### **VOICES** Deans in their Own Words



Dean, Graduate School of Engineering

Dean, School of Engineering

YUGAMI Hiroo

I have heard that the Japanese language has more gender-specific words compared to western languages, which may help to explain why gender equality is progressing more slowly in Japan. But there is no gender difference in the world of engineering, a universal science. Let's work together to build a lifestyle and society rich in learning. We are about to welcome one of our female professors to the executive department of the School of Engineering for the first time. We are excited to fully support the activities of ALicE.



Dean, Graduate School of Information Sciences

KATO Nei

Society 5.0 aims to create a future society where, with the help of AI and robots, our lives are enriched by integrating virtual spaces with existing physical spaces. Information science is not limited to advances in technology like AI, IoT, data mathematics, and robotics. It also takes on numerous global issues through an integrative approach that combines the humanities and the sciences. We will do our utmost to support the activities of ALicE so that more female researchers can be active in the field



Dean, Graduate School of Environmental Studies

KAWADA Tatsuya

There are a variety of ways to address environmental and energy issues. Some say we must stop using fossil fuels altogether while others think better use of coal is indispensable. I believe we can find the solution that works for as many people as possible by collecting ideas from a diverse group of people. We are happy to support the activities of ALicE that directly and indirectly encourage and empower such people who are key in creating our future.



of Biomedical Engineering

SAIJO Yoshifumi

Biomedical engineering is considered as an interdisciplinary area of medicine and engineering. It is in fact the crossroad of the needs and seeds of multidisciplinary people. We are proceeding medical device innovation by the design thinking approach in which we emphasize the unmet clinical needs of various people and our sympathy to the people in problem solving. Let's create a bright and healthy future by developments based on various viewpoints. Graduate School of Biomedical Engineering is continuously supporting ALicE activities.



Zundanuki

Zundanuki is a *zunda* (edamame)-colored *tanuki* (a Japanese racoon dog) that lives in Aobayama. Its mouth forms the Japanese kanji  $\mathbb{I}$ , for "engineering," and on its belly is the pattern of the Japanese bush clover, featured in Tohoku University's logo. This *tanuki* has a keen interest in engineering, science, and technology!

\*\* The engineering at Tohoku University is the collective term that encompasses Tohoku University's Graduate School of Engineering, Graduate School of Information Sciences, Graduate School of Environmental Studies, Graduate School of Biomedical Engineering, International Research Institute of Disaster Science, New Industry Creation Hatchery Center, Environment Conservation Center, and the Center for Innovative Integrated Electronic Systems. Association of Leading Women Researchers in Engineering, Tohoku University

**ALicE** 









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Association of Leading Women Researchers in Engineering, Tohoku University ALICE Website

ALicE/Association of Leading Women Researchers in Engineering, Tohoku University 6-6-04, Aramaki Aza Aoba Aoba-ku, Sendai, Miyagi 980-8579 1305-1-3, Engineering Laboratory Complex Building, School of Engineering, Tohoku University





At Tohoku University Engineering,

we respect diversity as the way to realize

## a truly prosperous society.

What type of discipline do you consider engineering to be? I believe that engineering is a discipline in which we work behind the scenes to improve society. Society is also constantly changing, so it is important to have a dream of, "wouldn't this make the world a better place?" and strive for that. Having such dreams and hopes leads to the realization of that better society, and engineering helps to make those dreams and hopes come true.

Moreover, in order to make a truly prosperous society a reality, we must respect the diversity of opinions that everyone holds.

Tohoku University's Association of Leading Women Researchers in Engineering (ALicE) works to realize a society where women can continue their careers in engineering without undue worries.

I look forward to learning, growing, and working together with you at Tohoku University engineering.



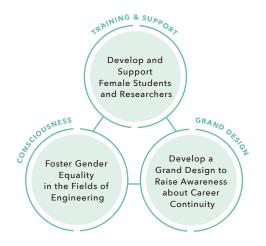
Professor TANAKA Mami

Graduate School of Biomedical Engineering/ Graduate School of Engineering Director, ALicE

### **Purpose**

Supporting the Advancement of Women in Engineering

We are working to realize a society in which women can continue their careers in the fields of engineering with peace of mind. We work to support the training of women in engineering and fostering awareness of gender equality and career continuity opportunities.

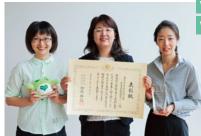


#### **Activities**



### Awarded the 2016 Women's Challenge Award (Cabinet Office)

Recognized as Improving the Research Environment for Female Engineering Researchers in Tohoku University and Beyond.



Women's Challenge Grand Prize
Women's Challenge Support Grand Prize

This award is sponsored by the Cabinet Office's Gender Equality Bureau. It aims to honor women who excel in various fields and the organizations that support them, in order to recognize role models for taking on challenges to heighten momentum toward gender equality in society.





### Promoting Visibility of Female Researchers/ Appeal of Engineering



#### Science Experience Program

We hold science experience programs for elementary and junior high school students in order to further their knowledge in various science fields. We also hold laboratory tours for female junior and senior high school students, where they can actually experience research in those fields.



### Mini Forum for Female Junior and Senior High School Students

Mini forums are held at Open Campuses, where female faculty, professionally working graduates, and students give lectures and pen dialogues and hold round-table discussions (Q&A sessions). We encourage anyone interested to attend.

#### **∃** Student Voices

- "I was able to imagine what my studies and life would be if I enrolled in Tohoku University. I got to know more about the University and the engineering departments, and it broadened my horizons. I want to study hard to expand my own options." (High School Student, Akita)
- "I was nervous about doing the online forum, but I had a great time participating." (High School Student, Mivagi)
  - ◆ "I was pretty undecided as the Science and Engineering departments seem really similar, but now I want to study Engineering. (High School Student, Saitama)



### Introducing Female Researchers and Researchers Raising Children

We provide on-site lectures (also available online) at mainly girls' high schools to give them a broad understanding of the appeal of engineering. We also introduce female researchers in engineering in our newsletter, on our homepage, and via SNS.



### Support for Work/Life Balance between Research and Childcare/nursing care



### Nursery/Resting Rooms

For all faculty, educational researchers, and enrolled students in Engineering, we provide a nursery space for the temporary care of children, and a quiet resting room for those requiring a space to rest or breastfeed. It can also be used for temporary childcare during meetings or academic conferences.

For inquiries about the nursery TEL 022-795-4619/5678 eng\_alice@grp.tohoku.ac.jp



# ubsidies for Babysitting Fees

All engineering researchers raising children can subsidize babysitting and temporary childcare fees. There are two application periods per year, in September and February. Application documents can be downloaded

Application for Babysitting Fee Subsidy https://alice.eng.tohoku.ac.jp/ompatibility

#### Dispatching Research Support Staff

We dispatch research support personnel (administrative assistants) to provide support to researchers who are struggling to secure research time. The aim of this program is to maintain and promote a balance between research and childcare/nursing care and social contributions. Recruiting will begin in March.

#### Researcher Voices

"It was a huge relief to be able to hand off clerical paperwork I had long put off. I now feel more relaxed and have more time to think about my home life."



### **Nurturing Women Leaders in Engineering**



#### TEP-ALICE Program

This program subsidizes a portion of travel expenses for female researchers participating in academic conferences, joint research meetings, and training programs. There are 2 application periods per year, in May and October. The maximum amount is 200,000 yen for overseas travel expenses and 80,000 yen for domestic travel expenses. Application forms can be downloaded from our website.

#### 

◆ "In the future, I would like to go abroad and 
◆ "For young researchers, the ability to build build up experience and achievements to further open up opportunities for working women. I hope that the next generation can do so, and create an environment where women in research can easily travel."

an international network early in your career has a huge impact on the development of your own research. I hope everyone can take advantage of this program to actively participate in international conferences and gain experience testing their research."



#### Seminars/Networking Events

We hold seminars and networking events for female researchers and students in engineering aimed at improving their skills and developing their careers.

#### Researcher and Student Voices

◆ "It was great to hear directly from
◆ "Listening to senior students and experienced female researchers about what they think about the future and turning points in their lives, such as marriage, childbirth, and childcare."

researchers, I felt like I can work hard now toward my goals, and it made me less anxious about the future."



### Efforts to Actively Hire Female Researchers



We support the active recruitment and promotion of female researchers. We are working to improve laboratories, daycare rooms, and women's resting rooms, so that female researchers can conduct their work with peace of

### Problem-Solving through Information Sharing

#### Sharing/Providing Information

We operate a mailing list for female students and researchers in the engineering for the purpose of providing and sharing information. We share public information including childcare, research grants, and event information.

For Inquiries about the mailing list eng\_alice@grp.tohoku.ac.jp

- ☑ Information on research fees and overseas travel expenses
- ☑ Information on nursery schools and babysitters
- ✓ Information on events and symposiums at/ outside of Tohoku University
- ✓ Full description of support systems

#### Talk Desk

We accept consultation regarding female students and researchers, from all researchers and students of either gender

#### Talk Desk (ALicE)

TEL 022-795-5678 eng\_alice@grp.tohoku.ac.jp

### Other Consultation Desks

- Student Support Center
- 2 Counseling Room
- 3 Harassment Consultation Desk
- 4 Gender Equality Consultation Desk

## Q&A

### What kind of discipline is engineering?

Engineering is a discipline that improves people's lives and society. Through the power of science and technology, we create new things and work to solve problems. Because we create things that benefit society, it is also known as a discipline of social doctors.

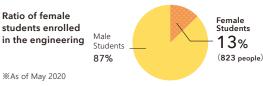
### What should I do if my lab work does not end until night time?

Aobayama Station on the Sendai City subway line is conveniently located on Aobayama Campus. In addition, there is support for female students through the Faculty of Engineering Alumni Association. You can also take a taxi if you are returning home late at night.

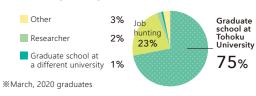
### Will I be able to balance home life and research?

We can provide assistance in the form of babysitter fee subsidies and research support personnel to assist in balancing research and childcare. There are also spaces available for use as temporary childcare during academic conferences.

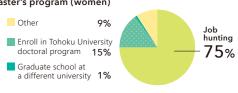
### Women in the engineering by the numbers



### School of Engineering Post-Graduate Career (women)



#### Career after completing Graduate School of Engineering Master's program (women)



\*March 2020 graduate school graduates