## **Department of Chemistry**

## Newsletter, October 2020

Greetings from the Department of Chemistry. When I last wrote in May, we had almost finished an extraordinary Spring semester in which all our classes were moved online, students had been sent home from the dorms, and all research activities were paused. Now, with our Fall semester in full swing, I am writing to give you an update on events and activities in the Department.

At the end of May, we held our first-ever Virtual Departmental Convocation. The Department has held its own convocation for many years to celebrate the Chemistry majors and graduate students who are leaving us to take the next steps in their careers. This year it was not possible to hold an in-person event and so we held <u>our 50th convocation</u> using Zoom and live-streamed on YouTube. Although we would have liked to say goodbye and good luck to our graduates in-person, the virtual commencement was an outstanding success! More than 150 faculty, students and guests attended, and Dr. Chris am Ende (MS Tonge, PhD Parker), Senior Principal Scientist at Pfizer, gave an uplifting and motivational talk in his commencement address.





Professor Simmerling shows SARS-CoV-2 spike binding to the human ACE2 receptor.

Although research labs were emptied in March, a few personnel were allowed to return in April to work on COVID-specific projects. Since then the number of researchers has increased gradually over the summer so that ~80 percent of postdocs and graduate students are back in the labs at any one time. Unfortunately the number of undergraduates able to participate in research is still very small.

On the teaching front, we have been largely online since March. This summer, we offered a number of courses including three labs: CHE133 and CH134, General Chemistry I and II, and CHE327, Organic Chemistry. CHE133 and 134 were taught remotely by Dr. Susan Oatis, who had the students buy kits so that they could do experiments in their kitchens. CHE327 was offered by Dr. Saj Hossain as a virtual lab using videos of experiments recorded by the teaching assistants. We also offered two sessions of General Chemistry Lecture I (CHE131) so that high school students could take it once their semesters had ended.



This Fall, most of our courses remain online with CHE133 offered as a remote lab using kits. The remainder of the labs are in person but adapted to enable social distancing. For instance, CHE327 has only 50 percent of the students present in the organic teaching labs at any one time, whilst CHE303, Physical Chemistry lab, is using the general chemistry labs so that students can spread out. Those lecture courses that are in-person are given in large lecture halls so that the students can socially distance.

There have been some hiccups, but in general the teaching is going very well and students are engaged in their classes. This is a testament to the enormous efforts of the faculty and staff, who continue to do an amazing job!



We continue to hold virtual events such as seminars as we strive to support and enrich the Chemistry community at Stony Brook despite the pandemic's unprecedented challenges. In this regard, I am particularly grateful to Distinguished Professor Iwao Ojima, who has created the The Ojima Distinguished Lectureship Award that will provide annual support to host a distinguished speaker at Stony Brook. Thank you, Iwao! Professor Ojima is also the Director of the Institute for Chemical Biology and Drug Discovery (ICB&DD). On October 8, the ICB&DD held its annual symposium, <u>"Frontiers of Chemical Biology and Drug Discovery: Nucleic Acid-Based</u> <u>Medicine,"</u> which was an outstanding success.

Some exciting alumni news:



Priyanka Sharma, PhD, Research Scientist, Department of Chemistry (PhD 2014, CSIR-National Chemical Laboratory, Pune India, and Postdoctoral Researcher in the Department of Chemistry) was among four SBU researchers who won the <u>2020 Young Academic Inventors Award</u> "for her inventions leading to the development of nitro-oxidation method to extract nanocellulose from raw biomass, which drastically decreases the consumption of energy, chemicals and water."

We would also like to celebrate some student achievements and awards since our last newsletter:

- <u>Undergraduate Students Who Earned Valedictorian Awards: Olivia Comer/Chemistry Major</u>
- Abbigayle Cuomo '21 Embraces Undergraduate Research
- <u>SUNY Honors 14 SBU Students for Academic Excellence and Leadership: Chloe</u> <u>Savino/Chemistry Major and Claire Garfield/Chemistry Minor</u>

Each year, the faculty nominate graduating students who have distinguished themselves through scholarly achievement in their thesis research and service to the Department and fellow students, for departmental awards, which are presented at commencement. At that time, the faculty also recognizes outstanding teaching in advanced and first-year graduate students. <u>Congratulations to all award winners!</u>

I would like to end by highlighting faculty who have received special recognition:

- Professor Surita Bhatia was named a Fellow of the American Institute of Chemical Engineers (AIChE) and a Fellow of the Society of Rheology
- Professor Carlos Simmerling was awarded the SUNY Chancellor's Award in Scholarship and Creative Activities.
- Distinguished Professor Ben Hsiao was awarded the Creativity Prize as part of the 2020 Prince Sultan Bin Abdulaziz International Prize for Water.
- Professor Eszter Boros was named a 2020 Moore Inventor Fellow.

The Department is also pleased to welcome Benjamin Levine as Department of Chemistry and Institute For Advanced Computational Science (IACS) Endowed Professor of Chemistry.



From left to right: Surita Bhatia, Eszter Boros, Benjamin Levine

Please join us for the following virtual event:

From Batteries to Drugs: Stony Brook Chemistry in 2020 Wednesday, October 21, 2020 2 pm to 3:30 pm EDT <u>Registration required through Zoom »</u>

Building on the legacy of Nobel Laureate Paul Lauterbur who made his pioneering discoveries in Magnetic Resonance Imaging (MRI) as a chemistry faculty member at Stony Brook, the Department of Chemistry continues to perform outstanding research and training at the interface of chemistry with fields such as biology, medicine, materials science, physics and engineering. Our culture of interdisciplinary excellence has led to advances such as developing brighter, faster light sources to understand how electrons move in molecules, to a better understanding of the Universe in the seconds after the Big Bang, to improved materials for water filtration, energy and information storage, and to new drugs and diagnostics for human diseases. Join us for a discussion led by Dr. Peter Tonge, distinguished professor and chair, to hear more about the past, present and future of the Department, including research highlights and our response to COVID-19.

## Giving Day - 2020

As always, we are grateful for the support of our alumni and friends, as so many of the activities and accomplishments of our Department are made possible through your support. Last week, we participated in the University's second Giving Day in support of

the <u>Department of Chemistry's Fund for Excellence</u>. The Giving Day site will remain open for additional gifts through Friday, October 16, 2020 at midnight, if you would like to support this important initiative. In addition, If you are interested in learning how you can support our students and Department initiatives, please feel free to contact <u>Christina Rosa-Ragona</u>, Director of Development, at 631.632.6078 if you are interested in learning more about how you can support our students and Department initiatives.

We hope you will also connect or reconnect with our faculty soon. We'd love to hear your news, hear 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