

DEPARTMENT OF CHEMISTRY

Fall 2024 Newsletter

Dear Alumni and Friends,

Greetings from the Department of Chemistry! I am happy to share and recap some of the news and accomplishments for the Department, our students, and faculty from the 2023-2024 academic year.

For those of you who may not know me, I am pleased to have completed my first year as Chair of the Department. I most recently served as a Vice Chair and member of the Executive Committee, since 2019. I wish to thank my predecessor, Distinguished Professor Peter J. Tonge, for his guidance and leadership during the preceding four years, which included dealing with COVID and many other challenging issues.

This past year has been an exciting, eventful period, as we have been working hard on a number of key initiatives to proactively raise the Department's profile to achieve a consistent top-30 Departmental status on the national stage.

To achieve this fundamentally manageable objective, I have identified a number of priorities to address. These include:

- Faculty hiring at all levels to replace retirement and rentention losses and ensure a critical mass of faculty in key research areas
- Addressing building renovation and infrastructure modernization issues in support of research and teaching activities and advances
- A re-thinking of staff and support staff hiring to implement a sustainable, thoughtful vision for fulfilling research missions
- Efforts to improve graduate student quality, recruitment, and retention
- Developing a culture, vision, and set of values that will propel a renewed and collective sense of shared identity and purpose

These are exhilarating times to be in the Department, and there is still much to be done. As such, we would love to hear from you and hope you can join us in our efforts.



If you would like to

receive real time updates about the Department of Chemistry, please check in on Facebook/
StonyBrookChemistry or follow us on X (formerly Twitter) AstonyBrookChem.

To learn how you can support our students and other departmental inititiatives, please visit our website or contact Michael D'Ambrosio, senior director of development, at 631.632.4061.

Please send us a note about your current activities to include in the "Alumni News" section of our website. Moreover, we look forward to meeting up with you soon, perhaps either at Homecoming or a future ACS meeting in your part of the country! All the best for health, happiness, and success.

With warmest wishes and regards,

Stanislaus S. Wong Distinguished Professor and Chair Department of Chemistry

Faculty and Staff News - Arrivals and Departures

The Department is thrilled to welcome

assistant professor,

Quinton Bruch,



who started in Fall 2023. Quinton tackles the development of organometallic tools to exert greater control Quinton Bruch over catalysis for the

sustainable production of molecular fuels and small molecules.

In January 2024, we welcomed Matthew Parker to our Department as a joint appointment with the Department of Psychiatry and Behavioral Health. Matthew is an organic chemist who is interested in developing



Matthew Parker

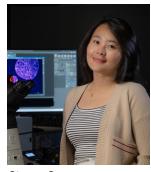
novel radiological probes for ailments, such as Alzheimer's disease.

The new faces in our teaching contingent for 2023 - 2024 included **Heather Crapo** (general chemistry); **Troy Wymore** (general and organic chemistry); and Lu Bai (organic chemistry) as our three new lecturers. We also welcomed Irina Zaitseva, general chemistry lab technician, and Harini Jaishanker, our graduate student intern to assist with the website.

Due to the hard work and efforts of many dedicated and tireless colleagues within several different search committees during the academic

year, we are extremely pleased to welcome starting September 1 '24 not only **Eugene** Serebryany as an affiliate appointee but also **Jeffrey** Gustafson, incoming senior organic hire and Simou 'Summer' Sun, incoming junior biological

hire.



Simou Sun

Jeff is an organic chemist who strives to apply innovative chemical strategies towards complex biological problems, while Summer is a biophysical chemist who is primarily interested in how information processing distinguishes signals from noise in the biological world.

Retirees

Special thanks to Professor Emeritus Jin Wang, who retired in January, and Professor Michael G. White who retired in August. Also, thanks to **Trevor Sears** for his unprecedented and generous assistance with CHE 357 in



Jin Wang

deferring his retirement to help the Department with teaching during the Fall 2023 semester.



Left to right: Axel Drees, Michael G. White, Stanislaus Wong

In Memorium

William J. le Noble

passed away on December 12, 2023, announced in Chemical & Engineering News on February 2nd. Bill served for 41 years in our Department in various capacities, including chair in the 1990s. His research in stereochemistry was



William J. le Noble

concerned with the electronic control of face selection, and involved studies of 5-substituted 2-adamantylidene derivatives.

Faculty and Staff Recognition and Achievements



Surita Bhatia

Surita Bhatia served as interim chair of the Department of Anthropology during 2023-24, and was replaced in her role as vice chair of facilities on the executive committee by

Karena W. Chapman, professor and Endowed Chair in Materials

Chemistry. <u>Karena</u> was formally invested last November and also received the <u>2023-2024</u> <u>Chancellor's Award for Excellence in Scholarship</u> <u>and Creative Activities</u> in recognition of her "record of sustained scholarship."

Surita was awarded an <u>NSF NRT-PREM</u> grant in the fall to initiate new training activities to bridge the gap between classrooms and labs with partners at the University of Texas El Paso (UTEP) and Navajo Technical University. She was involved along with **Katherine Aubrecht** with renewing SBU Chemistry as an ACS Bridge Department. More recently, Surita was named a 2024 Stony Award finalist in the <u>SB</u> <u>You award</u> category in addition to being appointed Associate Dean for Faculty Affairs and IDEA in the College of Arts and Sciences.

Amy C. Marschilok was promoted to full professor in September 2023. **Stephen A. Koch** earned the



Stephan A. Koch

2024 ACS Award for Distinguished Service in the Advancement of Inorganic Chemistry, an honor announced in Chemical & Engineering News last September. An award symposium was held in his honor during the Spring ACS meeting in New Orleans.

Roy A. Lacey was named <u>"Professor of the Month"</u> in the SBU Graduate Arts & Sciences Monthly Newsletter in October 2023. His work, as well as that of Jiangyong Jia, was recently discussed not only in a BNL newsroom article

"New Driver for Shapes of Small Quark-Gluon Plasma Drops?" but also in the context of a recent movie screening of <u>Thor: Ragnarok</u>.

<u>Christopher J. Johnson</u> was lauded as the SBU 2023 Discovery Prize winner for "A New Platform to Track the Chemistry of Climatically-Relevant



but Currently Under-Addressed Ultrafine
Aerosol Particles." Chris
also was awarded the
2024 College of Arts
and Sciences Godfrey
Excellence in Teaching
Award, selected by a
student panel.



Dale Drueckhammer and Roxanne Brockner (center) won USATF Long Island Athlete of the Year Awards, joined by USATFLI President Alex Cuozzo (left) and Vice President Robert Lemke (right).

Elizabeth M. Boon was appointed to the role of Associate Dean of Strategic Initiatives in the Graduate School, effective September 1st.

Roxanne Brockner & Dale Drueckhammer were honored as "Masters Male and Female Athletes of the Year" by US Track and Field Long Island.

Prior to accepting a promotion in the School of Nursing in May 2024, Kathleen McCauley, a Graduate Administrative Assistant, earned the 2024 Staff Excellence Award and was honored during the annual CAS "Difference You Make" Awards and Recognition Ceremony.

Congratulations to <u>Quinton Bruch, Iwao Ojima, and</u> <u>Peter Tonge</u> who were OVPR seed grant program winners in Fall 2023.

Congratulations to Amy Marschilok, Esther Takeuchi, Kenneth Takeuchi, Iwao Ojima, and Peter Tonge, who were issued patents during the 2023-2024 academic year. Iwao also was part of the team that developed ART26.12, a drug which treats chemotherapy-induced pain and inflammation and which recently garnered FDA approval.

Professors **Zachary Katsamanis** and **Fernando Raineri** were awarded the title of 'Advanced
Senior Lecturer' in June in recognition of their
"outstanding contributions to the teaching mission of the University, consistent excellence in teaching and mentoring students, and dedicated service."

Daniel P. Raleigh was among eight SBU faculty members appointed to the rank of State University of New York (SUNY) Distinguished Faculty by the SUNY Board of Trustees for 2023-2024.

<u>Dan</u> was cited as a world leader in the biophysical analysis of protein folding and protein amyloidosis.



Esther S. Takeuchi

Distinguished Professor **Esther S. Takeuchi** was recently honored with a J. Phys. Chem. C Festschrift issue dedicated to her life and accomplishments.

Student Recognition and Achievements



Simran Multani

Simran Multani,

a Chemistry major mentored by Professor Elizabeth Boon, was named December 2023's URECA Researcher of the Month. Her impressive <u>list</u> <u>of accomplishments</u> has been featured by CAS.

Zhihengyu 'Woodrow' Chen (Chapman

group) was a finalist for the 2003 <u>SUNY-wide</u> <u>Chancellor's Distinguished Dissertation Awards</u> for his thesis entitled "Insights into Metal-Organic Frameworks at the Edge of Stability."

Lauren Raguette (Simmerling group) was awarded the <u>President's Award for Excellence in Teaching by a Graduate Student</u> (campus-wide recognition).

Zain Zaldi (Levine group) earned a <u>Barry Goldwater</u> Scholarship for 2024.

Jagrut Atul Shah (Lipshultz group) received a 2024 Merck Research Award for Underrepresented Chemists of Color.



Zain Zaldi

Emma Scher (Lipshultz group) was the recipient of the <u>American Chemical Society's Division of</u> <u>Organic Chemistry Summer Undergraduate</u> <u>Research Fellowship (SURF).</u>

Edelmy Marin Bernardez

(Marschilok and Takeuchi groups) was presented with the <u>Joanna Fowler Award in the Chemical and Biochemical Sciences</u> for 2024 (Brookhaven National Laboratory).

Highlights of Departmental Events for 2023-2024

In addition to the 17th annual ICB&DD symposium on "Frontiers in Chemical Biology and Drug Discovery" (October 2023) and the Pfizer-SBU symposium on drug discovery and development (September 2023), a number of <u>named lectures</u> were successfully held and celebrated over the course of the year.

This distinguished series of talks and lectures included:

- Francis Johnson (Kevan Shokat, University of California San Francisco) "Overcoming the Undruggable Nature of the Most Common Human Orcogene K-Ras"
- Franklin (Julie Kovacs, University of Washington) "How Does Nature Synthesize Beta-Lactam Antibiotics? Iron and Cysteine Play a Key Role"
- **Bigeleisen** (Mark Johnson, Yale University) "Capturing the Molecular Level Mechanics Driving Bulk Chemical Behaviors from Catalysis to the Spectral Dynamics of Water"
- Ojima Distinguished Lectureship Award in **Chemistry**, (Hiroaki Suga, University of Tokyo) "Therapeutics based on New Modalities of Pseudo-Natural Peptides, Products and Neobiologics"



Hiroaki Suga and Iwao Ojima

• Sir Run Run Shaw Lecture Series

(Helen Blackwell. University of Wisconsin, Madison) "Chemical strategies to intercept and alter bacterial communication

pathways"



The **Bridging Science and** Diversity (BSD) Committee has been very active over the year, including hosting career mentoring opportunities, several potluck events, in addition to a special seminar and round-table discussion with Polly Arnold (UC Berkeley).

Chemistry Research Day was held on December 1, 2023, and was deemed a huge success. It



featured Barney Grubbs as the keynote speaker with a presentation entitled "Emphasizing the 'Molecule' in 'Macromolecule': Making Old Polymers New Again Through Organic Chemistry."

Dr. Robert B. Grubbs

The Departmental Convocation ceremony

was held on the morning of May 17, 2024 and highlighted a thoughtful and memorable discussion by Professor Emeritus **Albert Haim** in addition

to talks given by graduate student Jaclyn Mauro and undergraduates, Saba Gulzar and Aliaksandra Kiniova. Warmest congratulations to all graduates and their families!



Albert Haim

Alumni and Donor Recognition

A reception event for alumni and friends was celebrated at the <u>Pawn Shop San Francisco</u>, in conjunction with the ACS Conference in August 2023. It was a wonderful <u>opportunity</u> to unwind in a relaxing and pleasant atmosphere and to renew acquaintances after a long day of talks and presentations. We also held a <u>symposium in honor of the 60th Birthday of Carlos Simmerling</u>, entitled "Molecular Dynamics, from Force Field Development to Biological Applications."



Chemistry Alumni Establish New Endowed Chair in Cheminformatics

In September 2024, the Department was pleased to announce the <u>Dr. Stephen R. Heller Endowed</u> <u>Chair in Cheminformatics</u>, a position established by the munificence and generosity of Drs. Stephen and Shelley Heller, a Stony Brook alumni couple from the 1960s. The purpose of this fund in cheminformatics data science is to promote excellence and scholarship in the field with the particular objective of generating transformative and fundamental advances in the methodology of cheminformatics.



2024 Forty Under 40 Awards

Two Departmental alumni, **Carla Neckles '14**, and **Marvin Parasam '10**, were recently recognized among <u>SBU's 2024 Forty Under 40 Awards</u> in the Science and Engineering category. Carla performed her PhD studies with Professor Peter Tonge, while Marvin completed his senior undergraduate research with Professor Nancy Goroff and graduated with a BS degree in Chemistry. Congratulations!





Alumni Corner

The Department was pleased to receive an anonymous \$500,000 gift that unlocked not only \$750,000 for the Lauterbur fund but also another \$750,000 to our unrestricted endowment -- a total impact of \$1.5 M for the University!

Congratulations to our previous chair Peter Tonge, our Advancement team led by Amanda Sabanos, AVP for Development, Schools & Colleges, and her staff for their hard work in enabling this gift, which was years in the making.

Giving Day 2024: We successfully raised \$11,225 towards the Excellence Fund! Thanks to all who donated, as well as to Norma Reyes, department administrator, and the advancement staff for their assistance.

During the past year, the generous funding and financial supprt of friends, family and alumni have contributed to resource acquisition, including:

- An autosampler for the NMR facility
- Mnova software for processing, analyzing, and interpreting NMR data
- ChemDraw Prime and Signals software for wide-ranging research activities;
- Replacement of outdated projectors and projection screens with high-resolution "state-of-the-art" LED TV screens, compatible with the latest technology in seminar rooms 412, 421, and 515
- Purchase of a state-of-the-art single-crystal
 X-ray diffractometer
- Revamping of the appearance and content of our website as a "one-stop" shop for all Departmental resources and needs

Addressing these resource needs has complemented infrastructure improvements, including the creation of **new ADA parking spaces** near the building, a view to handling future swing space considerations and the **reallocation of significant internal space** that other departments had previously occupied within the building. This is important, since the Phase 1 renovation project is continuing in an effort to install sprinklers and fire alarms along with other modifications to bring the building up to code.

Thank you for your support.





Stay up to date with our events and research activity.

