

Global Education and Research Activities that Contribute to the Development of the International Community

Japan Advanced Institute of Science and Technology (JAIST) has set as its goals "to actively interact with students and faculty members through collaboration with overseas educational and research institutions, to promote the internationalization of education and research, and to develop scholars and researchers who are active globally." We believe it is important to contribute to international collaborative research, promoting interaction between people, organizing international symposiums, actively accepting international students and faculty members, and promoting educational collaboration programs with overseas universities. Through these activities, we are promoting international exchanges in education and research in advanced science and technology with a global perspective.



Strengthening International Networks and Promoting World-Class Research

Yukari Nagai

Trustee and Vice President for Research and International Affairs

Director, Headquarters for International Collaboration Director, International Research Center for Innovation Design (until March 2021) Director, Center for Global Educational Collaboration

Director, JAIST Innovation Plaza

As President Terano proclaimed on the 30th anniversary of JAIST, it is well known that the university's research is world-class, and the motto of the University is "The best education and social contribution through the best research." In order to demonstrate JAIST's unique strengths for the future, we will support faculty member's research and promote the establishment of an international base through promotion of research and international collaboration. Of course, individual graduate students also contribute significantly to JAIST's excellent research capabilities. In particular, through our postdoctoral program, we have produced a large number of outstanding researchers.

With regard to international efforts, we have signed over 130 academic exchange agreements with overseas institutions, built on the active promotion of joint research and exchanges by faculty members. In 2006, at the dawn of the concepts of "design thinking" and STEAM, we established a research group called Design Creativity & Innovation that has led these trends, and the group has continued to be active as an international research base. The group has 200 members from more than 25 countries, mainly from the UK, the United States, and Europe, who are jointly progressing the research activities. It is not easy for researchers in Japan to take initiatives such as holding international conferences and publishing academic journals on the world

stage, but I believe that the fact the University is trusted by overseas universities has greatly assisted us in achieving these goals.

This is just one example, and every faculty member at the university has spent his or her life pursuing his or her dreams as a researcher and working on various research themes with passion. In addition, each laboratory operates autonomously, and students take on their own research as members of the laboratory and actively engage in research discussions with faculty members. I believe that this also leads to improving the guality of research and teaching at JAIST. It is important that we develop the university's strengths and inspire each other by supporting daily research activities and promoting international collaboration, and that we establish a comprehensive research capability creation system that can be utilized by society.

The research that the faculty members have been developing based on their own free thinking has come to the stage of having great influence on the world. I believe that cuttingedge science and technology is the key to opening up the future of society, and that now is the time for JAIST to drive new academic trends. I would like to send a message from JAIST to researchers around the world.

Conclusion of Academic Exchange Agreements

In order to promote world-leading research and develop human resources who can contribute to the international community, we actively engage in international academic exchanges through human interaction and collaborative research with overseas universities and research institutions. As of April 1, 2021, we have signed academic exchange agreements with 140 institutions in 29 countries and 1 region.



Global Collaborative Research Activities (international co-authored papers)



The size of the circle represents the number of co-authored papers (2010-20) by country of overseas research institute. Source: Elsevier © SciVal.

World-class Research

Based on the world's largest literature database provided by Elsevier (2016-20), JAIST ranks 4th in terms of international co-authorship ratio (45.1%) in national universities.

(From "University Ranking" Asahi Shimbun Publishing)

Quantity and Quality of Presented Research Results (2020)



"JAIST International Seminar House" opened in April 2021!

On April 1,2021,the International Exchange Hall was relaunched as "JAIST International Seminar House." JAIST International Seminar House is an accommodation facility for visitors to the university and their families that aims to promote educational research and international exchange. There are 10 single rooms, 5 4-person rooms, 3 rooms for couples, and 3 rooms for families. The rooms are equipped with furniture such as beds and dining tables, and appliances such as refrigerators and microwaves.



Communicating the Essence of the Graduate University through Diversity and Intelligence

Hiroyuki lida

Trustee and Vice President for Educational and Student Affairs Director, Research Center for Entertainment Science (until March 2021) Director, Global Communication Center (until March 2021)

At JAIST, international students from 20 countries account for 40% of all students. This percentage is very high for Japan. I believe it is important for us to ensure that this international diversity works well. In Japan, there was a time when the economy was growing, but now growth is stagnant. As a reflection of the current times, the younger generation has lost their outward competitive attitude and desire to work tirelessly. In JAIST's global environment, I would like Japanese students to work hard in friendly rivalry with motivated international students. I believe international students can learn a lot in Japan, such as traditional Japanese culture, values, and customs.

In terms of diversity, in Europe and the United States, changing your major and affiliation when you progress from university to graduate school is considered to be a sign of having diverse capabilities and leads to higher recognition in society. This is not yet the case in Japan, but students at JAIST are generally rated highly by companies because they have been taught based on a strict curriculum and have acquired knowledge outside their major. JAIST has set the goal of establishing "advanced



researcher training" as the first pilot case for a graduate university, and I believe this is a result of our focus on student education. I joined the university in 2005. Comparatively, I had a light teaching load and few other duties, so I was able to enjoy the privileges of JAIST being a "Graduate University" and a "Research University" and focus on my research. I had time for meaningful discussions with my students and I was able to meet and mentor individual students. In 2010, the University celebrated its 20th anniversary and held a joint Computer Olympiad with the International Computer Games Association. Holding this world tournament in Kanazawa - the first time it had been held in Japan - made it a very exciting project.

JAIST was established with the goal of being an "ideal academic institute" that conducts world-class advanced research and develops excellent human resources. 2020 marks our 30th anniversary, and President Terano has set out his vision to maximize the growth of our research capabilities. We will return to our inception and strive to further develop and publicize our research capabilities.



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JAIST won awards for six consecutive years from 2016 to 2021 at the "Japan Ryugaku Awards" organized by the Association for the Promotion of Japanese Language Education, which investigates and selects higher education institutes recommended for international students. In 2016 and 2017, JAIST won the Grand Prize in the "Graduate School (West Japan) Category." JAIST's educational content, school equipment, and learning support for international students were rated highly.

Global Learning Environment

More than 40% of JAIST students are international students, representing approximately 20 countries worldwide, and many of our classes are conducted in English. We believe that maintaining a diverse student body is an effective way to develop scientists and researchers who can play an active role globally.



Number of International Students (Including research students)

(As of May 1, 2021)

| Country Region | Graduate School of Advanced Science and Technology | | | Total | | | | |
|-------------------|---|---------------------|----------------------|---------------------|---------------------|----------------------|-------|-----------|
| | Master's Program | Doctoral Program | Research Students | Master's Program | Doctoral Program | Research Students | Total | Rate % |
| China | 225 | 104 | 5 | 225 | 104 | 5 | 334 | 67.7 |
| Vietnam | 22 | 31 | | 22 | 31 | 0 | 53 | 10.8 |
| Thailand | 5 | 26 | | 5 | 26 | 0 | 31 | 6.3 |
| India | 4 | 10 | | 4 | 10 | 0 | 14 | 2.8 |
| Bangladesh | 3 | 10 | | 3 | 10 | 0 | 13 | 2.6 |
| Myanmar | 4 | 8 | | 4 | 8 | 0 | 12 | 2.4 |
| Indonesia | 3 | 7 | | 3 | 7 | 0 | 10 | 2.0 |
| Taiwan | 4 | 3 | | 4 | 3 | 0 | 7 | 1.4 |
| Korea | 3 | 4 | | 3 | 4 | 0 | 7 | 1.4 |
| Malaysia | 2 | 2 | | 2 | 2 | 0 | 4 | 0.8 |
| Egypt | | 1 | | 0 | 1 | 0 | 1 | 0.2 |
| Netherlands | | 1 | | 0 | 1 | 0 | 1 | 0.2 |
| Canada | 1 | | | 1 | 0 | 0 | 1 | 0.2 |
| Saudi Arabia | | 1 | | 0 | 1 | 0 | 1 | 0.2 |
| Jamaica | | 1 | | 0 | 1 | 0 | 1 | 0.2 |
| Pakistan | 1 | | | 1 | 0 | 0 | 1 | 0.2 |
| Brazil | | 1 | | 0 | 1 | 0 | 1 | 0.2 |
| Laos | | 1 | | 0 | 1 | 0 | 1 | 0.2 |
| Total | 277 | 211 | 5 | 277 | 211 | 5 | 493 | 100 |

Collaborative Educational Programs with Overseas Universities Double Degree Program

Students study and conduct research activities both at JAIST and a partner institution to obtain a degree from each institution.

| Partner Universities | Program | Туре | |
|---|--------------------------------------|------------|--|
| Tianiin University (China) | Master's Program | Reciprocal | |
| Tianjin University (China) | Doctoral Program | Reciprocal | |
| | Master's Program | | |
| Chulalongkorn University (Thailand) | Master's & Doctoral combined program | Accepting | |
| | Doctoral program | | |
| Thammasat University, Sirindhorn International Institute of Technology (Thailand) | Doctoral program | Accepting | |
| Indian Institute of Technology Gandhinagar (India) | Master's program | Reciprocal | |

Collaborative Educational Program with Vietnam

JAIST conducts a Collaborative Education Program with following Vietnamese academic institutions. Students who study and conduct research activities at both JAIST and a partner institution in Vietnam, and have fulfilled all the requirements for completion of JAIST are awarded a degree from JAIST.

| Partner Universities | Program | Туре |
|---|------------------|-----------|
| Vietnam National University, Ho Chi Minh City - University of Science (VNUHCM-US) | | Accepting |
| Vietnam National University, University of Engineering and Technology (VNU-UET) | Master's program | |
| Posts and Telecommunications Institute of Technology (PTIT) | | |
| Le Quy Don Technical University (LQD) | | |
| Vietnam National University, Ho Chi Minh City-University of Information Technology (HCM-UIT) | | |



Online ceremony to commemorate the 20th anniversary of collaboration with higher education institutions in Vietnam (December 2020)

Collaborative Education and Research Co-supervision Program

Supervisors at the degree awarding university and a subsidiary supervisor at the host institution co-supervise a student under a joint research project implemented between JAIST and the partner institution. The student studies at the host institution as a non degree-seeking student (Special Visiting Student) for a certain period of time, and receives a Certificate of Attendance after the completion of the program.

| Partner Universities | Program | Туре |
|---|------------------|------------|
| Dresden University of Technology (Germany) | Doctoral program | Reciprocal |

Congratulatory Messages for JAIST 30th Anniversary from Partner Universities

Tianjin University (China)



Those exchange professors represent our efforts. Those exchange students reflect our achievements. Those exchange COVID-19 masks witnessed our friendship. A friend in need is a friend indeed. Happy 30 years birthday to JAIST!

> *Prof. Dr. TAO Wenyuan Vice Director, College of Intelligence and Computing*



Chulalongkorn University (Thailand)



I am delighted to express sincere congratulations to JAIST on its 30-year anniversary. The JAIST-Chulalongkorn University dual degree program has woven tight bonds among the professors and researchers of the two institutions and paved the way to success for many students. I truly wish that this friendship will continue growing.

> *Prof. Dr. Supason Wanichwecharungruang Department of Chemistry, Faculty of Science*

Indian Institute of Technology Gandhinagar (India)

On behalf of IIT Gandhinagar, heartfelt congratulations to JAIST on its 30th Anniversary.

We are proud to have vibrant joint degree, student, faculty, and research exchange programs with JAIST and consider them among our most valuable global partners. We look forward to both broadening and deepening our collaborations with JAIST in the decades to come!

> Prof. Dr. Sudhir K Jain Director, IIT Gandhinagar



OGUNLEYE, Olamikunle Osinimu Ph.D. in Material Science (2019) Nigeria



I have many pleasant memories of my time at JAIST. The campus was cosmopolitan, consisting of students from all over the world. I got to learn about cultures other than my own: food, clothing, and even ways of life that were different. This experience broadened my perspective about life in general.

Some of the lectures on campus were taught in English. The Student Affairs Department staff were very helpful and solved various problems during my stay on campus. They had good command of English, so they were able to interact easily with me.

The weather at JAIST was quite unique: winter was very cold and summer was very hot. Spring and autumn were the best seasons for me. I was able to take amazing pictures during the brief cherry blossom season. Thanks to the University for taking the initiative to grow such trees, thus beautifying the campus.

The education I got at JAIST was world class. With the support of my

supervisor, I was able to publish my research paper with a very good journal. Thanks to the exposure and academic rigor I experienced during my time at JAIST, I am confident that the sky is just the limit. In the near future, I plan to do a post doc to further or start a new research field.

I would admonish prospective students to pick JAIST. For Japanese students, I think it's a good place to learn English because of the diversity of students admitted into JAIST. Research is also very intense and rewarding because of the top-notch academics and world-class facilities students are exposed to.

PRIMANITA, Anggina Ph.D. in Information Science (2021) Indonesia

I took the 3D program at the Graduate School of Advanced Science and Technology between 2018 and 2021.

I was first introduced to JAIST and its program during a conference held in my hometown, Palembang, in 2017. My first impression was that everything was very swift and structured, which I was happy about since I can be a clumsy person. After some time in the lab, I feel like JAIST and

its environment is a very good place for research. Truthfully, there isn't much change from my first impression that everything was swift and structured. I have had a great experience studying at JAIST.

I enjoy the advanced classes and minor research. They are structured for students to dig deeply into subjects that could be foreign to us.

I feel like it is really interesting to learn things outside of your area of expertise. Moreover, living in Japan has been interesting. For the last year and a half of my time there, the pandemic has been ongoing and thus I cannot spend much time exploring everything. I am glad that JAIST took the measure of doing remote learning as well as remote research supervision. It gives me a sense of comfort and lessens the anxiety that comes with the change of lifestyle during the pandemic. I feel like studying at JAIST has helped me to become more agile in navigating my research, as long as I am not procrastinating about it. My advice is to plan your research and milestones thoroughly. It is better not to meet something on your schedule than to not have a schedule at all.





TIENG, Kimseng Ph.D.in Knowledge Science (2020) (SIIT-JAIST Double Degree Program) Cambodia



I was a dual doctoral degree student between the Sirindhorn International Institute of Technology (SIIT) Thamatsart University and JAIST, and completed my doctoral program in September 2020. It is my great pleasure to share my thoughts with new students who intend to join master or doctoral degree programs in the upcoming year. Let me share four reasons you should choose to pursue further study at JAIST.

First, students can experience differences among the four seasons in Japan. You can enjoy cherry blossoms during spring, clear blue sky and sunsets during summer, red maple trees during autumn, and snow during winter. Students can also taste different types of Japanese food in accordance with each season. JAIST is the perfect place for nature-lovers, where students can borrow the free bicycles and go to the Tedori River or the Sea of Japan. Also, students can enjoy running along the rice fields under cherry blossoms, hiking at the foot of Mt. Hakusan, seeing nighttime views of the galaxy around campus, and skating or skiing nearby during winter.



Second, JAIST is located on a secluded hill, and as such it is a perfect place for students who need to focus on their academic research. JAIST provides full facility support for master and doctoral degree students. For instance, students can enjoy reading or borrowing books from the library 24/7 and accessing the JAIST server and staying in the lab at any time, using Surface tablets with full version software from JAIST for research. Even though the campus is a bit isolated, JAIST provides a free shuttle bus to connect with train stations and shopping malls.

Third, JAIST provides multidisciplinary courses across different schools to the students. This means that students who join the school of Knowledge Science (KS) can also take courses from other schools (Material Science (MS) and Information Science (IS)) if they have an interest, and the same is true for students in the MS and IS schools. Thanks to the extensive academic and industrial experience of the faculty members, this system helps students gain multiple skills and knowledge sets across both their own fields of research and their areas of specific interest.

Finally, JAIST is truly an international graduate university, with almost 50% of the students coming from foreign countries such as China, Vietnam, Thailand, Indonesia, Myanmar, Laos PDR, Jamaica, India, Malaysia, Pakistan, Bangladesh, and Kenya. Also, JAIST often organizes different cultural programs, such as homestays with local people, tours of historical sites, and Culture Experience excursions. These experiences encourage students to learn about different cultures and live in this community.

For these reasons, JAIST is one of the best graduate universities for international education. I hope that everyone will have wonderful experiences at JAIST, as I did.

Japanese Culture Training



From left: Komatsu Awazu Factory Tour (September 2014), Tea Room Experience (June 2015), Higashi Chaya Street Walk (June 2019)

JAIST Foundation

"JAIST Fund" will be utilized to foster leaders capable of contributing to the making of the future world.

"JAIST Foundation" was established in 2010, the 20th anniversary of JAIST, and donations to the JAIST Foundation are used for education and research, social contributions, international exchange, and support for students in financial difficulties. In 2020, we provided financial support from the JAIST Fund to students in financial hardship and students affected by the COVID-19 pandemic. Thank you very much for your support of the JAIST Foundation.

2020.7 We provided 50,000 yen per student from the JAIST Fund to students in financial hardship due to the impact of COVID-19.

2020.11 We provided 50,000 yen per student from the JAIST Fund to new international students to help them with accommodation expenses for the 14-day quarantine period after their arrival in Japan.

JAIST has established two funds, "Education and Research Support Fund" and "Study Support Fund", in the JAIST Foundation in order to further enhance education, research and study support for students.

The "Education and Research Support Fund" accepts donations for the purpose of applying to the projects that promote education and research, social contribution, international exchange, etc. In addition, the "Study Support Fund" accepts donations for the purpose of funding for projects that support students who are difficult to study due to economic reasons.

We would appreciate your support and cooperation.

JAIST Fund

ation and Research Support Fund

- 〈Outline〉
- Education and research promotion project
- Student support project
- (excluding projects carried out by the Study Support Fund) • Social contribution project
- International exchange project
- · Other projects necessary to achieve the objectives of the Fund

Study Support Fund

(Outline)

 \cdot Exempting all or a part of tuition, admission fee or boarding fee

- Projects that lend or provide scholarships
- Projects that bear the cost of studying abroad
- Projects that pay remunerations to students engaged in teaching assistants, research assistants, etc.

Contact : JAIST Foundation Office, Japan Advanced Institute of Science and Technology

E-mail : kikin@ml.jaist.ac.jp

How to donate

1. Express your intention to donate

Please contact the JAIST Foundation Office to let us know your intention of donation by telephone, e-mail, etc.

2. Receive notice from JAIST

We will notify you about acceptance of donation and send you a transfer form.

*Please note that we cannot always accept your donation if it is a conditional offer, or it is considered to affect execution of duties of JAIST or to be inappropriate for us to accept the donation for social reasons or by judgement of the president.

3. Transfer donation

Please transfer donation to designated account. (For individuals: 1,000 yen per unit, for corporations: 10,000 yen per unit.)

4. Receive a thank-you letter, etc.

We will send a thank-you letter and a receipt for the donation. Also, we will post the donor's name, etc. on our website. (You can also choose not to post.)

Management of the Funds

"JAIST Foundation Steering Committee" is responsible for the management and deliberates which projects should be covered by the donation effectively. "JAIST Foundation Office" is in charge of its administration.

Handling of Personal Information

JAIST Foundation shall use personal information obtained through donation procedures only to contact the donor and put the donor's name, etc. on our website with consent from the donor. Personal information shall be handled properly under the relevant laws and ordinances.

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