Kyoto University

1. Description

Kyoto University is a national research university located in Kyoto, Japan. Founded in 1897, it is one of the former Imperial Universities and the second oldest university in Japan.

Founded upon the principles of its words, “freedom of academic culture”, Kyoto University is currently composed of three campuses with ten Faculties, eighteen Graduate Schools, thirteen Research Institutes, and twenty-two Research and Educational Centers. The Kyoto University Library, boasting over 7 million volumes, is Japan's second-largest academic library.

Kyoto University comprises of three campuses: Yoshidam Uji, and Katsura, as well as a number of faculties located throughout Japan.



2. Ranking *As of 22/11/2023 (Ref: timeshighereducation.com และ Topuniversities.com)

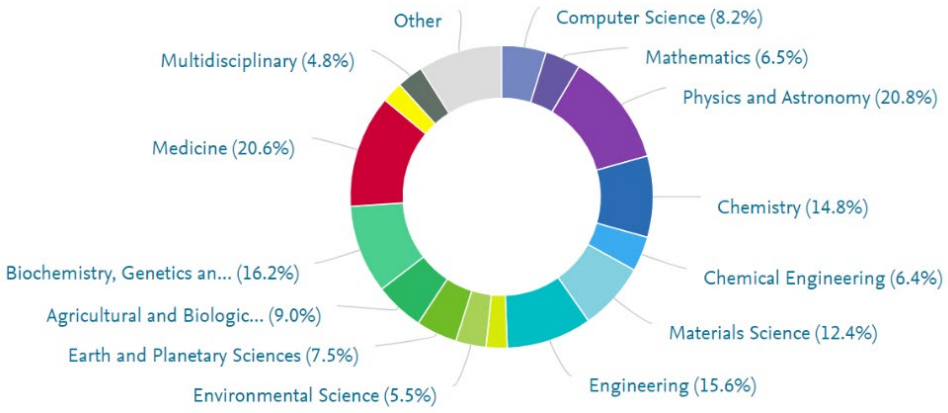
=55th World University Rankings 2024	**=49th** Impact Rankings 2023	**5th** Japan University Rankings 2023	**=46th** QS World University Rankings	**=17th** Asian University Rankings

3. Research Performance *As of 22/11/2023 (Ref: www.Scival.com)

3.1. Overall

86,762 ▲ Scholarly Output ⓘ 53.9% All Open Access View list of publications	32,020 ▲ Authors	1.26 Field-Weighted Citation Impact Yearly breakdown
1,828,991 Citation Count ⓘ	21.1 Citations per Publication ⓘ	183 *h5*-index ⓘ

3.2. Publication share by Subject Area



3.3. Research Topics

Topic Cluster	At this Institution: Scholarly Output	At this Institution: Publication Share	At this Institution: Field-Weighted Citation Impact	Worldwide: Prominence percentile
Galaxies; Stars; Planets TC.1	2,157	1.57% ▲	1.66	97.659
Decay; Quarks; Neutrinos TC.6	1,999	2.14% ▼	2.98	95.318
Secondary Batteries; Electric Batteries; Lithium Alloys TC.30	1,225	0.53% ▼	1.96	99.933
Gravitation; Black Holes (Astronomy); Models TC.15	1,159	1.39% ▼	1.57	93.445
Catalysis; Synthesis (Chemical); Catalysts TC.4	1,063	0.86% ▼	1.18	98.796

3.4. Performance indicators

Outputs in Top Citation Percentiles ⓘ

+ Add to Reporting

Publications in top 10% most cited worldwide

Show as field-weighted

Kyoto University: 11.4%

Japan: 8.2%

› Analyze in more detail

Publications in Top Journal Percentiles ⓘ

+ Add to Reporting

Publications in top 10% journals by CiteScore Percentile

Kyoto University: 36.0%

Japan: 24.3%

› Analyze in more detail

International Collaboration ⓘ

+ Add to Reporting

Publications co-authored with Institutions in other countries/regions

Kyoto University: 33.4%

Japan: 28.4%

› Analyze in more detail

Academic-Corporate Collaboration ⓘ

+ Add to Reporting

Publications with both academic and corporate affiliations

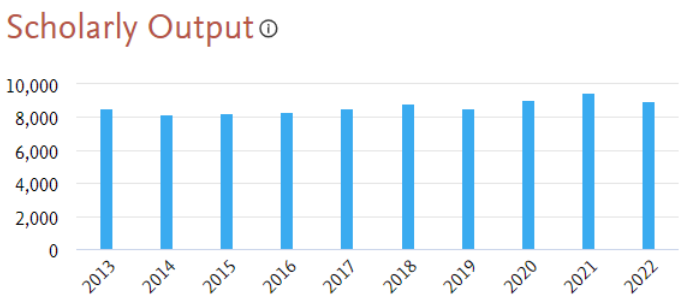
Kyoto University: 8.2%

Japan: 7.1%

› Analyze in more detail

3.5. Published

86,762 number of publications by authors at Kyoto University



3.6. Most cited publications

Top 5 publications at the Kyoto University, by number of citations

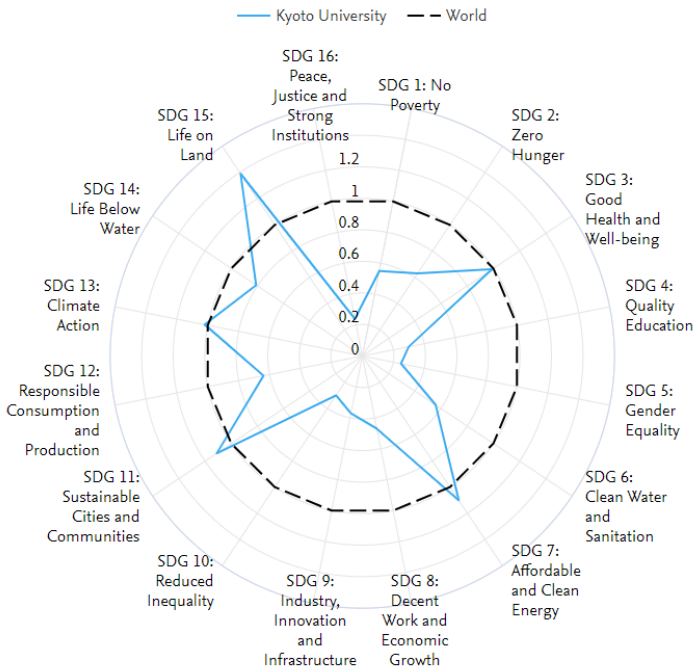
Most cited publications

+ Add to Reporting

Top 5 publications at Kyoto University, by number of citations

Publication	Citations	Field-Weighted Citation Impact
First principles phonon calculations in materials science. Togo, A., Tanaka, I. (2015) Scripta Materialia, 108, pp. 1-5. View in Scopus ↗	5,991	105.56
Review of Particle Physics. Tanabashi, M., Hagiwara, K., Hikasa, K. and 228 more (2018) Physical Review D, 98 (3). View in Scopus ↗	5,947	95.49
Global, regional, and national incidence, prevalence, and years lived with disability for 310 diseases and injuries, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. Vos, T., Allen, C., Arora, M. and 637 more (2016) The Lancet, 388 (10053), pp. 1545-1602. View in Scopus ↗	5,109	352.96
Review of particle physics. Patrignani, C., Agashe, K., Aielli, G. and 224 more (2016) Chinese Physics C, 40 (10). View in Scopus ↗	5,027	175.7
KEGG: New perspectives on genomes, pathways, diseases and drugs. Kanehisa, M., Furumichi, M., Tanabe, M. and 2 more (2017) Nucleic Acids Research, 45 (1), pp. D353-D361. View in Scopus ↗	4,996	167.43

3.7. Publications by SDG



3.8. Research Collaborations

1,726 collaborating Institutions, 51,100 co-authored publications

3.9. Research Collaborations with Chiang Mai University

3.9.1. Overall performance of co-authored publications

Collaboration Summary

100 ▲ Co-authored publications View list of publications	87 Co-authors from Kyoto University	104 ▲ Co-authors from Chiang Mai University
3.58 Field-Weighted Citation Impact ⓘ	37.1 Citations per Publication ⓘ	

3.9.2. Performance comparison

Compare the performance of the co-authored publications with the overall research performance of each Institution.

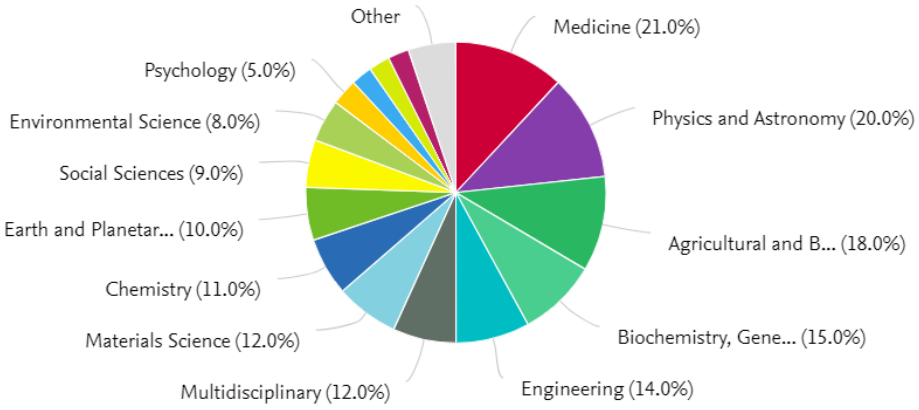
Metric	Co-authored publications	Kyoto University	Chiang Mai University
Field-Weighted Citation Impact	3.58	1.26	1.01
Citations per Publication	37.1	21.1	12.2
Citation Count	3,709	1,828,991	228,059
Field-Weighted Views Impact	3.48	1.41	2.53
Views per Publication	81.2	32.7	53.0
Views Count	8,121	2,838,052	987,883

3.9.3. Institution comparison

Contextualize both collaboration partners and understand the relative share of collaborated output.

Metric	Kyoto University	Chiang Mai University
Total Scholarly Output by Institution	86,762 ▲	18,641 ▲
% of Scholarly Output in this Collaboration	less than 1%	less than 1%
Total authors at Institution	32,020 ▲	8,999 ▲
% of authors in this Collaboration	less than 1%	1.16%
Rankings		
QS World University Rankings 2024	46th	571st
THE World University Rankings 2024	55th	801–1000
THE Impact Rankings 2023	49th	74th
Shanghai Academic Ranking of World Universities 2022	41st	701–800

3.9.4. Area of Collaboration



3.9.5. Current co-authors

Kyoto University

Co-authors with Chiang Mai University

Author	Co-authored publications	Citations
Musumari, Patou Masika	24	274
Techasrivichien, Teeranee	13	217
Kihara, Masahiro	11	209
Ono-Kihara, Masako	11	209
Suguimoto, S. Pilar	9	186
Sagawa, Takashi	9	95
Kurata, Hiroki	7	93
Kiyono, Junji	6	33
Ohgaki, Hideaki	6	6

Chiang Mai University

Co-authors with Kyoto University

Author	Co-authored publications	Citations
Srithanaviboonchai, Kriengkrai	23	270
Tangmunkongvorakul, Arunrat	23	268
Ruankham, Pipat	9	95
Wongratanaphisan, Duangmanee	6	79
Sarakonsri, Thapanee	6	66
Musumari, Patou Masika	6	55
Chariyalertsak, Suwat	6	42
Chairuangsri, Torranin	5	83
Choopun, Supab	5	65

4. Distinctiveness/Strength of Kyoto University

4.1. Education

The university has about 22,000 students enrolled in its undergraduate and graduate programs.
Kyoto University has 10 faculties, 19 graduate schools, and 4 Professional.

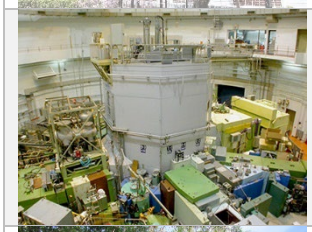
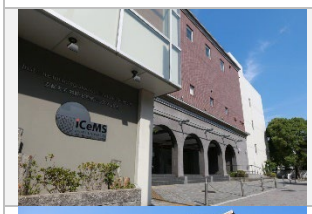
Faculties	1. Faculty of Integrated Human Studies 2. Faculty of Letters 3. Faculty of Education 4. Faculty of Law 5. Faculty of Economics 6. Faculty of Science 7. Faculty of Medicine 8. Faculty of Pharmaceutical Sciences 9. Faculty of Engineering 10. Faculty of Agriculture
Graduate schools	1. Graduate School of Letters 2. Graduate School of Education 3. Graduate School of Law 4. Graduate School of Economics 5. Graduate School of Science 6. Graduate School of Medicine 7. Graduate School of Pharmaceutical Sciences 8. Graduate School of Engineering 9. Graduate School of Agriculture 10. Graduate School of Human and Environmental Studies 11. Graduate School of Energy Science 12. Graduate School of Asian and African Area Studies 13. Graduate School of Informatics 14. Graduate School of Biostudies 15. Graduate School of Global Environmental Studies
Professional	16. School of Government 17. Graduate School of Management 18. Kyoto University Law School 19. Kyoto University School of Public Health

The university was ranked 3rd in 2008 and 2010 in the ranking "Truly Strong Universities" by Toyo Keizai. In another ranking, Japanese prep school Kawaijuku ranked Kyodai as the 2nd best university in Japan.

4.2. Research

Kyoto University Research Institutes: 18 Research Institutes

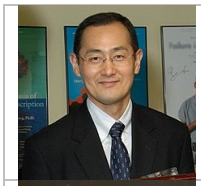
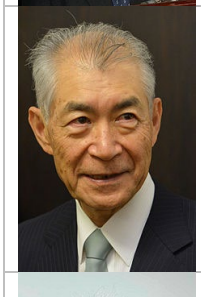
	**Institute for Chemical Research (ICR)** The institute currently consists of five research divisions and three centers, comprising thirty-one laboratories in total. Each laboratory also functions as a cooperative lab with one of the following seven graduate schools: science (12 labs), engineering (10), pharmaceutical science (3), agriculture (2), medicine (1), informatics (1) and human and environmental studies (1). The institute pursues extensive domestic and overseas collaborations (56 international cooperation agreements are currently tied).
	**Institute for Research in Humanities** The institute currently comprises five research divisions and two research centers: the Center for Informatics in East Asian Studies, and the Research Center for Modern and Contemporary China.
	**Institute for Life and Medical Sciences (LiMe)** "Joint Usage/ Research Center Program for Transdisciplinary Collaboration on Viral Research, Stem Cell Science and System Biology" has been designated by the Ministry of Education, Culture, Sports, Science and Technology within our institute. We offer our resources and research techniques to research communities in Japan and overseas through joint research initiatives.
Kyoto University Institute of Advanced Energy	**Institute of Advanced Energy** The institute comprises three divisions: the Advanced Energy Generation Division, Advanced Energy Conversion Division, and Advanced Energy Utilization Division, and one research center: the Laboratory for Complex Energy Processes, which promotes inter-division research. The institute's faculty also serve as teaching staff in the Graduate School of Energy Science.

	**Research Institute for Sustainable Humanosphere (RISH)** The institute pursues four missions to solve present and future humanospheric problems: (1) Humanosphere Assessment and Remediation, (2) Refinement of Solar Energy through Bio-mass and Solar Power Satellite Research, (3) Exploration of the Space Environment and its Utilization and (4) Development of Technology and Materials for the Cyclical Utilization of Bio-based Resources.
	**Disaster Prevention Research Institute (DPRI)** The DPRI pursues research in the fields of natural science, engineering, and social sciences, with topics that span local and global scales. The institute also forms interdisciplinary groups to implement practical projects in response to the needs of the global society. With a 63-year heritage of scientific achievements and accumulated knowledge, the institute is dedicated to leading increasingly important research efforts in natural disaster reduction throughout both Japan and the world.
	**Kyoto Institute of Economic Research (KIER)** The research activities undertaken at the institute are acknowledged both internationally and domestically, and encompass the fields of econometric analysis, economic strategy and institutions, finance research, and complex economic systems.
	**Institute for Integrated Radiation and Nuclear Science (KURNS)** The KURNS pursues research in the fields of Nuclear Engineering Science, Quantum Beam Material Science, Radiation Life Science, Research Center for safe Nuclear System, Particle Radiation Oncology Research.
	**Center of Evolutionary Origins of Human Behavior (EHUB)** EHUB at the Kyoto University Inuyama campus, Aichi, carry out multidisciplinary research and educational activities through experimental approaches with non-human primates to better understand evolutionary origins of human behaviors, including a wide range of biological research exploring body and brain structures, molecular functions, brain functions and connive abilities.
	**Center for Southeast Asian Studies (CSEAS)** The strength of the Center for Southeast Asian Studies (CSEAS) lies in its multi-disciplinary orientation, with the inclusion of the natural sciences, humanities, and social sciences. While Southeast Asia remains at the center of our attention, research activities are extended to adjoining regions, with studies conducted in Bangladesh, India, China, and Korea to enrich comparative perspectives.
	**Kyoto University Institute for Advanced Study (KUIAS)** The Kyoto University Institute for Advanced Study (KUIAS) to support the University's unique research while serving as an international hub for advanced scholarship. It is led by a team of distinguished scholars with outstanding achievements in their respective fields, overseeing a cluster of world-leading research centers including the Institute for Integrated Cell-Material Sciences (iCeMS).
	**Institute For Integrated Cell-Material Sciences (iCeMS)** The Institute for Integrated Cell-Material Sciences (iCeMS) seeks to investigate the chemical basis of cells, create compounds to control processes in cells such as stem cells, and utilize cellular processes to fabricate chemical materials. Focusing on the mesoscale, the institute's work will potentially benefit medicine, pharmaceutical studies, the environment, and industry.
	**Institute for the Advanced Study of Human Biology (ASHBi)** Institute for the Advanced Study of Human Biology (ASHBi) implements the concept of World Premier International Research Center Initiative (WPI), and aims to create new academic disciplines uncovering the core principles of human beings and disease states.
Notable research institutes and faculties	

	**Yukawa Institute for Theoretical Physics** The Yukawa Institute for Theoretical Physics is a research institute in the field of theoretical physics, attached to Kyoto University in Japan. It was inaugurated in 1952. While the center is often referred to as "YITP", this can be confusing as YITP also stands for the C. N. Yang Institute for Theoretical Physics at Stony Brook University in the United States.
	**Research Institute for Mathematical Sciences** The Research Institute for Mathematical Sciences (RIMS) is a research institute attached to Kyoto University, hosting researchers in the mathematical sciences from all over Japan. RIMS was foundesd in April 1963.
	**Primate Research Institute** The Primate Research Institute, Kyoto University is a Japanese research center for the study of primates. It was founded in 1967 by primatologists Kinji Imanishi and Junichiro Itani. The institute works toward understanding the biological, behavioral, and socioecological aspects of primates, and the origin and evolution of humans.
	**Kosobe Conservatory** The Kosobe Conservatory was a botanical garden that forms part of the Experimental Farm, located at 2-30 Kosobe, Takatsuki, Osaka, Japan. The conservatory was established in January 1929 to educate undergraduate and graduate students, and to advance horticultural research in ornamental plants of tropical and subtropical origin. Today its collections include orchids, begonias, Nepenthes, and Melastomataceae.
	**Seto Marine Biological Laboratory** The Seto Marine Biological Laboratory is a marine biology field station of Kyoto University. It is located in the small town of Shirahama in Wakayama Prefecture about 230 km from Kyoto.

4.3. Nobel Prizes (Still Alive 2023)

	**Susumu Tonegawa** Nobel Prize for Physiology or Medicine in 1987 for his discovery of V(D)J recombination, the genetic mechanism which produces antibody diversity.
	**Ryōji Noyori** He won the Nobel Prize in Chemistry in 2001, Noyori shared a half of the prize with William S. Knowles for the study of chirally catalyzed hydrogenations; the second half of the prize went to K. Barry Sharpless for his study in chirally catalyzed oxidation reactions (Sharpless epoxidation).
	**Makoto Kobayashi** Makoto Kobayashi is a Japanese physicist known for his work on CP-violation who was awarded one-fourth of the 2008 Nobel Prize in Physics "for the discovery of the origin of the broken symmetry which predicts the existence of at least three families of quarks in nature."

	**Shinya Yamanaka** He and John Gurdon were awarded the Nobel Prize for Physiology or Medicine for the discovery that mature cells can be converted to stem cells. In 2013.
	**Tasuku Honjo** He won the 2018 Nobel Prize in Physiology or Medicine and is best known for his identification of programmed cell death protein 1 (PD-1). He is also known for his molecular identification of cytokines: IL-4 and IL-5, as well as the discovery of activation-induced cytidine deaminase (AID) that is essential for class switch recombination and somatic hypermutation.
	**Akira Yoshino** Yoshino was awarded the Nobel Prize in Chemistry in 2019 alongside M. Stanley Whittingham and John B. Goodenough.

5. Collaborations with Chiang Mai University

5.1. MoU (As of 22/11/2023)

- Student Exchange Agreement between Chiang Mai University and Kyoto University
  Start date: 2/9/2019 No Expiration date.
- Extension of the General Memorandum of Academic Cooperation and Exchange between Chiang Mai University and Kyoto University
  Start date: 2/9/2019 No Expiration date.
- General Memorandum for Academic Cooperation and Exchange
  Start date: 24/3/2021 To 23/3/2026 Active.
- Student Exchange Agreement
  Start date: 24/3/2021 To 23/3/2026 Active.
- Memorandum of Understanding for Establishment of the ASEAN+3 University Network
  Start date: 1/11/2012 No Expiration date.
- Memorandum of Understanding and Student Exchange Agreement between Faculty and Graduate School of Agriculture, Kyoto University, Japan and Faculty of Agriculture, Chiang Mai University, Thailand
  Start date: 20/4/2023 To 19/4/2028 Active.

5.2. Research Collaboration

5.2.1. Assistant Professor Dr. Jitthep PrasitYousil participated in the 3rd International Conference on Sustainable Future for Human Security – SUSTAIN 2012 and presented academic research on "Properties of Solid Fuel Briquettes Produced from Rejected Material of Municipal Waste Composting." Additionally, Dr. Jitthep PrasitYousil visited laboratory facilities during the event. The conference took place from November 3 to 6, 2013, at Kyoto University, Japan.

5.2.2. Assistant Professor Dr. Chatchawan Chaichana, affiliated with the Mechanical Engineering Department, collaborated with Professor Keiichi Ishihara on research that resulted in the publication of academic work in the scholarly journal Energy Procedia Volume 141 in the year 2017. The research focused on "Promoting Community Renewable Energy as a Tool for Sustainable Development in Rural Areas of Thailand."

5.2.3. Assistant Professor Dr. Cheowchan Leelasukseree from the Department of Mining and Petroleum Engineering received funding from the Electricity Generating Authority of Thailand to conduct a research project. The project's focus was on "Ploughing Failure Mechanisms in Lower Wail using Mechanical Properties of Rock Mass at Mae Moh Mine." This collaborative research involved researchers from Kyoto University.

5.2.4. Assistant Professor Dr. Chatchawan Chaichana received research funding through the International Grant Program 2021 from the Toyota Foundation. The research project is titled "Financial Support Platform for Sustainable Circular Local Economy" and involves collaboration with researchers from Kyoto University.

5.3. Students Exchange

Students Exchange Program	Detail
Short-term Exchange Program Between faculty of Engineering and Kyoto University	Short-Term Exchange Program since 2013 at the Faculty of Engineering, Chiang Mai University (CMU), occurs regularly every two years. The program comprises lectures by professors from both institutions and field visits related to renewable energy within various locations in Chiang Mai Province. During the program, students receive assignments, form workshop groups, brainstorm ideas, and present problem-solving methods. Afterward, each group of students collaborates, discusses concepts, and presents solutions to the challenges posed. Students also share insights gained from participating in the program. Beyond acquiring academic knowledge, student benefit from collaborative work, cultural exchange, language learning, and the establishment of positive relationships. The program's schedule is as follows: **Session 1:** March 7-11, 2013 **Session 2:** August 10-21, 2018 **Session 3:** August 9-18, 2020 **Session 4:** August 6-17, 2022
Outbound Exchange Faculty of Engineering	Miss Naphatsawan Khammayom, student ID 560610380, an undergraduate student in the Mechanical Engineering Department at the Faculty of Engineering, Chiang Mai University, was selected to represent the university in the Winter Seminar on Human Security Development and Energy Science at Kyoto University, Japan. The program took place from January 9 to 22, 2020. The activities during the seminar included attending lectures, site visits, and workshops focusing on the topic of Energy Sustainability. Participants had the opportunity to learn and exchange ideas, as well as engage in language and cultural activities with students from the ASEAN region. Miss Naphatsawan Khammayom's selection as a representative demonstrates her academic excellence and the recognition of Chiang Mai University in international programs promoting human security development and energy science.
Outbound Student 2 persons: Faculty of Social Science	Research scholarship support for doctoral programs at Kyoto University, Graduate School of Asian and African Area Studies (ASAFAS)

6. Opportunities for Collaboration

Collaboration between Chiang Mai University (CMU) and Kyoto University presents a wealth of opportunities for academic, research, and cultural exchange. Both institutions have unique strengths that can complement each other.

Research Collaboration	• **Joint Research Projects:** Facilitate collaborative research projects that leverage the strengths of researchers from both universities. This could involve joint funding applications, interdisciplinary projects, and the sharing of resources and expertise. • **Research Centers:** Establish joint research centers or initiatives focusing on areas of mutual interest, such as environmental studies, sustainability, advanced technology, or cultural studies.
Student Exchange Programs	• **Exchange Programs:** Develop student exchange programs to allow students from Chiang Mai University and Kyoto University to spend semesters or academic years at each other's campuses. This promotes cultural exchange and provides students with a global perspective. • **Language Programs:** Collaborate on language programs to enhance language proficiency, with a focus on Japanese and Thai languages, enabling students to better navigate academic and cultural environments.
Joint Workshops and Conferences	• **Academic Conferences:** Organize joint academic conferences, symposiums, or workshops that bring together researchers, academics, and students from both universities. This can foster intellectual exchange and the sharing of research findings. • **Cultural Exchange Events:** Host events that promote cultural exchange, such as joint exhibitions, performances, or festivals that showcase the rich cultural heritage of both Thailand and Japan.
Dual-Degree Programs	• **Collaborative Degree Programs:** Develop dual-degree programs that allow students to earn degrees from both

	universities. This could be particularly effective in fields where both universities have expertise, providing students with a well-rounded education.
Sustainability and Environmental Initiatives	• **Collaboration on Sustainability Research:** Given Kyoto University's emphasis on sustainability, collaborate on research projects and initiatives related to environmental conservation, sustainable development, and climate change, which are critical issues globally.
Technology and Innovation	• **Technology Transfer and Innovation:** Explore opportunities for technology transfer and collaborative innovation projects, especially in areas such as robotics, advanced manufacturing, and information technology, where both universities have strengths.
Language and Cultural Studies	• **Language and Cultural Exchange Programs:** Facilitate programs that allow students to engage in language and cultural studies, promoting a deeper understanding of each other's languages, traditions, and customs.
Medical and Healthcare Collaboration	• **Medical Research and Exchanges:** Given Kyoto University's strength in medical research, explore collaborations in healthcare research, medical exchange programs, and joint projects addressing regional health challenges.
Business and Economics Collaboration	• **Business and Economic Research:** Explore collaborative research in business, economics, and entrepreneurship, promoting a better understanding of economic trends in the region and fostering innovation.
Government and Community Engagement	• **Community Outreach Programs:** Engage in joint community outreach programs that address societal challenges, applying academic expertise to benefit local communities in Thailand and Japan.

To realize these opportunities, establishing a framework for collaboration, including memorandum of understanding (MOU) agreements, joint committees, and regular communication channels, would be essential. Additionally, seeking external funding sources and involving industry partners could further enhance the sustainability and impact of collaborative initiatives.