Kyoto University On-site Laboratory: Kyoto University Research Center San Diego

General Information

- Approved in FY 2018
- Established in September 2019
- Established by the Graduate School of Medicine
- Partner institution: The University of California San Diego (UCSD), USA
- Location: The University of California San Diego (UCSD), San Diego, USA (outbound)
- Purposes: Acceleration of research collaboration, industry-academia collaboration, education collaboration, and global human resource development through sharing space in the Center for Novel Therapeutics with UCSD's top researchers
- Functions: Joint research in the field of medicine and expansion of collaboration with academic institutions and industrial partners in San Diego.

Positive ripple effects on the university's activities

- Promotion of international joint research
- Support for study abroad and global exchange by students and faculty and staff members
- Recruitment of talented international students and researchers
- Support for KU ventures

【FY 2025】

- Many internationally renowned researchers in the field of immunology are affiliated with departments on the UCSD School of Medicine campus, where KURC-SD is located. This campus has multiple research facilities, including the Moores Cancer Center, La Jolla Institute for Immunology (LJI), etc. A Joint research program focusing on human immunology will be launched, and a joint application for grants (e.g., NIH) will begin preparation by utilizing this environment. These activities are anticipated to lead to cutting-edge research and raise Kyoto University's international profile.
- The facility will function as an "open-space" research environment that provides KU researchers with a convenient environment in which to launch projects with lower costs.

Activity Overview

京都大学 KYOTO UNIVERSITY

INNOVATION HUB KYOTO

- **Promotion of advanced joint research with researchers from UCSD**
- **Promotion of relationships among researchers, undergraduate, and graduate students**
- **Overseas training of early-career researchers and administrative staff**
- **Support for KU Ventures**

Graduate school of Medicine, etc. ⟷ CNT, Moores Cancer Center, La Jolla Institute etc.

On-site Laboratory

Joint research program

SD academic hub

Lead cutting-edge research, Ripple effect on the university activities

Application

International Grants in USA

Sustainability

Entrepreneurship

KU Ventures

Ripple effect on the university activities

Kyoto University On-site Laboratory: Kyoto University Research Center San Diego

Main Activities in FY 2024

❶ 6th Kyoto University LifeScience Showcase (KULS) @San Diego 2025 (February 20–21, 2025)

- A pitch event was held in San Diego with the aim of promoting the international dissemination of innovations in medical fields by Kyoto University and other institutions.
- Presentations were delivered by eleven venture companies related to developing devices for medical treatment and drug development from Japan and other countries. The event was attended by 11 commentators with knowledge of entrepreneurship in the US and 104 participants including venture capitalists, investors, and pharmaceutical company representatives. The reception, held after the event, featured a lively exchange of information and preliminary negotiations between companies and participants.
- During the educational seminar held on February 21, companies that presented at the pitch event received advice from lawyers, accountants, and investors living in San Diego about launching businesses in the US.

❷ Other notable achievements

- To advance international research collaboration on human immunology using KURC-SD as a base, discussions have begun to conclude a comprehensive collaboration agreement with UC San Diego, La Jolla Institute for Immunology (LJI), and Chiba University, all of which utilize the AMED-SCARDA initiative.
- With support from the AMED Strengthening Program for Pharmaceutical Startup Ecosystem program, a Kyoto University-originated venture business that participated in KULS leveraged the connections it developed through the event to relocate its main office to the US to expand its business and conduct US clinical trials of its product.
- Utilizing the network developed through the OSL, a clinical trial is currently underway to treat Parkinson's disease using transplants of nerve cells created from human iPS cells.

Kyoto University On-site Laboratory: IFOM-KU Joint Research Laboratory

General Information

- Approved in FY 2018
- Established in April 2020
- Established by the Graduate School of Medicine
- Partner institution: The AIRC Institute of Molecular Oncology (IFOM ETS), Italy
- Location: Kyoto University, Kyoto, Japan (inbound)
- Purposes: Promotion of international research collaboration through the establishment of an international joint laboratory on the campus of the KU Graduate School of Medicine, co-funded by IFOM ETS and Kyoto University.
- Functions: Advanced cancer biology research and training of graduate students and early-career researchers.

Positive ripple effects on the university's activities

- Boost research activity by bringing together the knowledge and expertise of both institutions.
- Foster global human resources by internationalizing the research environment
- Create innovation through interdisciplinary academic collaboration

【FY 2025】

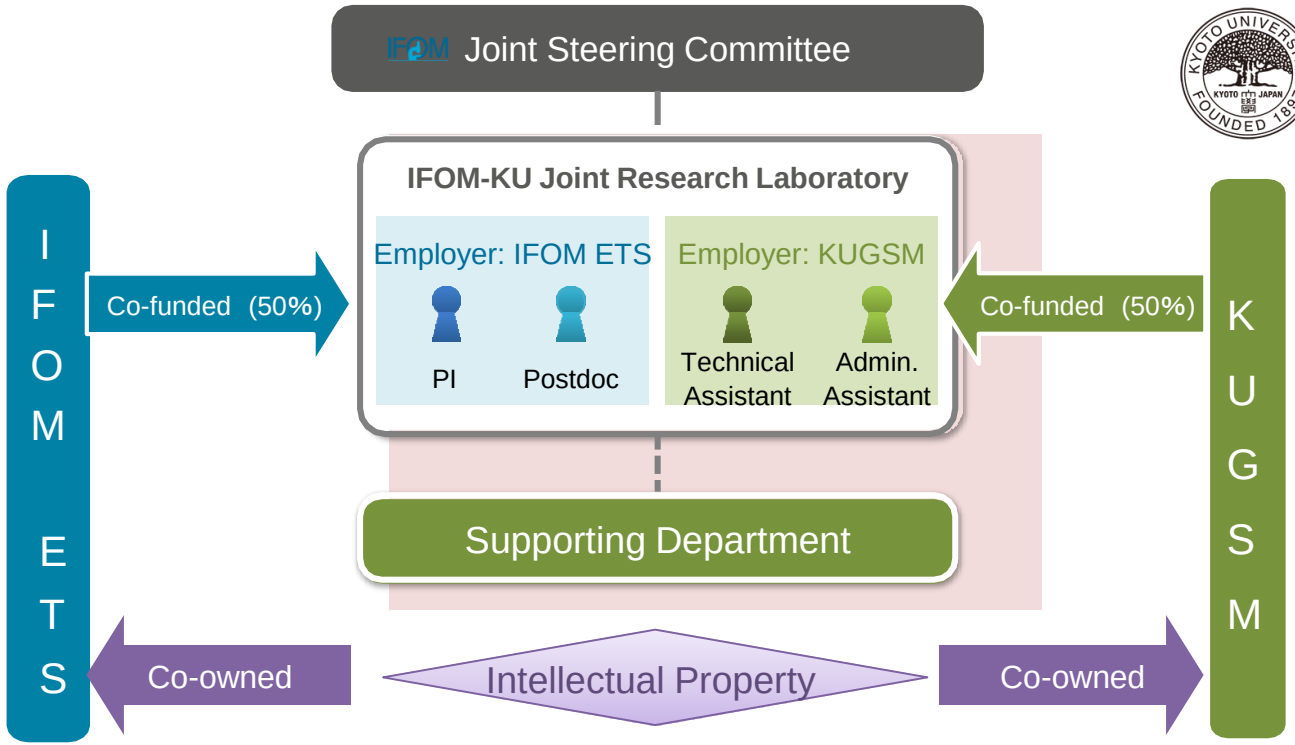
- Promotion of research collaboration and publication of internationally co-authored academic papers.
- Development of international joint research through the hosting of multiple international students including a MEXT scholarship student and JSPS Research Fellowship for Young Scientists recipient, and foreign researchers.
- Hosting multiple international students through the AMGEN Scholars Program and Kyoto University's General Exchange Special Research Student system etc., to contribute to the university's internationalization efforts.
- Deepening of international exchange through short-term hosting at IFOM ETS.

Activity Overview

About IFOM

IFOM ETS is an institution dedicated to the study of the molecular processes of cancer. It was established by the Italian Foundation for Cancer Research (FIRC) and boasts the largest-scale and best facilities in Europe. Numerous high-quality research projects are being conducted there.

KU's Graduate School of Medicine has an ongoing relationship with IFOM ETS. Since the conclusion of departmental academic and student exchange agreements in 2010, the two institutions have been implementing research and student exchange actively through holding joint symposiums, etc.



Kyoto University On-site Laboratory: IFOM-KU Joint Research Laboratory

Main Activities in FY 2024

❶ Research outcomes

- Articles

Diana Romero-Zamora[#], Samuel Rogers[#], Ronnie Ren Jie Low, Andrew B. Robinson, Scott G. Page, Blake JE Lane, Noa Lamm, Fuyuki Ishikawa, **Makoto T. Hayashi**[*] and Anthony J. Cesare[*], A CPC-shelterin-BTR axis regulates mitotic telomere deprotection, ***Nature Communications***, 2025, March 17, [#]Equal contribution, [*]Co-corresponding authors

- Conference presentations

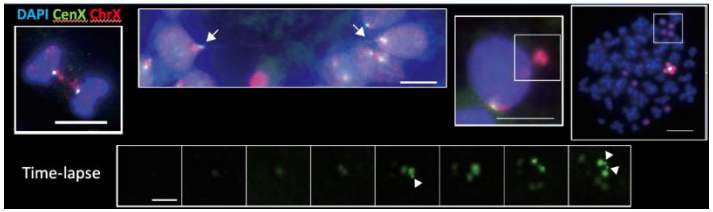
Yuki Sato and ○**Makoto T. Hayashi**, Micronucleus Derived from Chromosome Fusion Is Not a Potent Inducer of cGAS-STING Pathway, EMBO Workshop Telomere function and evolution in health and disease, Roma, Italy, May 6-11, 2024;

Yuki Sato and **Makoto T. Hayashi**, Micronucleus Derived from Chromosome Fusion Is Not a Potent Inducer of cGAS-STING Pathway (invited lecture), 96th Annual Meeting of the Genetics Society of Japan, Kochi, September 4–6, 2024

Diana Romero-Zamora, Placide Niyonshuti, Samuel Rogers, Anthony J Cesare, Makoto T. Hayashi, RECQ Regulatory Mechanisms of M-phase Telomere Deprotection by Factors, the 42nd Chromosome Workshop, the 23rd Nuclear Dynamics Workshop, Oita, January 29–31, 2025

- Acquisition of external funding

Grant-in-Aid for Challenging Research (Exploratory), Takeda Research Grant (Cancer Category), Enzyme Research Grant FY 2024



Analysis of the fate of X chromosome fusion by the chromatid fusion visualization system (FuVis)

❷ Education, internationalization, and outreach

- Education and internationalization

The laboratory hosted:

IFOM ETS post-docs: 1 (Nigerian)
Research assistants: 3 (1 Mexican, 2 Japanese)
Researchers/master's/doctoral students: 5 (2 Rwandan, 1 Mexican, 1 Chilean, 1 Japanese)
Short-term international students (AMGEN Scholars Program): 1 (Kazakhstan)

Meetings with IFOM ETS

PI chalk-talk meetings (online or onsite, once per month), PI meetings (online, once per month), PI retreat (Italy, October 7–9, 2024)

- Education and outreach

IFOM-KU Joint Graduate Student Symposium (Milan, Italy, February 19, 2025)

The IFOM-KU Joint Research Laboratory

Kyoto University On-site Laboratory: Kyoto University-Tsinghua University Cooperative Research and Education Center for Environmental Technology

General Information

- Approved in FY 2018
- Established in December 2018
- Established by the Graduate School of Engineering and Graduate School of Global Environmental Studies (GSGES)
- Partner institution: Tsinghua Shenzhen International Graduate School, Shenzhen, China
- Type: Outbound
- Location: Tsinghua Shenzhen International Graduate School, Shenzhen, China
- Purposes: Promotion of joint research and education
- Functions: Research and education in environmental engineering fields, and international double degree program

Positive ripple effects to the university's activities

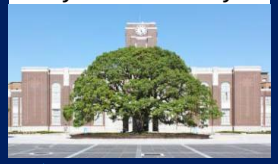
- Recruitment of talented international students in environment-related fields.
- Expansion of internship education to fields other than environmental engineering.
- Expansion of international double degree programs to other fields, and implementation of diverse degree programs.
- Development of international industry-government-academia collaboration in other fields and in collaboration with other universities, local governments, and companies in Japan and China, building on the research collaboration in environmental engineering between Kyoto University and Tsinghua University.

【FY 2024】

- A Japanese student was dispatched as part of the Master's DD program continuously. Conducting international training programs to attract talented students from Tsinghua University and to cultivate the international mindset of Kyoto University students.
- Symposiums and seminars were held to develop ongoing international joint research.

Activity Overview

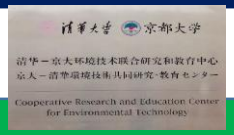
Kyoto University



Graduate School of Engineering

Graduate School of Global Environmental Studies

CRECET
Cooperative Research and Education Center for Environmental Technology
Foundation: October 2005



Tsinghua Shenzhen International Graduate School

Founded in 1911, one of the top universities in China
Established the Shenzhen Campus in 2001
QS World Univ. Ranking: 25th@2024

Tsinghua University

University Town of Shenzhen in Guangdong Province, China

Companies & Government Bodies in Japan

- Study and experiments by Kyoto University faculty members and students
- Joint research with Tsinghua University and Chinese research institutes
- Joint Research with Japanese companies and Chinese research institutes
- Student internship program
- Double degree program

Joint Laboratory

Liaison Office

Collaborative Education

Companies & Government Bodies in China

- Facilities for Tsinghua University faculty members and students
- Joint research with Kyoto University and related companies
- Cooperation with Japanese and Chinese companies, and Chinese research institutes
- Student internship program
- Double degree program

The on-site laboratory will facilitate interaction with various fields other than environmental engineering.

Kyoto University On-site Laboratory: Kyoto University-Tsinghua University Cooperative Research and Education Center for Environmental Technology

Main Activities in FY 2024

❶ Kyoto University-Tsinghua University Symposium 2024 on Research and Education of Environmental Engineering

- The Kyoto University-Tsinghua University Symposium 2024 on Research and Education of Environmental Engineering (hereinafter “the symposium”) was held in person in December 2024.
- Prior to the symposium, the MOU for the establishment of the center was renewed (the renewal period was extended from 3 years to 5 years).The symposium featured lively discussions among 88 participants including students, faculty, and staff members of the two universities, and delegates from private companies in Japan and China.
- The symposium included a report on the situation regarding education and international exchange, research presentations by researchers from the two universities, overviews of the latest technologies by environment-related companies in Japan and China, and reports by students from the two universities about their outputs on JST Sakura Science Exchange Program.
- As a result on collaborative research, 3 papers have been published in international journals. The Agro’2025 Pre-Workshop was held in Kyoto University in Sept.,2024.

Symposium group photo at Tsinghua Shenzhen International Graduate School (TSIGS)

❷ Implementation of the Master's DD program and Global Environmental Human Resource Development Programs

- Two Japanese students joined the Master‘s DD program and a Tsinghua University student started the DD program in the Graduate School of Engineering.
- The JST Sakura Science Exchange Program “Learn cutting-edge environmental technology aimed at creating a sustainable society in Kyoto” was implemented from Nov. 3 –Nov.9, 2024. Seven students from Tsinghua University (China), 2 students from the University of Malaya (Malaysia), and 6 students from Kyoto University participated in the program.
- The short internship program was implemented in Shenzhen from Mar. 9–15, 2025. Ten students from Kyoto University interacted with TSIGS students in the program including group works, lecture, cultural exchange event facility tour and workshop.
- Online seminars for supporting companies were held in July 2024 and January 2025.

Cultural Exchange in JST Sakura Science Exchange Program

Kyoto University On-site Laboratory at Mahidol University for Educational and Research Collaboration in Environmental Studies

General Information

- **Approval Year**: FY 2018
- **Establishment**: March 2019
- **Implementing Schools**: Graduate School (GS) of Global Environmental Studies (GSGES); jointly implemented by GS of Engineering, GS of Agriculture, and GS of Medicine after FY 2020.
- **Partner institution**: Mahidol University, Thailand
- **Purposes**: To solve environmental problems in Japan and Thailand and to foster the next generation of researchers and high-level practitioners.
- **Location**: Mahidol University, Bangkok, Thailand (outbound)
- **Activities**: Joint education and research activities on environmental studies, recruitment of talented international students, and development of international joint programs

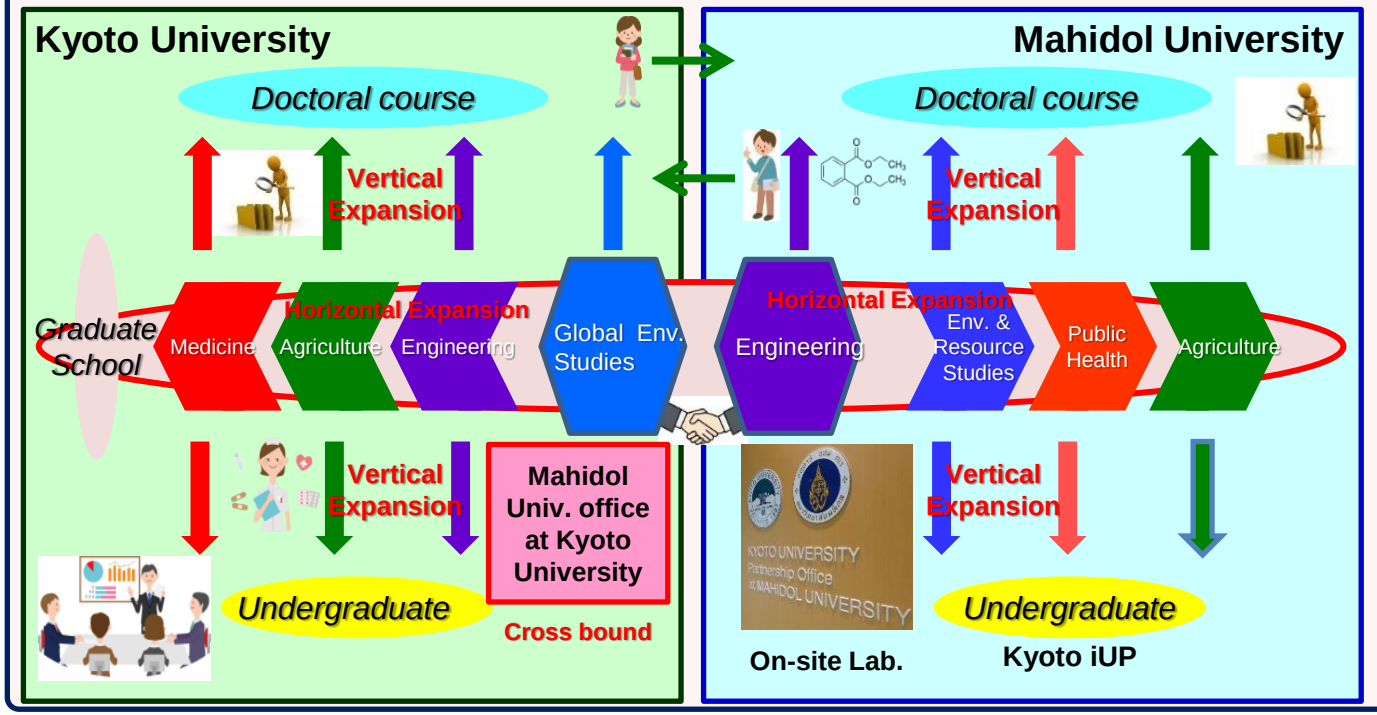
Positive ripple effects to the university's activities

- Research collaboration with local companies
- Recruitment of talented international students
- Education and training for local students
- Extension of joint/double degree programs
- Fusion of the humanities and sciences
- Expansion to cross-bound type

【FY 2018–2024】

- **On-site Laboratory Workshops**: 1st Workshop (MU, Mar 8, 2019), 2nd Workshop (KU, Nov 25, 2019), 3rd Workshop (On-line, Mar 11, 2020), 4th Workshop (On-line, Nov 27, 2020), 5th Workshop (On-line, Mar 11, 2022,) , 6th Workshop (On-line, Mar 29, 2023), 7th Workshop (Feb 23, 2024), 8th Workshop (Feb 21, 2025, 159 participants). In addition, the International Symposium was co-hosted (on-line, November 30–Dec 1, 2020).
- **Double master's degree programs**: the Graduate School (GS) of Global Environmental Studies (GSGES), the School of Public Health, GS of Medicine, and GS of Agriculture were concluded in 2016, 2019, and 2022, respectively. As of the end of March 2025, 1 KU students and 13 Mahidol students have enrolled/will enroll in the GSGES program, one KU student has enrolled in the Agriculture program, and 2 Mahidol students in the Public Health program.
- **Exchange of students & faculty members**: In 2018–2019, 52 of 17 groups from Mahidol and 57 of 15 groups from KU visited each. In 2020–2022, only 9 of 7 groups from Mahidol and 1 from KU visited each due to COVID-19. In 2023-2024, 46 researchers/students of 13 groups from KU and 36 of 8 groups visited each.
- **Others**: Joint lectures, joint research, co-authored research presentations, internships, etc., were conducted.

Activity Overview



Expansion in Thailand

- Khon Kaen Univ.
- AIT
- Kasetsart Univ.
- Thammasat Univ.
- Chulalongkorn Univ.

- Collaborative Research and Innovation
- Faculty and Student Mobility
- Joint Distance Lectures
- Double/Joint Degrees
- Symposium & Study Fair
- Collaborative Projects

Kyoto University On-site Laboratory at Mahidol University for Educational and Research Collaboration in Environmental Studies

Main Activities in FY 2024

❶ Symposium/workshops

- 8th Kyoto University-Mahidol University On-Site Laboratory Workshop, Feb 21, 2025: 159 participants (62 onsite (at MU Salaya Campus) and 97 online participants). First, Prof. Yasuyuki Kono, Vice President of KU, Prof. Chihiro Tanaka, Dean of GSGES, and Prof. Thanapat, Dean of the Faculty of Engineering of MU, gave opening remarks. After that, the participants were divided into four sessions of "Environmental Engineering," "Chemical Engineering," "Agriculture and Ecosystems," and "Public Health," where they introduced their research and held discussions for joint research and education. This was followed by a summary session of reports from each session and general discussions and ended with closing remarks by Prof. Korporn Panyim, Vice Dean of the Faculty of Engineering, and Prof. Izuru Saizen, Vice Dean of GSGES.
- Kyoto University International Symposium, Dec 3, 2024: Held by the Graduate School of Global Environmental Studies at Royal University of Agriculture, Cambodia with Zoom broadcast. One presentation from MU (a joint research project by a student in the double degree program with GSGS) won a presentation award.
- Three KU master students were sent to KU-MU-CU Research Progress Seminar (2024/9/24). This workshop on chemical engineering was held at Chlalongkorn University (Bangkok), and the participants KU, MU, and Chulalongkorn University, made presentations and joined active discussions.

❷ Student exchange/degree programs

- In addition to the Graduate School of Global Environmental Studies (2016) and the School of Public Health (2019), the Graduate School of Agriculture signed an agreement for the establishment of a master's double degree program with Mahidol University Kanchanaburi Campus in July 2022. Preparations for the new double degree programs are also underway at the Graduate School of Engineering (with MU Graduate School of Engineering) and the Graduate School of Agricultural Science (with MU Faculty of Science). Furthermore, an interdepartmental student exchange agreement was concluded between GSGES and the MU School of Public Health in March 2024.
- Two students on the double degree program (who entered Engineering, MU in August 2021, and GSGES in April 2022) received a master's degree from MU in 2024 after receiving a master's degree from KU in March 2024.
- Two students on the double degree program (who entered Engineering, MU in August 2022, and GSGES, Kyoto University in April 2023) came to Kyoto University in April 2023, and left in March 2024. They received a master's degree from KU in March 2025.
- Two students on the double degree program (who entered Engineering, MU in August 2023, and GSGES, Kyoto University in April 2024) came to Kyoto University in April 2024, and left in March 2025.
- Two students who entered MU Engineering in January 2024 were selected for the double degree program. They plan to stay at GSGES for one year from April 2025.
- Dispatched one master's student from the Graduate School of Agriculture to the MU Faculty of Agriculture (from January 13, 2025).
- Joint research with Mahidol University, Chulalongkorn University, and the Royal Nanotechnology Research Center of Thailand, led by the Department of Chemical Engineering, has been selected for JST's NEXUS (Young Scientist Exchange Program) in FY2024 (exchange support period is one year).

❸ Publication of collaborative research results in internationally co-authored academic papers

- Research results produced through collaboration between the two universities have been published in 3 peer-reviewed co-authored papers.

Kyoto University On-site Laboratory: Smart Materials Research Center

General Information

- Approved in FY 2018
- Established in August 2018
- Established by the Institute for Integrated Cell-Material Sciences (iCeMS) and Kyoto University Institute for Advanced Study (KUIAS)
- Partner institution: Vidyasirimedhi Institute of Science and Technology (VISTEC), Thailand
- Purposes: Development of basic research in chemistry and materials science in both countries, and training of researchers with expertise in these fields
- Location: Vidyasirimedhi Institute of Science and Technology (VISTEC), Rayong, Thailand (outbound)
- Functions: Creation of new materials and development of technologies that contribute to solving energy and environmental issues / Training of young researchers and human resource circulationinternational academia

Positive ripple effects to the university's activities

- Development of international joint research including research with local companies
- Student recruitment
- Provision of education for local students and summer schools
- Development into international joint program (JD/DD）
- Establishment of venture companies

- Recruitment of talented undergraduate students from top universities throughout Thailand through in-person visits or online recruitment activities.
- Utilize VISTEC's one- and two-year study abroad programs for PhD students, and strengthen collaboration and develop joint research with relevant top laboratories around the world through using VISTEC as a hub.
- Continue to develop the research using the Thai research grants, and establish a new research consortium consisting of multiple research organizations.

Activity Overview

- **Instructing PhD students and cultivating human resources for industry, government, and academia**
- **Establishment and management of a sustainable laboratory**
- **Launching projects and obtaining external funding**

Kyoto University On-site Laboratory: Smart Materials Research Center

Main Activities in FY 2024

❶ Promoting materials science and chemistry research through collaboration between local lab members and others

- A total of 10 reports (including 5 reports in Nature index) were published during the period 2024/1/1-2024/12/31.
- Teerat Watcharatpong, who is currently studying abroad at Harvard University, was evaluated for his abilities and it was decided that he would continue to work at Harvard University as a postdoctoral researcher after receiving his doctorate. In addition, we sent all of our students to participate in and present at overseas academic conferences.
- Dr. Nattapol Ma (Ph.D. @ Kyoto University in 2022) and Dr. Soracha Kosasang (postdoctoral researcher until 2024), who were active in the on-site laboratory, were both promoted to NIMS ICYS Research Fellows and will each head their own laboratories. Dr. Ma was awarded the Inoue Research Award for Young Scientists in 2024, and was successful in developing human resources and strengthening research capabilities in Japan.

❷ Efforts to establish sustainable laboratory/launching new projects and acquiring external funding

- Dr Horike participated in the admissions process and was involved in the placement of students to establish an annual student intake system, and is on track to receive one new PhD student in FY2025.
- JST-PMU: In the Japan-ASEAN Science and Technology Innovation Collaborative Program, the application for the Japan-Thailand joint research project “Development of Intermediate Temperature Water Electrolysis Technology Using Proton Conductive Metal-Organic Frameworks” was accepted. This project is being conducted with Dr. Kanokwan Kongpatpanich of the VISTEC MSE Department, and it will support the strengthening and promotion of research for the entire VISTEC laboratory.

Kyoto University On-site Laboratory: Kyoto University Shanghai Lab

General Information

- Approved in FY 2019, established in September 2019
- Established by the Institute for Chemical Research
- Partner institution: Fudan University, China
- Purposes: Cutting-edge collaborative research and promotion of personnel exchange in the field of chemistry
- Location: Fudan University, Shanghai, China (outbound)
- Functions: Promotion of cutting-edge chemical research, expansion of international collaboration and equipment sharing, and exchange of human resources with partner institutions

Positive ripple effects to the university's activities

- Promotion of activities as an international joint-usage/research center.
- Efficient research through sharing research resources and equipment.
- Recruitment of talented students through using the lab as a contact point.

【During FY 2024】

- Thirteen faculty members from Fudan University were invited to Kyoto University to participate in the 4th Shanghai-Kyoto Chemistry Forum, which was held at the Institute for Chemical Research of Kyoto University. Ten faculty members from each university presented their research results in the field of new materials, energy conversion and chemical biology.
- Hosted 3 undergraduates (talented program) from Shanghai Jiao Tong University for 1 month at iCeMS.

Overview of activities

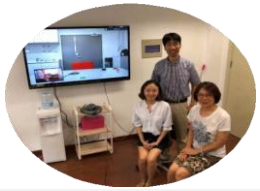
- Research collaboration in advanced chemistry (porous materials and other new materials, energy conversion, chemical biology, etc.)
- Shared use of state-of-art research equipment available at Fudan University, Shanghai Jiao Tong University, ShanghaiTech University, and Kyoto University
- Shared use of the National Compound Library of the Chinese Academy of Sciences (two million compounds)
- Utilize Kyoto University's online courses and short-term study abroad programs to attract talented students from top Chinese universities
- Obtain research funds by inviting visiting professors, and promote early-career researcher exchange

*Proactive applications for external funding
*Collaborative research with companies

Secure funding for self-sufficient management

Office of the Institute for Chemical Research (ICR)

Fudan University Zhangjiang Campus



(Rear) Assoc. Prof. Lu, School of Pharmacy, (Fudan University, concurrent post)
(Left) Secretary

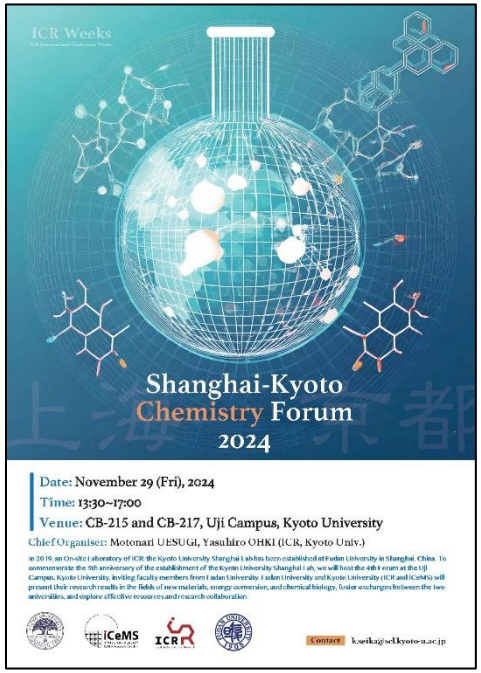
Shanghai-Kyoto Chemistry Forum, October 2024 (Kyoto)

Kyoto University On-site Laboratory: Kyoto University Shanghai Lab

Main Activities in FY 2024

❶ The 4th Shanghai-Kyoto Chemistry Forum was held in Kyoto

Until November 2024, the visa exemption measures for Japanese citizens travelling to China were suspended, and visa applications required time and a certain procedure. Therefore, in 2024, we reduced the number of trips from Kyoto to Shanghai and focused our activities on trips from Shanghai to Kyoto. We invited 13 faculty members from Fudan University to Kyoto University and held the "4th Shanghai-Kyoto Chemistry Forum" at Institute for Chemical Research. Nine professors from Fudan University and ten professors and associate professors from ICR presented their latest research results and academic insights in the fields of new materials, energy conversion and chemical biology. The presentations were followed by a lively Q&A session, and there was also an exchange of views on joint research topics across fields and disciplines.



❷ Nurturing the next generation

- Three selected undergraduate students (talented program) from Shanghai Jiao Tong University joined the one-month internship at iCeMS, Kyoto University in 2024. This will continue as a partnership in order to recruit talented students.
- Tongji University in Shanghai and Kyoto University hosted the “Tongji-iCeMS International Graduate Symposium” on 27-28 August 2024. Young researchers and students from Tongji University and iCeMS discussed next-generation materials.

Kyoto University On-site Laboratory: iPS Cell Research Center at Gladstone Institutes

General Information

- Approved as KU On-site Laboratory in FY 2019
- Established by the Center for iPS Cell Research and Application (CiRA) in September 2019.
- Partner institution: Gladstone Institutes, USA
- Purposes: Further development of world-leading iPS cell research and fostering globally competent early-career researchers
- Location: Gladstone Institutes, San Francisco, USA (outbound)
- Functions: Advanced research on iPS cells, training of early-career researchers, and recruitment of international students

Positive ripple effects to the university's activities

- Advancement in activities of researchers and students through participation in cutting-edge research
- Exploration of new programs beyond the departmental level, including international collaborative research between KU and UCSF

【FY 2025】

- Create opportunities to offer internship education to students from neighboring universities.
- Develop research collaborations with other laboratories and partner institutions and deepen the understanding for the functions of pluripotent stem cells.
- Promote further applications of iPS cell technologies to industries and academia.

Activity Overview

Shinya Yamanaka (PI)

Collaborative Research
Collaborative Management

Shinya Yamanaka (PI)

VISION:

- Development of global human resources and acceleration of cross-border innovation

OUTLINE:

- Collaborative research on the mechanisms of protein translation regulation in the proliferation and differentiation of pluripotent stem cells.
- International exchange of researchers and students
- International exchange programs (symposiums, postdoc training programs)

MANAGEMENT STRUCTURE:

- Associate professor employed by CiRA stationed at the on-site laboratory through a cross-appointment
- Researchers employed by CiRA stationed at the on-site laboratory

Kyoto University On-site Laboratory: iPS Cell Research Center at Gladstone Institutes

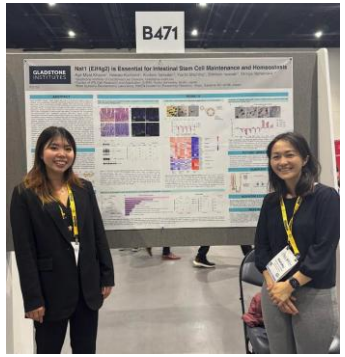
Main Activities in FY 2024

❶ Presentation at Cell Bio 2024

- A. Khaine*, H. Kunitomi*, K. Tomoda* and S. Yamanaka*/** (*: J. David Gladstone Institutes, **: CiRA) made a poster presentation at Cell Bio 2024（San Diego Convention Center, California, U.S.A）co-hosted by The American Society for Cell Biology（ASCB）and European Molecular Biology Organization（EMBO）on December 14-18, 2024.

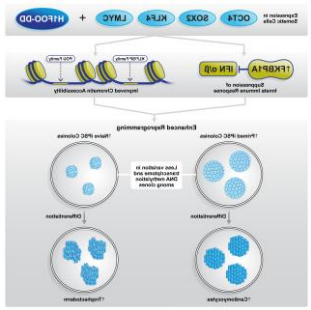
【Poster Number】P2155/B471 https://www.ascb.org/cellbio2024/

【Title】NAT1 is Essential for Intestinal Stem Cell Maintenance and Homeostasis.



❷ Further Improvement of Research & Educational Environment

- The OSL has expanded its research team and laboratory staff to enhance its research efforts, including a young Ph.D. exchange researcher from CiRA.
- The OSL welcomed three local high school students as summer interns. One of them continued her research at the OSL to earn credits in bioscience after enrolling at the University of California, Berkeley.
- Dr. Shinya Yamanaka and the research team at the OSL discovered the vital role of the oocyte-specific linker histone H1FOO in improving reprogramming efficiency and consistency to primed and naïve pluripotent states. These findings were published in Stem Cell Reports.



【Title】

H1FOO-DD promotes efficiency and uniformity in reprogramming to naive pluripotency

https://doi.org/10.1016/j.stemcr.2024.04.005

【Press Release】

https://www.cira.kyoto-u.ac.jp/e/pressrelease/news/240508-110000.html

Kyoto University On-site Laboratory: Center for Integrated Biosystems

General Information

- Approved in FY 2019
- Established in December 2019
- Established by: the Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University Institute for Advanced Study (KUIAS)
- Partner institution: Academia Sinica, Taiwan
- Purposes: Accelerating cutting-edge research
- Location: Academia Sinica, Taipei, Taiwan (outbound)
- Functions: Advanced research in biomedical science fields, expansion of interdisciplinary collaboration, and recruitment of international researchers and students

Positive ripple effects to the university's activities

- The center serves as Kyoto University's point of contact in Taiwan
- The center serves as a hub for exchange with universities and research institutes in Taiwan
- Kyoto University students are motivated by international students from Taiwan and other countries.
- Promotion of internationalization for Kyoto University students

➢ The following benefits are anticipated: Promotion of international research collaboration between the Kyoto University Institute for Advanced Study (KUIAS) and IBMS, Academia Sinica (acquiring research funding), recruitment of talented international students through National Taiwan University (NTU), exchange between local students and Kyoto University students, development of international joint/double degree programs using TIGP, and research collaboration with local and Japanese companies.

➢ As Academia Sinica has many research laboratories in the social sciences, developments in the fusion of the humanities and sciences and cross-bound exchange involving other departments are anticipated. The research networks established in Taiwan are expected to be further expanded and effectively utilized for the university as a whole (such as the clinical trial network). Efforts will be made to strengthen relationships with NTU, a strategic partner of Kyoto University.

Activity Overview

Identification and functional analysis of genes involved in molecular sensing through interdisciplinary research

Biomedical phenomenon → **Gene identification** → **Functional analysis** → **Application**

Cell molecular sensing function

Functional screening

State-of-the art equipment
Rapid research collaboration

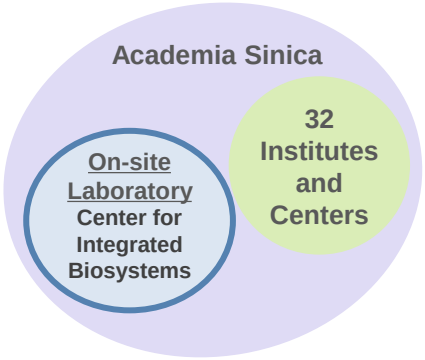
Rapid application

Academia Sinica

Cell molecular sensing functions of interest to individual PIs

Kyoto University

Screening technology to identify genes involved in biomedical phenomenon



Why Taiwan?

- Education in Europe and the US
- High English proficiency
- High research standards
- Concentration of research institutions
- Physical distance

Kyoto University On-site Laboratory: Center for Integrated Biosystems

Main Activities in FY 2024

❶ Mini Symposium
Kyoto University & Academia Sinica

2 students/researchers from KU and 4 from Institute of Biomedical Sciences, Academia Sinica, presented and discussed at the mini-symposium.

❷ Mini Symposium
Kyoto University & National Taiwan University

2 students/researchers from KU and 4 from Department of Life Science, National Taiwan University, presented and discussed at the mini-symposium.

❸ Meeting
Kyoto University & National Biotech Research Park

A meeting was held between the Office of Institutional Advancement and Communications, Kyoto University and the BioTReC, the National Biotech Research Park regarding future collaboration in innovation.

Kyoto University On-site Laboratory: Quantum Nano Medicine Research Center

General Information

- Approved in FY 2019
- Established in October 2019
- Established by the Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University Institute for Advanced Study (KUIAS)
- Partner institution: The University of California Los Angeles (UCLA), USA
- Purposes:Quantum nano-medicine research with a focus on cancer treatment applications, development of new research fields, and expansion of collaboration with UCLA and industrial partners
- Location: Kyoto University, Kyoto, Japan (inbound)
- Functions:Promoting academic, researcher and student exchange between UCLA and Kyoto University, Hosting symposiums and seminar series

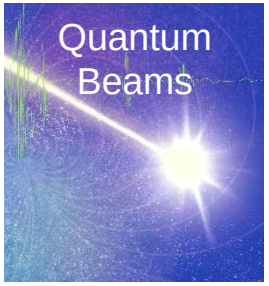
Positive ripple effects to the university's activities

- Establishment of new academic fields
- Ripple effects radiation medicine research
- Collaboration with the Institute for Integrated Radiation and Nuclear Science and SPring-8
- Collaboration with research centers in California
- Ripple effects on industries in California and Japan

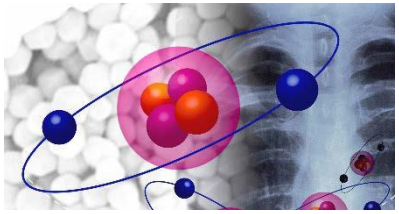
➢ Advancements in quantum nano medicine research have influenced research at Kyoto University, including the development of new radiation therapies. The center promotes interdisciplinary research that transcends disciplinary boundaries at the university

➢ The center provides opportunities for the university's researchers and world-class researchers in the US to interact by engaging in its activities

Activity Overview



Nano Medicine



Quantum Nano Medicine Research

iCeMS, KUIAS,
Kyoto University

Dept. of MIMG/UCLA

Collaboration: Institute for Integrated Radiation and Nuclear Science and SPring-8

Kyoto University On-site Laboratory: Quantum Nano Medicine Research Center

Main Activities in FY 2024

Academic exchange between UCLA and Kyoto University, publication of the *KAWARABAN* newsletter

- Gave a keynote lecture titled “Nanomedicine and cancer ” and discussed how nanomedicine is revolutionizing for cancer at Nano conference.
  - ➢Held on May 22-24, Tohoku University

- Gave a presentation on recent findings about BNCT with dipeptides titled “Tumor eradication by BNCT with boron-conjugated novel dipeptides”.
  - ➢Held on July 26-27, Osaka Medical and Pharmaceutical University
  - ➢The 20th Congress on Neutron Capture Therapy

- Organized a session on “Current situation and future of CAM model” at the joint meeting of Japan Society of Patient-Derived Cancer Model and the Japan Society of Human Cell Science in August 2024.
  - ➢Held on August 21-23, National Cancer Institute

- Gave a talk entitled “Boron neutron capture therapy (BNCT): SLC family membrane transporters and boron compound uptake” on the 52nd International Symposium of The Princess Takamatsu Cancer Research Fund.
  - ➢Held on November 12-14, Palace Hotel Tokyo, Japan

量子ナノ医療研究センター・アイセムス

KU-UCLA オンサイトラボ

KAWARABAN

第七号　2024 年 10 月

量子ナノ医療研究センター（QNM センター）は、ナノメディシンとがんの放射線治療の変革を目指した研究活動を続けている。図 1 に研究の概要を示したが、多孔性シリカナノ粒子の研究、ホウ素中性子捕捉療法の研究、がんのオージェ電子治療の開発を 3 本の柱として研究活動を進めている。玉野井 冬彦 特定教授と松本 光太郎 特定助教が中心になり新規の学術分野の開発を目指している。

玉野井　冬彦　　松本　光太郎

図1

最近の活動、学会報告

2 月 21 日に京都大学で “Radiation Therapy in Japan: Boron Neutron Capture Therapy (BNCT)” と題する講演を行った。これは Heidelberg University と京都大学との共催で開かれる Kyoto Winter School での講演の一つである。

3 月 26 日にロサンゼルスで Society for Brain Mapping and Therapeutics meeting (SBMT) の会議があり、Boron Neutron Capture Therapy のセッションが企画され、私たちが最近開発した BSH-BPMO ナノ粒子の研究の紹介を頼まれた。“Nanotechnology and BNCT” という題で招待講演を行い、BNCT 研究者との意見交換を行った。

Kyoto University On-site Laboratory: Laboratory for Green Porous Materials

General Information

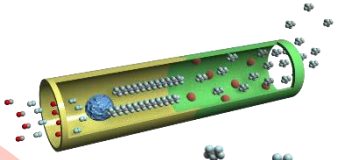
- Approved in FY 2020
- Established in FY 2020
- Established by the Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University Institute for Advanced Study (KUIAS)
- Partner institution: The Institute of Materials Research and Engineering (IMRE), Agency for Science, Technology and Research (A*STAR), Singapore
- Purposes: Combining iCeMS's expertise in porous materials with IMRE's research on bioapplications and green catalysts to pioneer an environmentally beneficial research
- Location: IMRE, Singapore (outbound)
- Functions:
  - Environmental catalysis with porous materials, creating new fields for environmental impact, and advancing interdisciplinary research.
  - Development of hybrid porous materials and biocompatible polymers for medical and healthcare applications.

Positive ripple effects to the university's activities

- Serves as Kyoto University's point of contact at A*Star in Singapore.
- Acts as a bridge between Kyoto University and Singaporean universities and research institutes in material science research.
- Kyoto University early-career researchers and students are motivated by international students.
- Helps Kyoto university students develop international awareness.

- Expansion and development of joint research topics between KUIAS and IMRE.
- Research guidance for talented students at the National University of Singapore, etc.
- Exchange between Kyoto University researchers and local researchers and students through holding seminars.
- Exploring the potential of porous materials development in cooperation with local companies.

Activity Overview



Institute of Materials Research and Engineering
IMRE

Institutes
Centers

iCeMS
KYOTO UNIVERSITY
WPI Research Center

Graduate School

On-Site Lab.
Laboratory for Green Porous Materials

Research grants
Research space
Staffing

Institutes
Centers

Students

Universities (NUS, NTU)

Kyoto University On-site Laboratory: Laboratory for Green Porous Materials

Main activities in FY 2024

Research collaboration with the IMRE / Soft Materials Laboratory

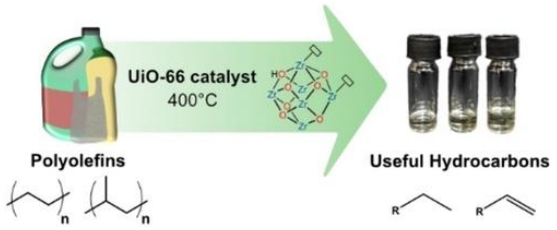
Onsite laboratory researchers (concurrent posts)

Assistant Professor Jason Lim
Assistant Professor Shermin Goh
Dr. Tristan Tan

❶ Collaborative research on green porous materials

- In 2024, the following research themes were conducted:
  - Theme 1 MOF catalysts for sustainable applications
  - Theme 2 MOF-mixed matrix membranes
  - Theme 3 MOF defect engineering
  - Theme 4 MOF/Biocompatible polymer hybrids
- Assoc. Prof. Ken-ichi Otake stayed in Singapore during the following periods to participate in local academic conferences, give lectures at universities in Singapore, and conduct research discussions at OSL: July 14–23, 2024; December 5–13, 2024; and March 9–12, 2025.
- Dr. Tristan Tan from OSL was invited to iCeMS, where he gave a lecture, engaged in research discussions with iCeMS researchers, and visited Nanoterasu, one of Japan's leading synchrotron radiation facilities (February 18–25, 2025).
- **The collaborative research results from Theme 1 were published.**

"Pyrolytic Depolymerization of Polyolefins Catalyzed by Zirconium-based UiO-66 Metal-Organic Frameworks", Jerry Zhi Xiong Heng, Tristan Tsai Yuan Tan, Xin Li, Wei Wei Loh, Yuting Chen, Zhenxiang Xing, Zhiyan Lim, Jennet Li Ying Ong, Katherine Shiyun Lin, Yusuke Nishiyama, Takefumi Yoshida, Lili Zhang, Ken-ichi Otake, Susumu Kitagawa, Xian Jun Loh, Enyi Ye, Jason Y.C. Lim、***Angew. Chem. Int. Ed***., 63, e202408718, 2024



❷ OSL symposium

On February 11, 2025, a joint symposium with VISTEC OSL was held at Kasetsart University in Thailand. From Kyoto University, six faculty members, including Distinguished Prof. Kitagawa and Assoc. Prof. Otake. Approximately 50 faculty members and students from IMRE, VISTEC, both OSLs, and the host institution, Kasetsart University, also attended. The symposium focused on sharing the latest research findings on new materials, including catalysts, porous materials, and CO_2 utilization. Additionally, a local Program Management Unit (PMU) representative provided insights into Thailand's academic funding landscape, and discussions were held on potential collaborative research projects among IMRE, VISTEC, and Kyoto University.

Kyoto University On-site Laboratory: Center for Integrated Data-Material Sciences (iDM)

General Information

- Approved in FY 2021
- Established in January 2022
- Established by the Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University Institute for Advanced Study (KUIAS)
- Partner institution: The MacDiarmid Institute for Advanced Materials and Nanotechnology, New Zealand
- Purpose: Perform integrative data science-materials science research
- Location: Wellington University, Wellington, New Zealand (outbound)
- Functions: Deepen research on material sciences using computational science and data science, and internationalize Kyoto University's research and education activities by enhancing collaboration with industry and local research institutions.

Positive ripple effects to the university's activities

- Development of interdisciplinary fields combining data science and material science.
- International industrial application of materials developed at Kyoto University
- Cultivating the perspective of contributing to the international community through basic research among students and early-career researchers.
- Raising the profile of the Kyoto University brand in Oceania.

- Expanding local research networks and enhancing the brand recognition of Kyoto University and KUIAS through establishing a policy for research on semiconductor materials and porous materials with local research institutions, which is anticipated to contribute to the achievement of a decarbonized society.
- Creating networks with local companies and Japanese companies, which can lead to research collaboration.
- Encouraging exchanges among early-career researchers and international students.
- Promoting the fusion of the humanities and sciences through research plans that fully respect the beliefs and customs of the Maori (indigenous people of New Zealand).

Activity Overview

京都大学 KYOTO UNIVERSITY

iCeMS KYOTO UNIVERSITY WPI Research Center

Center for Integrated Data-Material Sciences (iDM)

Research funds → **New Zealand Companies**

Grant → **New Zealand Royal Society**

Grant → **New Zealand Government** (Ministry of Business, Innovation, and Employment)

The MacDiarmid Institute for Advanced Materials and Nanotechnology (MDI), New Zealand

The MacDiarmid Institute for Advanced Materials and Nanotechnology

New Zealand's largest-scale and highest-level virtual research institute in material science
(31 laboratories from 5 major universities participate)

- **University of Auckland** (7 laboratories)
- **Massey University** (2 laboratories)
- **Victoria University of Wellington** (12 laboratories + Administrative office)
  - **Space provided by MDI**
  - **Researchers assigned by MDI**
  - **Researcher dispatched from iCeMS**
- **University of Canterbury** (6 laboratories)
- **University of Otago** (4 laboratories)

- Accelerating research collaboration in **computing and data science**, with a focus on **material science**, which is a strength of both Kyoto University and MDI.
- Promoting research exchange and brain circulation as a hub of the Kyoto University-MDI network.

Kyoto University On-site Laboratory: Center for Integrated Data-Material Sciences (iDM)

Main activities in FY 2024

❶ Dispatch / acceptance of researchers

【Kyoto → MacDiarmid Institute】

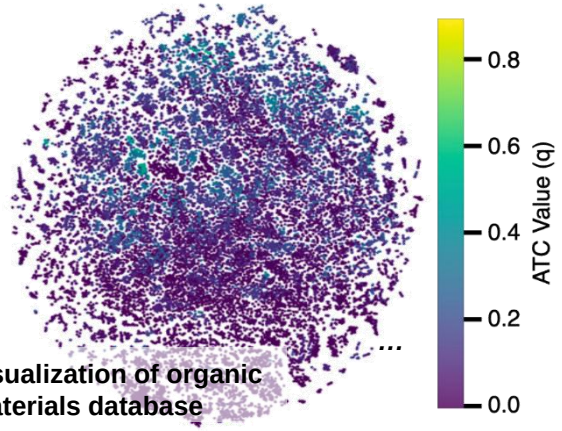
- 1-month stays by faculty (1) and postdocs (2) at MacDiarmid research groups for collaboration
- Participation and presentations at the MacDiarmid Symposium by postdocs (2)
- 1-month Internship at the MacDiarmid venture company Advemto by an undergraduate student (1)

【MacDiarmid Institute → Kyoto】

- 1-month stays at iCeMS by young researchers (4) from the MacDiarmid Institute
- 2-week stays by MacDiarmid faculty (2)
- Acceptance of MacDiarmid young researcher (1) as a JSPS Foreign Postdoctoral Fellow (host institute: iCeMS)

Lecture by visiting young MacDiarmid scientist

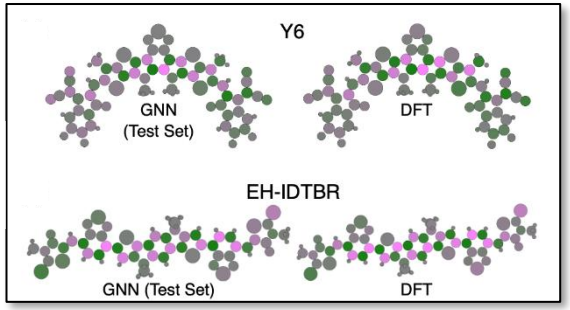
Lecture by visiting MacDiarmid PI



Visualization of organic materials database

❷ Organic semiconductor research with data science

- Trained a graph neural network with high universality using New Zealand material data; reproduced exciton diffusion in organic materials with high accuracy.
- Opened the way to virtual screening of novel semiconductor materials.



Accurate reproduction of atom-level properties in organic materials using graph neural network

Kyoto University On-site Laboratory: International Research Laboratory for Earthquake and Tsunami Risk Cognition and Reduction (iLETs)

General Information

- Approved in FY 2024
- Established by the Disaster Prevention Research Institute (DPRI)
- Partner Institution: National Autonomous University of Mexico (UNAM)
- Established in November 2024
- Location: (Cross-bound type)
  National Autonomous University of Mexico (UNAM), Mexico City, Mexico (outbound)
  Disaster Prevention Research Institute (DPRI), Kyoto University, Uji, Kyoto, Japan (inbound)
- Purpose: An interdisciplinary research center on the disaster mitigation of earthquake and tsunami in subduction zones
- Research and Education Activities: Enhance understanding of earthquake/tsunami disasters and risks through natural science, engineering, and social sciences

Positive ripple effects to the university's activities

- Establishment of the new academic field, "Comparative Earthquake and Tsunami Disaster Science."
- Publicize Kyoto University's leading role in earthquake and tsunami disaster prevention research.
- Serve as a hub laboratory with the Latin American research community.
- Recruit excellent master's and doctoral students.

Activity Overview

Kyoto University
Disaster Prevention Research Institute (DPRI)

Cooperation with national government/local governments/communities

UNAM OSL iLETs

International Research Laboratory for Earthquake and Tsunami Risk Cognition and Reduction (iLETs)

A research base for comparative studies on earthquake and tsunami disasters in subduction zones worldwide

"Risk communication" to promote disaster prevention in society

Hazard assessment

Risk assessment

Risk reduction/ evacuation

Engineering measures

Effective evidence-based risk mitigation strategies

Proposal of engineering measures and evacuation strategies

Autonomous University of Mexico (UNAM)
School of Engineering/ Institute of Geophysics

Cooperation with national government/local governments/communities

Kyoto University OSL iLETs

iLETs Satelite (Universidad de El Salvador)

Kyoto University On-site Laboratory: International Research Laboratory for Earthquake and Tsunami Risk Cognition and Reduction (iLETs)

Main activities in FY 2024

❶Joint Statement signed in collaboration with CENAPRED, AMEXCID, and JICA

- A joint statement signing ceremony was held at CENAPRED on November 28, 2024, between the Disaster Prevention Research Institute (DPRI), the Mexican National Disaster Prevention Center (CENAPRED), the Mexican Agency for International Development Cooperation (AMEXCID) under the Secretariat of Foreign Affairs, and the Japan International Cooperation Agency (JICA) Mexico Office.
- The statement aims to apply the outcomes of international collaborative research between DPRI and Mexico to disaster risk reduction policies in Mexico while also strengthening networks with government agencies and universities across the country.

Joint Statement Discussion at CENAPRED

❷Opening Ceremony at the National Autonomous University of Mexico (UNAM)

- To commemorate the launch of the On-site Laboratory iLETs, an opening ceremony was held at the National Autonomous University of Mexico (UNAM) on November 29, 2024.
- The event was attended by representatives from Kyoto University and UNAM, along with distinguished guests including Kozo Honsei, Ambassador of Japan to Mexico; Chiaki Kobayashi, Director General of JICA Mexico Office; Enrique Guevara Ortiz; and Jose Alfredo Galvan Corona, Director General of Project Operations in Mexico, AMEXCID.

Keynote Address by Prof. Kono, Vice President of Kyoto University, at UNAM

Kyoto University On-site Laboratory: Kyoto University-China Medical University Lab, Taiwan

General Information

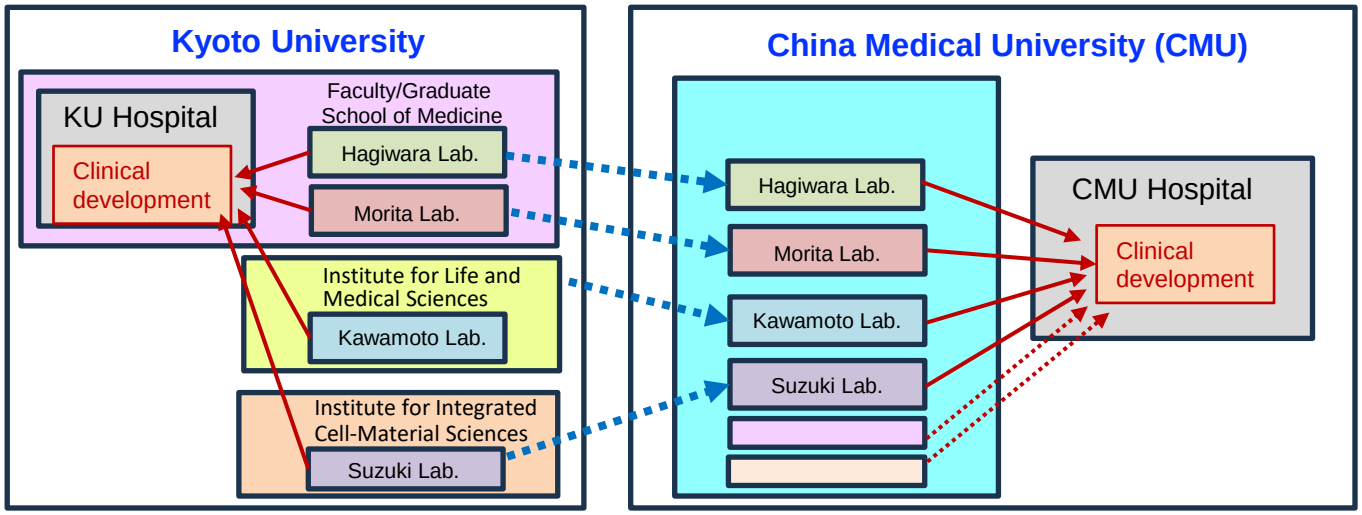
- Approved in FY 2024
- Established in October 2024
- Established by the Faculty of Medicine, Graduate School of Medicine, Institute for Life and Medical Sciences, and Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University Institute for Advanced Study (KUIAS)
- Partner Institution: China Medical University (CMU)
- Location: Taichung, Taiwan (outbound)
- Purposes: Promotion of clinical trials/Collaborative development of new strategies for clinical application
- Functions: Clinical trials using drugs and technologies developed at Kyoto University will be transferred to CMU via the on-site lab, where clinical trials will be conducted. The on-site laboratory will not only transfer the technology, but will also conduct joint research for further technological development and non-clinical trials to expand the range of target diseases.

Positive ripple effects on the university's activities

- Clinical trials using drugs and technologies developed at Kyoto University can be carried out at CMU Hospital.
- This will efficiently increase the number of clinical trial participants, and will serve as a bridgehead for global development.
- CMU will also benefit from being able to conduct joint development based on Kyoto University's materials and technologies.
- Research exchange is expected to lead to interdisciplinary development.

Activity Overview

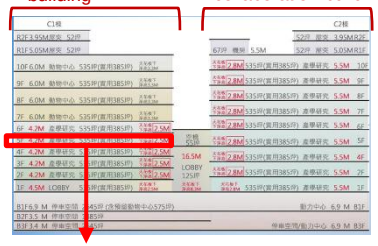
- The location (building and lab space within the building: 636 m^2) has been prepared (see diagram on the right).
- A total of four labs are planned to participate (three currently active labs and one new lab).
- Additional labs can participate in the on-site laboratory.
- A resident PI who will coordinate the entire lab will be employed through a cross-appointment by Kyoto University and CMU.

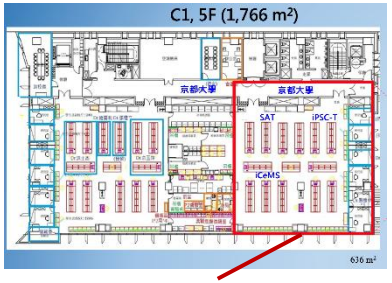


C1/C2 Building, Shui-Nan Campus

Joint research building

Industry-academia collaboration building





Space prepared for KU on-site lab. (636m^2)

Kyoto University On-site Laboratory: Kyoto University-China Medical University Lab, Taiwan

Main activities in FY 2024

❶ Opening Ceremony for the On-site Laboratory, The 2nd KU-CMU Joint Symposium 2024, and Interfaculty Student Exchange Agreements (November 19, 2024)

- An opening ceremony for the On-site Laboratory was held at the China Medical University on November 19, 2024. The ceremony was attended by representatives from Kyoto University and CMU, and was reported by several Taiwanese media outlets.
- The 2nd KU-CMU Joint Symposium was held after the ceremony. 23 researchers from both universities attended the symposium and discussed the latest research developments.
- An interfaculty Student Exchange Agreement was concluded, and discussions began regarding the recruitment of graduate students who wish to take a degree at the laboratory.

Opening Ceremony for the On-site Laboratory

Entrance of the symposium venue

The 2nd KU-CMU Joint Symposium

Laboratory space

❷ Other notable achievements

- Based on a list of research equipment requirements compiled by Kyoto University, CMU proceeded with the purchase of the equipment and improved the facilities.

Kyoto University On-site Laboratory: INitiative for INtelligent ChemBioInformatics (IN-CBI)

on-SITE Laboratory

General Information

- Approved in FY 2024
- Establishment in October 2024
- Established by Institute for Integrated Cell-Material Science (iCeMS), Kyoto University Institute for Advanced Study (KUIAS), and backed by the Institute for Chemical Research
- Partner Institution: Indian Institute of Technology Roorkee
- Location: (Cross-bound type)
  Indian Institute of Technology Roorkee, Roorkee, Uttarakhand, India (outbound)
  KUIAS, Kyoto, Japan (inbound)
- Purpose: Scripting an ecosystem to develop intelligent medical tools for age-related diseases
- Functions: Establishment of a hybrid (physical and virtual) platform between Kyoto University and premier Indian research institutions to efficiently identify and exchange outstanding students and early career researchers for education

Positive ripple effects to the university's activities

- Collaborate with India's top-tier engineering and medical institutions to co-develop innovative chemical biology tools at Kyoto University.
- Cultivate a new generation of scientists through the exchange of top students and researchers, empowering them to contribute to the global scientific community.
- Create an environment in which Kyoto University can become a "first destination" for Indian students.

Activity Overview

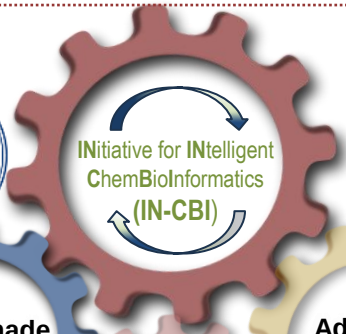
A hybrid (physical and virtual) cross-bound on-site laboratory for accelerating the development of intelligent (=programmable molecular design) chemical biology tools with the aim of advancing precision medicine

- Promoting research exchange and brain circulation as a hub between Kyoto University and the IIT network

Physical — **Provisional space by IIT Roorkee (3500 m²) and iCeMS (124 m²), cross-appointment of principal investigators, assignment of resident researchers by IIT and Kyoto University**

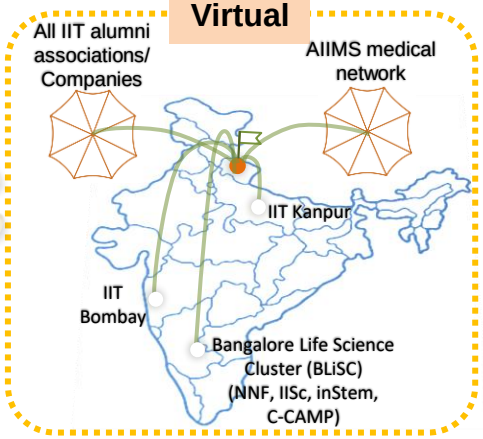
iCeMS KYOTO UNIVERSITY WPI Research Center

KYOTO UNIVERSITY Institute for Chemical Research ICR



- ✓ Cross-border funding initiatives
- ✓ Sustainable mechanisms
- ✓ Network expansion
- ✓ Regional development contribution
- ✓ Engagement and outreach activities

Virtual



- The synergistic effect of combining IIT Roorkee's outstanding engineering environment and Kyoto University's expertise in chemistry and cell biology will accelerate collaborative research to understand and treat age-related diseases.

Kyoto University On-site Laboratory: INitiative for INtelligent ChemBioInformatics (IN-CBI)

Main activities in FY 2024

❶Launch of IN-CBI and Joint Research

The IN-CBI On-site Laboratory was officially launched in November 2024 with a high-profile ceremony attended by representatives from Kyoto University, the Indian Institute of Technology (IIT) Roorkee, Narayana Nethralaya Foundation, the Indian Embassy, and Shimadzu Corporation.

IN-CBI initiated multiple collaborative projects by hosting 3 PhD students from these partners to generate circadian transcriptome profiles from human retina post-mortem samples

Participants including President Minato and IIT Roorkee Director Pant at the inauguration ceremony held on November 11, 2024

❷ Bridging Indo-Japan Collaboration and Young Researcher Exchange Programs

IN-CBI Head Namasivayam connected the Kyoto University and Japan Science and Technology (JST) delegates with the top scientists at IIT Bombay, IIT Roorkee, IIT Madras, and the Bengaluru bio cluster and delivered lectures to attract Indian students for the Sakura Science Program.

JST Delegates including Sakura Science Program Director Takashi Konishi at IIT Roorkee

Kyoto University Delegates at Indian Institute of Science

- iCeMS and the Institute for Chemical Research (ICR) co-hosted `Talent-spot 2025` in Mumbai and invited outstanding students to a joint internship program with Shimadzu.
- IN-CBI`s Namasivayam and Fujiwara group trained 12 Indian inbound students from IITs, Hokkaido University, and the Tamil Nadu (TN) Government`s skill development program on nanotechnology and mitochondrial imaging.

Professor from iCeMS and ICR with student participants of `Talent-spot 2025` in Mumbai, India

TN Government students getting Hands-on training at IN-CBI.