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Message from the Dean

Dean of the School of Life Science and
Technology
Prof. Shoen KUME



Hello everyone,

It has been one year since the Institute of Science Tokyo (Science Tokyo) was established through the merger of Tokyo Institute of

Technology (Tokyo Tech) and Tokyo Medical and Dental University (TMDU).

At the School of Life Science and Technology, we launched a new interdisciplinary graduate major, the ‘Science and Technology for Health Care and Medicine’, in the 2025 academic year. This represents our first step toward advancing innovative education and research through collaboration among medical, dental, and engineering disciplines. In addition, Science Tokyo has been selected as a candidate for the University for International Research Excellence accreditation.

As Science Tokyo shifts to the Visionary Initiatives (Vis), which together form a vision-driven, interdisciplinary research and education framework, we expect these changes to accelerate further in the coming years. At the School of Life Science and Technology, we are excited to expand interdisciplinary research and education related to life sciences.

We sincerely thank our alumni for your continued interest, support, and encouragement, and we look forward to building the future of Science Tokyo and the School of Life Science and Technology together with you.

Messages from New, Transferred, and Leaving Staffs

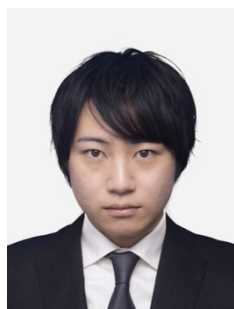
New Staffs

Asst. Prof. Rina KUNISHIGE April 2025-



My name is Rina Kunishige, and I have been serving as an Assistant Professor in the Kano Laboratory since April 2025. My research focuses on network-based representation of cell states using quantitative imaging features, as well as intracellular manipulation via the semi-intact reseal method.

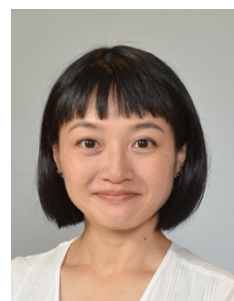
Asst. Prof. Ryou KAKIUCHI April 2025-



Until now, I have been engaged in chemical biology research. However, I have recently begun drug discovery chemistry research at this university, focusing primarily on “the development of PPI inhibitors based on three-

dimensional frameworks.” While I am still an inexperienced researcher in many ways, I will strive diligently in my research alongside the students, aiming for the goal of creating new therapeutic drugs.

Assoc. Prof. Yasuka TODA May 2025-



We study how taste has evolved in vertebrates with different dietary habits by combining functional analyses of taste receptors, gene expression profiling, food component analysis, and behavioral

experiments. We also collaborate with food companies to search for novel taste modifying compounds in foods.

Asst. Prof. Sho TSUKIYAMA May 2025-



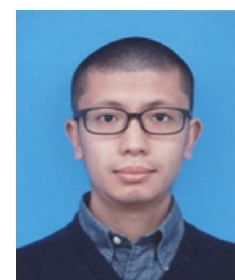
My name is Sho Tsukiyama, and I joined the School of Life Science and Technology as an Assistant Professor on May, 2025. After getting my doctoral degree from the Kyushu Institute of Technology, I studied molecular structure prediction for approximately one year at the National University of Singapore. I hope to contribute to both research and education at the School of Life Science and Technology. Thank you.

Asst. Prof. Daisuke ASANUMA July 2025-



We develop novel chemical tools and advanced fluorescence imaging techniques to visualize cellular processes previously inaccessible by conventional methods, aiming to advance our understanding of biological mechanisms and contribute to new diagnostic and therapeutic developments.

Asst. Prof. Tatsuhiro HORII August 2025-



Understanding and controlling the electrochemical interfaces created by electronic and ionic conduction enables the enhancement of electrochemical device characteristics and the

acquisition of high-quality biological signals. I currently advance research into reactions at the interface between electrodes and electrolytes within devices, as well as the electrochemical impedance at the interface between electrodes and skin.

Assoc. Prof. Takakazu SEKI October 2025-

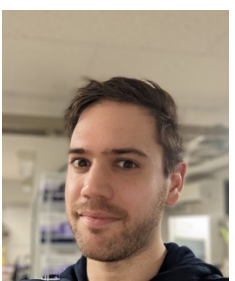
I have joined the School of Life Science and Technology as an Associate Professor in October 2025. I have been developing methodologies to understand multi-body interaction between biomolecules, water, and

ions with a surface-specific vibrational spectroscopy. I would like to show my gratitude to obtain the opportunity to work in this School harvesting cutting-edge multidisciplinary research, and I shall advance my research to further develop the School of Life Science and Technology. Last but not least, I would appreciate your future support and guidance, and I look forward to working with you in the future.

Asst. Prof. Yupeng DONG October 2025-

I am pleased to join the Institute of Science Tokyo as a newly appointed Assistant Professor. I am Yupeng Dong, with MSc and PhD degrees from Tohoku University. My research background spans

pathology, obstetrics, plastic surgery, and dermatology. My current work focuses on iPS cell-derived beta cells, aiming to bridge basic research and clinical application.

Asst. Prof. Richard James Archer October 2025-

Nice to meet you. I'm Richard, originally from the UK. I joined the Institute for Chemical and Life Sciences last October. My specialty is biophysics, focusing on research in artificial cells, lipid membranes, and DNA

nanotechnology. I have a strong interest in developing technologies that benefit society and human health. I welcome casual discussions about research and collaborative projects, so please feel free to reach out anytime. I look forward to working with you.

Transferred StaffsProf. Mako KAMIYA April 2025-

As of April 1, 2025, I was appointed as a professor at the Laboratory for Chemistry and Life Science, Institute of Innovative Research. I would like to express my sincere gratitude to all the faculty and administrative

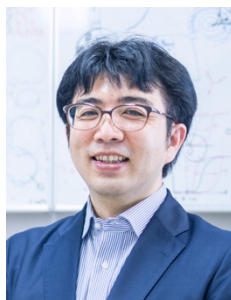
staff of the Department of Life Science and Technology for the warm support and guidance over the past three years since April 2022. I will continue enjoying research together with the students.

Asst. Prof. Hiroyoshi FUJIOKA

April 2025-

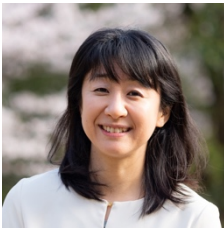
I have been appointed as an Assistant Professor in the Kamiya Laboratory, Institute of Integrated Research, as of April 2025. From April 2023 to March 2025, I was affiliated with the School of Life Science

and Technology, but have now transferred to the Institute of Integrated Research together with Professor Kamiya. During the past two years at the start of my career, I am aware that I still had much to learn, but I am sincerely grateful for all the guidance and support I received.

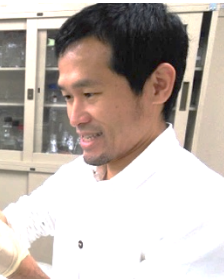
Prof. Masahiro TAKINOUE October 2025-

Since last October, I have joined the Laboratory for Chemistry and Life Science (educationally, a member of the Department of Life Science and Technology). My specialty is biophysics, and I am studying molecular computing and

artificial cells. Since joining this university in 2011, I have conducted various research projects with my colleagues. I look forward to creating new research projects in my new department and would appreciate your continued support.

Assoc. Prof. Tomoko HORIE October 2025-

My research focuses on the degradation mechanisms of biomolecules through autophagy. I hope to enjoy science while sharing the fascination of this field with the next generation and contributing to its continued growth.

Prof. Masato NIKAIDO December 2025-

I was appointed as a Professor on December 1, 2025. I am deeply honored to assume this significant responsibility at Science Tokyo, with which I have shared more than 30 years of my life since enrolling in April 1994. Through education and research grounded in my field of evolutionary biology, I am committed to working together with our students—my academic successors—to contribute to the continued development and bright future of this university.

Prof. Takuji YAMADA December 2025-

I am honored to be promoted to Professor. My work focuses on gut microbiome data analysis, international collaboration, and translating science into society. I will continue advancing education and research at the interface of life science and data science.

Leaving StaffsProf. Hiroshi ICHINOSE March 2026

I will be retiring after 23 years at this university. The number of graduates from my laboratory has now surpassed 100, and I am delighted to see so many of them succeeding in universities and in industry. As I look back on these 23 years, countless memories and emotions come to mind—far too many to be captured in just a few words. I would like to express my deepest gratitude to all the faculty and staff who have supported me during this period. Thank you very much.

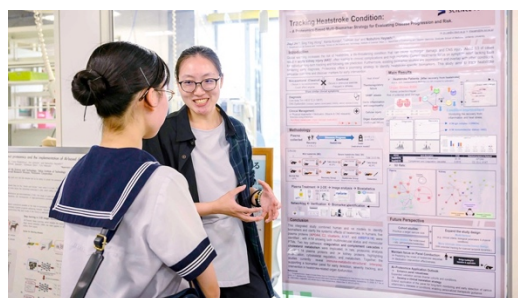
Assoc. Prof. Eizo MIYASHITA March 2026

I moved to School of Life Science and Technology in 2016 due to university reorganization after I had joined a member of Tokyo Institute of Technology in 2001. Indeed, I have spent 25 out of 41 years of my research life here. During this period, I have met various people and encountered concepts that have influenced my research viewpoint. Continuing research in neuroscience, I aim to develop a medical device that makes a positive social impact.

Activities and Events

Tokyo Tech Open Campus 2025

The "Institute of Science Tokyo, Science and Engineering Open Campus 2025 for High School Students and Prospective Students" was held on August 6, 2025. Despite the scorching heat, approximately 12,000 high school students and prospective students from all over the country attended the event, with many also participating online. This year's open campus consisted of a variety of programs, including mock lectures on science and engineering, research introductions, and roundtable discussions with current students, allowing visitors to get up close and personal with the vibrant research environment and cutting-edge research results. Consultation booths were set up to answer questions from visitors, including individual entrance exam consultation sessions and individual consultation sessions for each school. The event provided a great opportunity for high school students and prospective students to learn about life after enrollment, including a tour of campus facilities, such as the Manufacturing Center, which is equipped with a variety of machine tools, the library with its extensive collection of books, and the museum introducing the university's history.



The 13th Tokyo Tech International Symposium on Life Science and Technology

The 13th International Symposium on Bioscience and Biotechnology was held on January 22, 2025.

Science Tokyo Founding
13th International Symposium
on Life Science and Technology

January 22nd, 2025
@Suzukake Hall 3F

**Pioneering Techniques and Applications
in Biomedical Science and Engineering**

13:10	Prof. Institute of Science Tokyo Itsuki Ajioka "Molecular Assembly-Based Therapies and Scaffolds in the Central Nervous System"
13:40	Prof. Japan Advanced Institute of Science and Technology Kenzo Fujimoto "Development and application of photochemical ultra-fast DNA crosslinking"
14:35	Student presentations, Institute of Science Tokyo Toma Ikeda "Seesaw protein: Design of a protein that adopts interconvertible alternative functional conformations"
	Kai Nishimura "Innovative Boron Delivery System for Tumor Targeting: Utilizing Non-Covalent Albumin Ligands for Enhanced Neutron Capture Therapy"
	Agnia Vibriani "Investigating skin photoaging by detecting dysregulations in circadian rhythms"
	Daiiki Maejima "Design of intracellular antibody for live-cell imaging using AI tools"
15:35	Assoc. Prof. University of Miyazaki Kengo Inoue "Microbial Fuel Cells: Fundamental and Applied Research on Extracellular Electron Transfer"
16:30	Prof. Kobe University Ryo Nitta "Unraveling Medical and Biological Questions through Cryo-EM-Based Cross-Scale Measurements"
17:00	Prof. Technical University of Denmark Anne S. Meyer "Enzymatic degradation of the polyester polyethylene terephthalate (PET): Enzyme kinetics and significance of PET crystallinity"

■ Registration
<https://forms.gle/mMkiAUdqtZhi8Kbv9>

■ E-mail
isympos2024@life.isct.ac.jp

■ Address
 4259 Nagatsuta, Midori, Yokohama, Kanagawa, JAPAN

Institute of
SCIENCE TOKYO

Registration

Awards

The Commendation for Science and Technology by the Associate Professor Kayo Nozawa and Associate Professor (Visiting Professor) Keiko Nonomura have been awarded 2024 The Young Scientists' Award of the Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology
**Minister of Education,
Culture, Sports, Science and Technology**

8th Bioindustry Research Award (Japan Bioindustry Association)

The Bioindustry Research Award was established in 2017 to recognize promising young researchers and their achievements in applied research related to bioscience and biotechnology. Professor Mako Kamiya received the 8th Bioindustry Research Award on July 12, 2024.



SPSJ Asahi Kasei Award 2024 (The Society of Polymer Science, Japan)

This award is given to researchers who have achieved original and outstanding research results based on polymer science in the fields of environment, energy, bioscience, and life science.

Associate Professor Toshinori Fujie (currently Professor) was awarded the SPSJ Asahi Kasei Award 2024.



Kao Science Award (The Kao Foundation for Arts and Sciences)

The Kao Science Award is awarded to researchers who have achieved original and pioneering research results in the fields of "chemistry/physics" and "medicine/biology" under the theme of "surface science." On June 26, 2024, Professor Takao Yasui received the 2023 Kao Science Award in the field of Chemistry and Physics.



2024 Tokyo Tech Challenging Research Award

The Challenging Research Award is intended to encourage young faculty members at Tokyo Tech to pursue challenging research. It recognizes highly original and up-and-coming researchers who are boldly taking on the challenges of promoting cutting-edge research, pioneering unexplored fields, innovatively developing emerging research, or pursuing important problems that are considered difficult to solve. On June 21, 2024, Assistant Professor Ayumi Nagashima received the 23rd Tokyo Tech Challenging Research Award for 2024.

The Zoological Society of Japan Award 2024

The award is given to researchers who have made academically beneficial and significant contributions to the advancement and development of zoology. Professor Mikiko Tanaka has received the 2024 Society Award from the Zoological Society of Japan.



The Japanese Association for the Study of Taste and Smell Award for Young Investigators 2024

The Japanese Society of Taste and Smell Research Encouragement Award is given to young researchers who have made outstanding achievements in the field of taste, smell, and related research, and who are expected to make significant contributions to the Society in the future.

Assistant Professor Tetsuro Iwata received The Japanese Association for the Study of Taste and Smell Award for Young Investigators 2024.



(Asst. Prof. Iwata: 2nd from left)

Highly Cited Researcher designations by Clarivate in 2024

Professor Yuriko Osakabe has been selected as Clarivate's Highly Cited Researchers 2024.



2024 JSBBA Award for Young Women Scientists (Japan Society for Bioscience, Biotechnology, and Agrochemistry)

For the Encouragement of Women Scientists, awarded to women members under 50 years old with outstanding research contributions, with the expectation of future progress in extending Bioscience, Biotechnology, and Agrochemistry. Assistant Professor Ayumi Nagashima received JSBBA Award for Young Women Scientists.



Seiichi Tejima Research Awards

The Seiichi Teshima Memorial Research Award was established to honor the achievements of Seiichi Teshima, the principal of Tokyo Technical School and Tokyo Higher Technical School, the predecessor of Tokyo Institute of Technology, who retired in 1917 after more than 25 years of dedicated service to industrial education and made significant contributions to the advancement of industrial education in Japan. The fund was established by a group of prominent figures from the political, business, and educational worlds at the time to honor his achievements. Since its establishment, the award has encouraged research by Tokyo

Tech personnel and Tokyo Tech graduate students, and has honored many outstanding achievements.

The 2024 Research Paper Award was given to “High-throughput structure determination of an intrinsically disordered protein using cell-free protein crystallization” which was published in the journal *The Proceedings of the National Academy of Sciences*. The authors are as follows;

Mariko Kojima, Satoshi Abe (Assistant Professor), Tadaomi Furuta (Assistant Professor), Kunio Hirata, Xinchun Yao, Ayako Kobayashi, Ririko Kobayashi, and Takafumi Ueno (Professor)

Assistant Professor Kosuke Kikuchi received the Doctoral Thesis Award for his paper titled "Dynamics-coupled Design of Protein Needles for Constructing Self-assembly Structure."

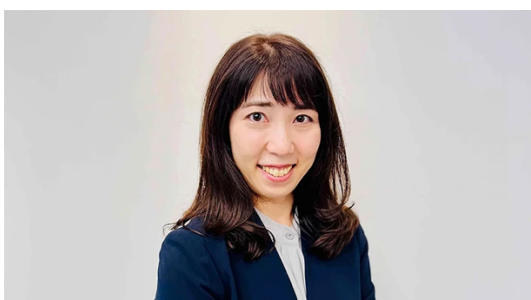
2nd KOBE Prize Young Investigator Award

This award is a new academic prize that highlights researchers who have achieved outstanding and original research that brings about innovation in the field of Bio Medical Engineering - the interdisciplinary area that combines life science and science and engineering - as well as young researchers who show great promise for their unique research. Professor Mako Kamiya has been received the Young Investigator Award.



18th Science Grant SHISEIDO Female Researcher

Shiseido established this grant in 2007 with the aim of supporting female researchers who are motivated to take on leadership positions, and has continued to provide support ever since. Assistant Professor Ayumi Nagashima received the Science Grant.



The Japanese Association for the Study of Taste and Smell Award 2024

This award is given to those who have made outstanding academic achievements in the study of taste and smell, as well as significant contributions to the development of the academic society.

Professor Junji Hirota received The Japanese Association for the Study of Taste and Smell Award 2024



Students' Achievement Graduate School Students Won Ohsumi Journal Award

The excellent students whose research papers were published in high-impact journals have been commended by “Yoshinori Ohsumi Memorial Fund” established in 2017. In 2023, six graduate school students won Ohsumi Journal Award.

The 26th Award (2024/6)

Ms. Yuri Oku

“Substrate Promiscuity of *Thermoplasma acidophilum* Malic Enzyme for CO₂ Fixation Reaction”

JACS Au



The 27th Award (2024/7)

Ms. Minami Imamoto

“Severe Bottleneck Impacted the Genomic Structure of Egg-Eating Cichlids in Lake Victoria”

Molecular Biology and Evolution



The 28th Award (2024/12)

Mr. Tomoya Maruyama

“Temporally controlled multistep division of DNA droplets for dynamic artificial cells”

Nature communications



The 27th Award (2024/7)

Mr. Daiki Tokura

“Active control of pharmacokinetics using light-responsive polymer-drug conjugates for boron neutron capture therapy”

Journal of Controlled Release



The 28th Award (2024/12)

Ms. Satomi F. Ono

“Immobilization secondary to cell death of muscle precursors with a dual transcriptional signature contributes to the emu wing skeletal pattern”

Nature communications



The 28th Award (2024/12)

Ms. Yinghui Yang

“BRET Nano Q-Body: A Nanobody-Based Ratiometric Bioluminescent Immunosensor for Point-of-Care Testing”

ACS Sensors



The 29th Award (2025/7)

Mr. Akinao Kobo

“A mini-hairpin shaped nascent peptide blocks translation termination by a distinct mechanism”

Nature Communications

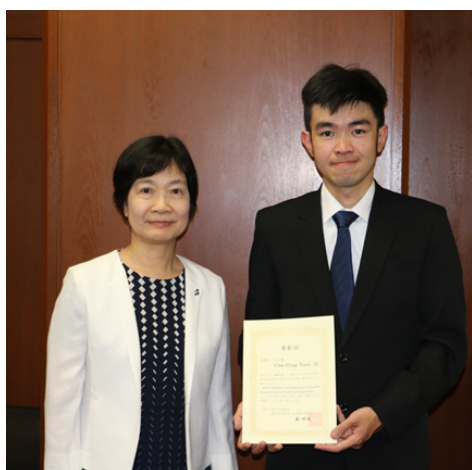


The 29th Award (2025/7)

Mr. Hong X. Chai

“DNA Condensates via Entanglement of String-like Structures Based on Anisotropic Nanotetrahedra”

JACS Au



The 29th Award (2025/7)

Mr. Toma Ikeda

“Seesaw protein: Design of a protein that adopts interconvertible alternative functional conformations and its dynamics”

Proc. Natl. Acad. Sci. USA



The 30th Award (2025/9)

Mr. Ryoma Iwata

“Heme bound to the bacterial transcription factor SqrR/YgaV catalyzes oxygen-dependent conversion of hydrogen sulfide to polysulfide for regulated gene expression”

Redox Biology



The 31th Award (2025/9)

Mr. Hayato Ito

“Canonical translation factors eIF1A and eIF5B modulate the initiation step of repeat-associated non-AUG translation.”

Nucleic Acids Research

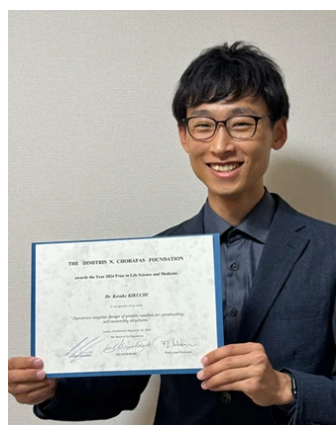
**Graduate School Students Won Chorafas Award**

The excellent students in the fields of biotechnology and related sciences have been commended by “Dimitris N. Chorafas Foundation” since 1992. In 2024, two graduate school students and in 2025 two students won Chorafas Award.

Dr. Kosuke Kikuchi

(2024.03 completed Ueno Lab)

“Dynamics-coupled Design of Protein Needles for Constructing Self-assembly Structures”

Dr. Masahito Tsuda

(2024.03 completed Nakamura-Okada Lab)

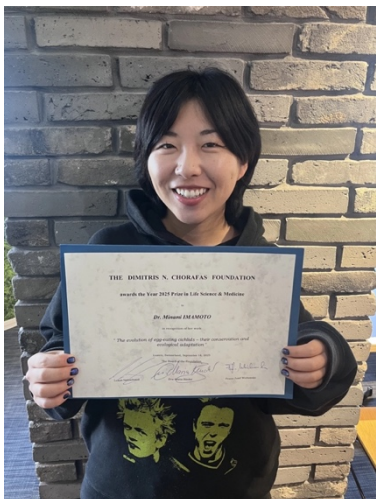
“Functionalization of isoxazoles and application to synthesis of heterocycles”



Dr. Minami Imamoto

(2025.03 completed Nikaido Lab)

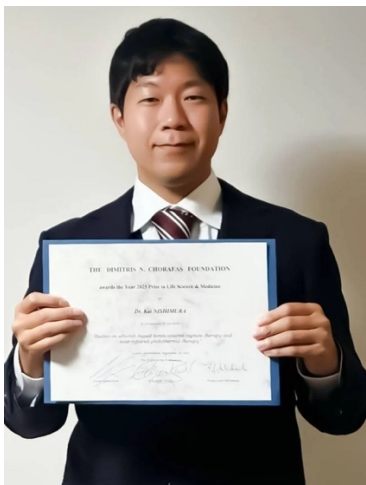
“The evolution of egg-eating cichlids - their conservation and ecological adaptation”



Dr. Kai Nishimura

(2025.03 completed Nakamura-Okada Lab)

“Studies on albumin-based boron neutron capture therapy and near-infrared photothermal therapy”

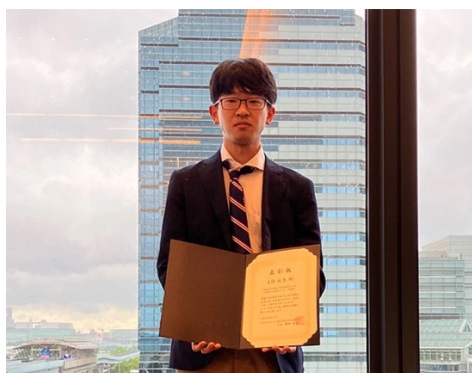


Presentation Awards in Symposium

Mr. Kose Kamijo (Kadonosono Lab)

The 28th Annual Meeting of Japanese Association for Molecular Target Therapy of Cancer

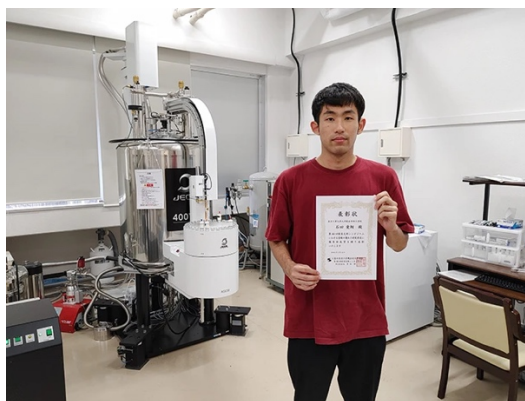
Poster Award



Mr. Manato Ishida (Hata Lab)

The Society of Synthetic Organic Chemistry, Japan 86th Kanto Branch Symposium

Excellent Presentation Award



Mr. Koki Date (Ueno Lab)
34th SPSJ symposium on Bio-polymer
Excellent Poster Presentation Award



Ms. Yuri Oku (Matsuda Lab)
The 92nd Meeting of the Japanese Society of
Enzyme Engineering
Excellent Poster Presentation Award

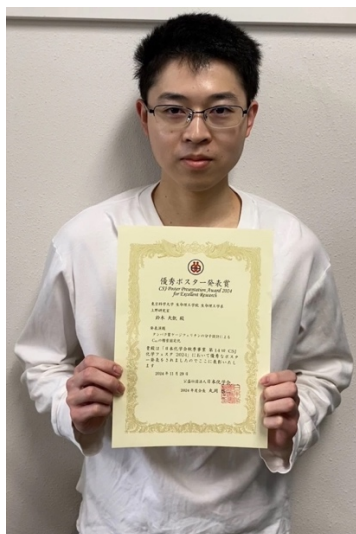


Ms. Mio Okui (Wachi Lab)
The Society for Biotechnology, Japan / 76th
Annual Meeting 2024

The Student Best Presentation Award



Mr. Taiga Suzuki (Ueno Lab)
14th CSJ Chemistry Festa
The excellent poster presentation award



Ms. Zhongyao Tang (Matsuda Lab)
The 24th Biocatalysis Symposium of Japan
Excellent Poster Presentation Award



Mr. Onggono Suwandi (Kadonosono Lab)
The 3rd Annual Meeting of the Antibody
Society of Japan
Poster presentation award



Mr. Fuma Ishii (Yasui Lab)
The 51st Conference of the Society for
Chemistry and Micro-Nano Systems
(Cheminas 51)
Excellent Presentation Award



Mr. Kosuke Fujii (Tanaka-Yoshida Lab)
The 66th Annual Meeting of the Japanese
Society of Plant Physiologists
PCP Poster Award



Mr. Kazuki Kase (Yasui Lab)
The 51st Conference of the Society for
Chemistry and Micro-Nano Systems
(Cheminas 51)
Excellent Presentation Award



Mr. Kotaro Miyamoto (Kadonosono Lab)

The 7th Annual Meeting of the Japanese Society
for Quantum Life Sciences

Best Poster Presentation Award

Mr. Kazuma Abe (Hata Lab)

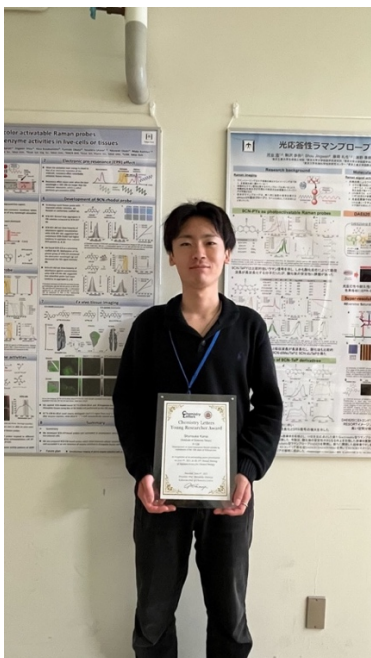
The Society of Synthetic Organic Chemistry,
Japan 88th Kanto Branch Symposium

Excellent Presentation Award

Mr. Shunsuke Kanai (Kamiya Lab)

The 19th Annual Meeting of the Japanese
Society for Chemical Biology

Poster Presentation Award

Mr. Rei Hamaguchi (Kimbara Lab)

35th SPSJ symposium on Bio-polymer

Excellent Poster Presentation Award

Mr. Kaito Okuguchi (Hirota Lab)

The 59th Annual Meeting of the Japanese
Association for the Study of Taste and Smell

Excellent Presentation Award



(Mr. Okuguchi: 2nd from left)

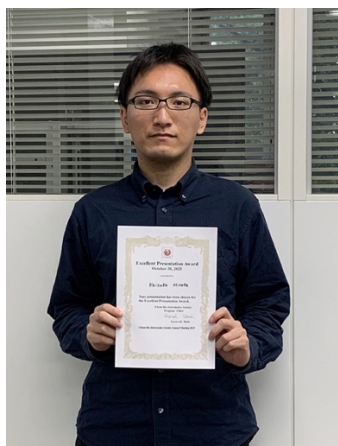
Mr. Kazuma Abe (Hata Lab)

71th Symposium on Organometallic Chemistry,
Japan
Poster Presentation Award



Mr. Keisuke Hirota (Yamada Lab)

Chem-Bio Informatics Society (CBI) Annual
Meeting 2025
Excellent Oral Presentation Award



Other Awards

2024 Tokyo Tech Award for Student Leadership

Mr. Yoshihito HASEGAWA (B4)

Tokyo Institute of Technology awards students with leadership qualities such as intelligence, creativity, humanity, and vitality, with the aim of fostering international leadership among students. Mr. Hasegawa won the award for his leadership as the Student Survey representative. He led a group of students who worked together to submit the Student Survey 2022 proposal to the Tokyo Tech president. Amidst major institutional changes such as the upcoming merger with Tokyo Medical and Dental University and the introduction of special quotas for Japanese-speaking prospective female students applying to the Tokyo Tech's bachelor's degree programs, took a leading role in the creation of survey questions, data tabulation and analysis, and the creation of recommendations and additional survey questions, while ensuring fairness and respecting the opinions and needs of individual student staff members.



(Mr. Yagi: 2nd from right)

The Yacht Club alumni team won the "NIPPON CUP" U30 class for the first time in their history.

Yuki Yakuwa, a first-year doctoral student in the Department of Life Science and Technology, School of Life Science and Technology, is participating in this race as a GRADs member.



(Mr. Yakuwa: 2st from left)

Tokyo Tech Yacht Club wins prize at Kanto Student Women's Yacht Championship

In the women's race, Yu Endo (3rd year, Department of Life Science and Technology, School of Life Science and Technology) and Haruna Suzuki came in 6th place in the Snipe class.



(Ms. Endo: left)

Institute of Science Tokyo Yacht Club wins Snipe class and finishes second overall in the women's race at the Spring Intercollegiate Championships

Both the Snipe class victory in the women's race and the overall runner-up finish were firsts since the club was founded.

Snipe Class Winners: Yu Endo (4th year, Life Science and Technology) and Haruna Suzuki

7th place in the 470 class: Yui Ito (4th year, Life Science and Technology, School of Life Science and Technology) and Ami Sasazawa

8th Place, 470 Class: Rina Yamada (4th year, Life Science and Technology) and Mikina Goto (4th year, Life Science and Technology)



(Ms. Sasazawa, Ms. Ito, Ms. Endo Ms. Suzuki, Ms. Yamada, and Ms. Goro: from left)

Institute of Science Tokyo Yacht Club participates in the All Japan Snipe Class Yacht Championship

The pair that qualified to compete are Yu Endo (4th year, Life Science and Technology) and Yuki Takahashi.



(Ms. Endo: left)

From International Student

NOFINSKA Balqis Arche

In 2013, I visited Japan for the first time as a youth representative of Indonesia for the Kizuna (Bond) Project, two years after the Great East Japan Earthquake in 2011. I witnessed with my own eyes the flattened land and the massive ships stranded far inland. I can still feel how the disaster left deep emotional scars on the local communities. Yet, I was equally amazed by Japan's disaster mitigation systems, its culture, and the warmth of its people. I promised myself that one day, I would return to Japan and study here.

That promise was fulfilled in 2021 when I was accepted into the International Graduate Program at the Institute of Science Tokyo (IST) and joined Yamada Laboratory. Our laboratory focuses on metagenomics, comparative genomics, tool development, biological simulations, semantic web databases, and big-data visualization, collaborating with researchers in Japan and abroad. Under the supervision of Yamada-sensei, I began researching the gut microbiome and metabolite profiles in young-onset colorectal cancer (under 50 years old). Several studies have shown that gut microbial imbalance is linked to various diseases, including colorectal cancer (CRC). Although CRC is typically associated with older adults, its incidence has been rising among younger populations. While CRC is

treatable, and even curable when detected early, early detection remains a major challenge. Through my research, I aim to identify biomarkers that can be used to detect CRC in young individuals. The more I study the gut microbiome and metabolites, the more fascinated I become. It has changed the way I live and made me more conscious of my own health, and it strengthened my desire to help others understand the microbiome science as well.

Beyond research, my life in IST has also opened doors beyond traditional academic research. With support from the campus, I joined an entrepreneurship workshop at the Hong Kong University of Science and Technology. The program encouraged me to think beyond the scientific mindset, collaborate with participants from various fields, and explore how research can evolve into real-world innovation. It was my first step into the world of entrepreneurship, and it broadened my perspective in an unexpected but meaningful way.

I was also fortunate to have an opportunity to attend the The Human Microbiome Symposium at the European Molecular Biology Laboratory in Heidelberg, Germany. Engaging with world-class researchers and presenting my work allowed me to better understand the global landscape of microbiome science. It was inspiring to learn how scientists from different countries approach similar questions, and the event significantly expanded my professional

network. The conversations I had there helped refine my research vision and strengthened my confidence to contribute to global scientific dialogue.

Another important chapter of my journey has been balancing student life with motherhood. I went through pregnancy, childbirth, and early motherhood alongside my research responsibilities. Managing experiments through sleepless nights, meeting deadlines while caring for my baby, and navigating academic expectations amid the emotional demands of motherhood taught me resilience, grit, and the strength to persevere through challenges. I am deeply grateful for the understanding and support from my supervisor, lab members, and friends, whose kindness helped me through this demanding period. I am also thankful to the university for regularly organizing enjoyable activities such as Japanese calligraphy (shodō) event, drawing workshops, video-editing workshops, campus festival and many other creative events which enriched my life outside the laboratory.

One of my most cherished memories is from my first semester, when I joined campus shodō event and I wrote 夢の実現 (**yume no jitsugen**), which means “making dreams come true.” Now, in my final year as a student at this university, those words truly reflect how I feel about my journey. None of this would have been possible without the scholarship awarded by the Ministry of Education, Culture, Sports, Science, and Technology of Japan (MEXT),

which allowed me to pursue my studies in Japan and turn my dream into reality. I am also deeply grateful to my supervisor, teachers, and lab members for their guidance and kindness throughout my time here. Japan has truly become my second home, and my time at IST has passed faster than I imagined. These years have shaped me deeply, and I will always cherish the experiences and memories I have gained at this university.



(Upper) Me with my art after attending Japanese calligraphy workshop. **(Lower)** Me and my child at the master's graduation ceremony.

Editor's Note

Last fall, our university became Institute of Science Tokyo, and this year we were recognized as an International University of Excellence. Our business plan, the "Research System Strengthening Plan," was approved, and we are transitioning to a vision-driven interdisciplinary research system called Visionary Initiatives (VI). Under such situation, our graduate school has been able to welcome many new professors.

I would like to express my deepest gratitude to those who have contributed to this newsletter this year. We are honored to present your activities and those of the School in this issue. We may continue to report on the activities of the School of Life Science and Technology in future issues of this newsletter. We look forward to your continued support and cooperation.

(Toshiaki MORI, editor-in-chief)