inorganic Chemistry from Texas A&M. She oversees global external innovation for Eastman Chemical Company. Her talk, "You Take an Organic and Add a Little Acid", will highlight best practices in planning for disaster, and will offer lessons from both large- and small-scale explosions.

The SIUE Chemistry Department cordially invites you to join us for the Johnson lecture and the reception following the talk in the Science East atrium. To receive a parking code for Lot B on the SIUE campus, please RSVP to towagne@siue.edu or swiedig@siue.edu by Monday, November 7th.



Dr Dawn Mason

Meeting & Seminars

Board of Directors

Board of Directors—ACRS Board of Directors meets the second Thursday of each month over Zoom for the foreseeable future

Date: November 10th (via Zoom)

Join internet meeting at 6:00 pm for social/chit-chat

Business meeting begins at 6:30 pm

Future meetings: December 8th, January 12th

Maryville University

Seminars are approximately once a month on Thursdays, 4-5 pm. Details are available on the university's [seminar page](#). All seminars are free and open to the public. Contact [Jason Telford](#) for more information.

Saint Louis University

Seminars are generally on Fridays at 12 noon in Carlo Auditorium, Tegeler Hall, unless noted otherwise. Refreshments follow. For the most up-to-date information, refer to the department's [home page](#) and follow the link to the Seminar Schedule.

University of Health Sciences & Pharmacy in St. Louis

The Center for Clinical Pharmacology hosts a monthly seminar series in ARB 212 unless otherwise noted. For the most up to date information refer to the center's [seminar page](#) or contact [Jodi Maslin](#).

University of Missouri–St. Louis

Mondays at 4 pm in 451 Benton Hall, unless otherwise specified. Refreshments 15 minutes prior to seminar time. For timely information on visiting seminar speakers, contact the Chemistry Department, 314.516.5311, or visit the [seminar schedule](#). The department has additional seminar series which are also accessible from this page.

Washington University

Seminars are in McMillen 311 at 4 pm unless otherwise noted. For information, consult the departmental [events page](#). Related seminars, including endowed seminar series and the WU med school biochemistry series, are linked here as well.

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- **Liquid Chromatography-Mass Spectrometry**
ThermoFisher Scientific TSQ Altis Triple Quad Mass Spectrometer equipped with Vanquish binary pump and Triplus autosampler

About the Chemical Bond

The *Chemical Bond* is published at www.stlacs.org January through May and September through December by the St. Louis Section–American Chemical Society. If you would like to receive email notification when each issue is posted, you can subscribe to our email list and join the "Chemical Bond reminders" group.

Correspondence, letters to the editor, etc., should be emailed to editor@stlacs.org or mailed % St. Louis Section–ACS, PO Box 410192, Saint Louis, MO 63141-0192.

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