



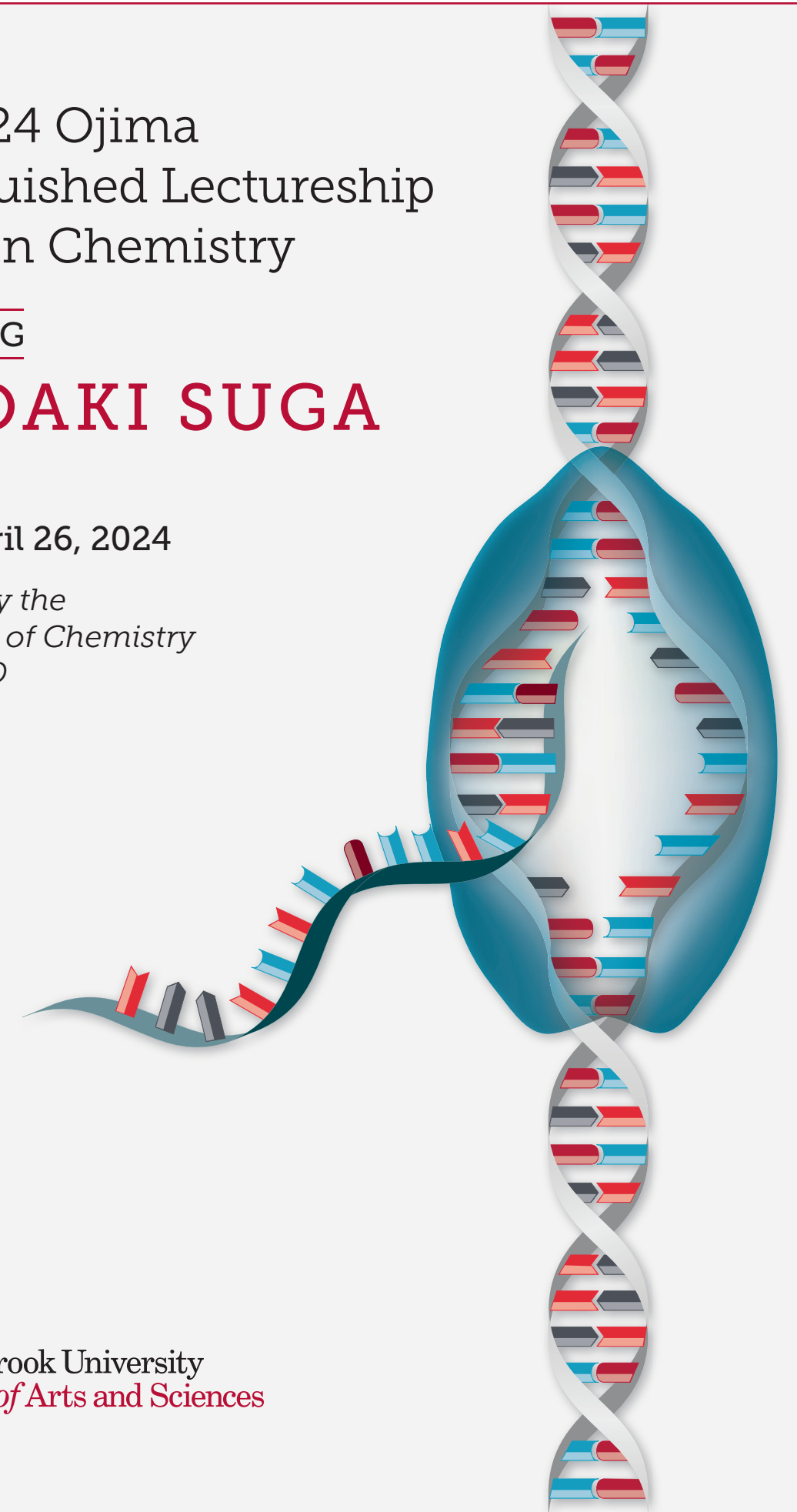
The 2024 Ojima  
Distinguished Lectureship  
Award in Chemistry

HONORING

**HIROAKI SUGA**

Friday, April 26, 2024

*Presented by the  
Department of Chemistry  
and ICB&DD*



 Stony Brook University  
College of Arts and Sciences

Established in 2020 to commemorate Iwao Ojima's 75th birthday, the Ojima Distinguished Lectureship Award in Chemistry is based on an endowment from the Ojima family to help ensure that eminent scholars can continue to enrich the Department of Chemistry and Stony Brook University.



### Iwao Ojima

*Distinguished Professor  
Director, Institute of Chemical Biology  
and Drug Discovery*

**Iwao Ojima** has a wide range of research interests in synthetic organic and medicinal chemistry, as well as in chemical biology, including the discovery and development of anti-cancer agents, anti-microbials and targeted drug delivery systems. His pioneering and innovative works on organometallic chemistry, homogeneous catalysis, catalytic asymmetric synthesis, and new and efficient synthetic methods and methodologies are well-recognized worldwide. He holds more than 100 issued patents, including 43 U.S. patents.

Ojima received his BS, MS and PhD degrees from The University of Tokyo, Japan. He joined the Sagami Institute of Chemical Research, where he held the position of senior research fellow until 1983,

at which time he joined Stony Brook University's Department of Chemistry as an associate professor. In 1984 he was appointed professor, then leading professor in 1991 and distinguished professor in 1995. Ojima was the department chair from 1997 to 2003; since 2003, he has been serving as founding director for the Institute of Chemical Biology and Drug Discovery, and as president of the Stony Brook University chapter of the National Academy of Inventors since 2016.

In recognition of his seminal contributions to the chemical sciences, Ojima has received numerous honors. They include four prestigious national awards (highest honors) in four subdisciplines from the American Chemical Society:

- Arthur C. Cope Scholar Award
- E.B. Hershberg Award for Important Discoveries of Medicinally Active Substances
- ACS Award for Creative Work in Fluorine Chemistry
- E. Guenther Award in the Chemistry of Natural Products

Ojima's other honors include being inducted into the Medicinal Chemistry Hall of Fame and the American Chemical Society, and receiving the Chemical Society of Japan Award and Outstanding Inventor Award from the Research Foundation of the State University of New York.

He is an elected fellow of the J.S. Guggenheim Memorial Foundation, the American Association for the Advancement of Science, the New York Academy of Sciences, the American Chemical Society, the National Academy of Inventors and the European Academy of Sciences.

## 2024 AWARD RECIPIENT



### Hiroaki Suga

*Professor of Chemistry  
The University of Tokyo*

**Hiroaki Suga** is a renowned academic inventor, entrepreneur and leader in professional society and government. His research program focuses on bioorganic chemistry, chemical biology and biotechnology related to RNA, translation and peptides. Suga made significant advances in using RNA-based enzymes, or ribozymes, to incorporate unnatural amino acids into tRNA. This technology, flexizyme, greatly expanded the potential for reprogramming the genetic code.

Through additional research on in vitro translation of proteins using reconstituted ribosomes, Suga could incorporate various unnatural amino acids into expressed peptides spontaneously to produce molecules that form macrocyclic peptides. He used oligonucleotide display to create the RaPID system — a platform for producing and selecting billions of macrocyclic peptides as high-affinity binders to protein targets, including many that had previously been considered undruggable.

### HONORS AND AWARDS

**2023**

Wolf Prize in Chemistry

**2020**

Prelog Medal, ETH Zurich

Research Award,  
Alexander von Humboldt Foundation

**2019**

Vincent du Vigneaud Award,  
American Peptide Society

**2017**

Nagoya Silver Medal

**2016**

Japan Innovator Award

Max Bergmann Medal, Germany

Suga's work has produced more unique non-natural molecules than other approaches, possessing the unique stereochemistry, rich functional group density and 3D architecture necessary for interrogating and controlling biological processes. This paved the way for a new generation of drugs.

Suga received his PhD in chemistry from the Massachusetts Institute of Technology in 1991 then conducted postdoctoral research at Harvard Medical School/Massachusetts General Hospital. He joined the University of Buffalo as assistant professor in 1997 and was promoted to associate professor in 2002. Suga moved to the Research Center for Advanced Science and Technology of The University of Tokyo, Japan, as associate professor in 2003. In 2010, he was appointed a professor of chemistry in the Department of Chemistry, The University of Tokyo, where he remains. Since 2022 he has served as president of the Chemical Society of Japan.