

Department of Chemistry

Newsletter, February 2022

Greetings from the <u>Department of Chemistry</u>! I am writing with an update on events and activities in the Department over the past nine months. Last Fall, we returned to fully in-person classes and thankfully, the number of positive COVID cases among students, faculty and staff has remained very low and allowed us to return again in person this Spring. This is a testament to the safe practices, such as the indoor mask mandate implemented by the University, and high vaccination rates of students, faculty and staff.

As you may have heard, New York Governor Kathy Hochul recently announced that Stony Brook University and the University at Buffalo are officially designated as two flagships of the SUNY System. This designation recognizes our University's essential role in driving scientific advancement, clinical care, employment, and socioeconomic mobility across the State—four things that are central to our University's identity. <u>You can read</u> more here.

Showcasing our Department!

Over the past several months, many faculty and students came together to discuss the great work being done in our Department. These discussions resulted in the creation of two short videos that will be very beneficial in our <u>student recruitment</u> and <u>philanthropic</u> efforts. I hope you enjoy viewing these videos that truly showcase the excellence of our Department!

In addition, mark your calendars for Monday, March 21, 2022 when we will host an in-person <u>Alumni and</u> <u>Friends Reception</u> at the site of the American Chemical Society National Meeting in San Diego. The reception will be from 5:00 pm - 6:00 pm at the Marriott Marquis San Diego Marina. If you are going to the ACS meeting, please stop by. However, you don't need to be registered for the ACS meeting to attend; we would love to see you there!

Facts and Figures:

For those of you interested in data, here is a brief summary of the Department:

- 37 faculty have appointments in the Department of Chemistry
- There are 26.25 FTEs in Chemistry, since many faculty have joint appointments with other departments or neighboring Brookhaven National Lab
- In 2019-2020, the Department had \$10.1M in research expenditures (~\$350,000/FTE)
- Expenditures support research performed primarily by graduate students
- The Department has 165 PhD and 20 MS students
- We teach chemistry courses to ~11,000 students per year (~38,000 credit hours!)

Department Events:

- *Convocation:* The Department held its 51st convocation ceremony on May 21, 2021 virtually, as we did last year. Dr. Ingrid Yin (PhD 2002, Sampson), Co-Founder, Managing Partner and Portfolio Manager at MayTech Global Investments, was this year's Department commencement speaker. For more event details such as the photo slide-show, video recording and student awards, please visit our <u>commencement page</u>.
- Sir Run Run Shaw Lecture: Last September, Professor Vincent Pecoraro, John T. Groves Collegiate Professor of Chemistry at the University of Michigan, presented the <u>Sir Run Run Shaw</u> Lecture, "Adventures in Metalloprotein Design: Enhancing Cu Based Enzymatic Catalysis" to a full audience!
- ICB&DD symposium: The Institute for Chemical Biology & Drug Discovery (ICB&DD) <u>15th annual symposium</u> "Drug Discovery for COVID-19 and Other Emergent Coronaviruses" was held on October 7, 2021. This successful and timely symposium covered many aspects of the fundamental science relating to the current pandemic and that are driving the discovery of novel covid therapeutics.
- Chemistry Research Day: Last October, the Department held this annual celebration of Research in Chemistry performed by graduate, undergraduate and high school students, as well as postdoctoral fellows and staff scientists affiliated with SBU and Brookhaven National Laboratory. <u>Click here</u> to see photos and more from this event!

Faculty News and Recognition:

- April 28, 2021: Professor Eszter Boros wins the <u>\$200K Stony Brook Discovery Prize</u>
- June 2, 2021: Professor Christopher Johnson receives a \$750K DOE Early Career Research Award
- June 18, 2021: Virtual Chemistry Safety Day
- July 6, 2021: The Körber European Science Prize 2021 awarded to Professor Clare Grey
- August 3, 2021: Distinguished Professor Stanislaus Wong selected as a 2021 ACS Fellow
- August 23, 2021: Professor Jin Wang elected to the European Academy of Sciences
- August 24, 2021: Distinguished Professor Esther Takeuchi receives a DOE award to "Accelerate Advancements in Zero-Emissions Vehicles"
- October 20, 2021: Professor José Rodriguez named Fellow of the American Vacuum Society
- October 27, 2021: A study "<u>To Mask or Not to Mask?</u>" led by Professor Amy Marschilok demonstrated a mechanism that enables multiple mask materials to provide protection from viruses
- November 4, 2021: Professor Daniel Knopf tries to Predict How Ice Forms in Clouds
- January 24, 2022: Distinguished Professor Esther Takeuchi receives the 2022 National Academy of Sciences Award in Chemical Sciences for breakthrough contributions to our understanding of electrochemical energy

Teaching and Student Recognition:

- In May 2021 we graduated 79 chemistry and engineering chemistry majors, 13 MS students and 27 PhD students. See our complete list of student achievements on our <u>commencement page</u> under Student Awards.
- May 7, 2021: Virtual Senior Research Symposium 17 seniors participated.
- November 8, 2021: Dr. Apurva Pandey, a graduate student in Professor Eszter Boros's lab, reports a method to trick bacteria into taking up antibiotics: <u>Gallium helps sneak antibiotic payload into</u> <u>bacterial cells</u>

Staff Recognition:

• July 30, 2021: Roxanne Brockner, assistant to the director of Stony Brook's Institute of Chemical Biology and Drug Discovery, won three individual events and helped Team USA set a world relay record at the recent <u>USA Track and Field (USATF) Masters Championships</u> in Ames, Iowa.





Upcoming Events:

- March 21, 2022: All are welcome to attend our previously mentioned Alumni and Friends Reception at the Marriott Marquis San Diego Marina. <u>Register here!</u>
- April 14, 2022: The 27th Jacob Bigeleisen Lecture will be given by Professor Laura Kiessling, MIT.
- April 22, 2022: The 6th Francis Johnson Lecture will be given by Professor Tom Muir, Princeton University.
- April 29, 2022: The Inaugural Ojima Distinguished Lecture will be given by Professor Makoto Fujita, The University of Tokyo.

Arrivals and Departures:

- The Department welcomes Dr. Jyothi Sistla, our new Lab Support Scientist working with Dr. Nicole Sampson.
- Many thanks and farewell to long-time faculty members, Dr. Nancy Goroff, Dr. Stephen Koch and Dr. Bradford Tooker who retired in 2021.



In Memoriam:

It is with great sorrow that we report the <u>passing of Dr. Jonathan Rudick</u>, associate professor, on January 1, 2022 after a long battle with cancer. Jon made numerous contributions to our Department through his research program, student mentorship, teaching and service. He was always friendly and upbeat, and exemplified the definition of collegial. He will be greatly missed. Our thoughts are with Molly, Chloe and the rest of his family.



A Philanthropic Opportunity - The Paul Lauterbur Fund:

On November 16, 2021, Professor Tonge and Professor Charles Springer, a former Stony Brook faculty member and current professor at Oregon Health & Science University, gave an <u>alumni talk</u>, "Interdisciplinary Research in Chemistry: Building on the Legacy of Nobel Laureate Paul Lauterbur," where Professor Tonge unveiled plans to support the Paul Lauterbur Fund. As many of you know, Dr. Lauterbur performed his groundbreaking experiments in the Department of Chemistry that led to the invention of magnetic resonance imaging and the award of the 2003 Nobel Prize. Current research in the Department is highly interdisciplinary and builds on the legacy of Dr. Lauterbur's pioneering discoveries made at the intersection of physical chemistry and medicine.

Inspired by this spirit of discovery, the Department launched the Lauterbur Fund to support faculty and students in multiple ways to benefit their research and teaching mission, including student fellowships and travel awards, instrumentation for research and teaching, and professional development activities. We will prioritize research initiatives with High Risk-High Payoff. Our goal is to raise \$4M.

To learn more about how you can support this fund, our students and other important Departmental initiatives, please contact <u>Hodan Hassan</u>, Assistant Dean for Advancement, at 631.632.4055.

Save the Date - 2022 Giving Day

We will also be participating in the University's annual Giving Day on Wednesday, April 27 and hope you will join us for this exciting 24-hour campaign! More details to follow.

We hope you will connect or reconnect with our faculty soon. We'd love to hear your news, how you're doing, where your career has taken you, and any life events you would like to share. And if you haven't already, please join our alumni group on LinkedIn: <u>SBUChemistry Alumni</u> so that we can stay connected.

Best wishes,

Pete

Peter J. Tonge Distinguished Professor of Chemistry Chair, Department of Chemistry

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