NITech Topics 2021

Nagoya Institute of Technology
Gokiso-cho, Showa-ku, Nagoya, Aichi,466-8555 Japan
https://www.nitech.ac.jp/eng/

TOPIC 01

Ranked 1st in Design Award in Student Formula Japan

"Student Formula Japan 2021" (73 teams were registered.) was held online from August 27 to 31 and NIT Formula Project ranked 1st in Design section and received other awards too.

Due to the influence of Covid-19, Student Formula Japan in 2020 was cancelled. Although almost of all events including automobile inspection and dynamic examination were canceled in 2021, static examination alone was conducted.

NIT Formula Project team's best subject, dynamic examination, was canceled. Therefore, the participants competed static examination alone, however, the team worked together. Consequently, NITech just ranked 4th, however, could procure the several awards including the 1st award in Design.

On September 30, an award ceremony was conducted online, and a project leader, Mr. Izumi Yoshida (4th grade in Creative Engineering Program) attended and made a speech about the outcome of this event.

Please check the award ceremony from the link below.
https://www.youtube.com/watch?v=afv4tkSl51s

TOPIC 02

JSPS Japanese-German Graduate Externship Program Joint Seminar was Held Online

From March 3 to 5, 2021, a Japan-Germany joint seminar (Yearly school: Energy Systems School II) was held. Last year, we held a joint seminar in Bamberg, Germany, but this time it was held online in response to the global outbreak of the new coronavirus. Approximately 60 faculty, staff and students from both the University of Erlangen-Nuremberg (FAU) and Nagoya Institute of Technology (NITech) attended the seminar. After the opening remarks by Japanese coordinator Prof. Ken-ichi Kakimoto and German coordinator Prof. Kyle Grant Webber, invited lectures were delivered by Dr. Dai Hisamoto of Hitachi, Ltd. and Dr. Izumi Kano of the NITech Center for Diversity and Inclusion. Over the course of three days, the program students gave presentations respectively about 12 research projects and four joint promotion projects, and the Q&A session became lively among participants. On the last day, the Young Research Award was awarded to the three students who made excellent research presentations. At the cultural exchange meeting, it was a good opportunity to further deepen understanding among members of both Germany and Japan by watching a self-introduction video created by the program students. The next joint seminar will be held in Nagoya in March 2022.

Japanese-German Graduate Externship Program

http://jgge-eng.web.nitech.ac.jp/

Commemorative photo of all members

During the seminar

TOPIC 03

Prof. Hideki Kandori Awarded Medal with Purple Ribbon in Spring 2021

Medal with Purple Ribbon is awarded to those who made invention or discovery in the field of science and technology or achieve excellent accomplishment in the fields of academic, sports and artistic culture.

Outline of accomplishment:

In the field of biological physics, spectroscopically elucidating optical initial process, and the structure of red, green and blue materials of primate. In addition to this, a great accomplishment has been achieved such as discovering, converting and creating functions regarding a microbe rhodopsin of optical response protein, which led to a significant contribution to the development of relevant fields.

Comment from awardee:

It is a great honor for me to be awarded Medal with Purple Ribbon. The color of purple: the color of ribbon, which is also the color of various kinds of rhodopsin I have long researched, and this coincidence makes me pleased. The credit for gaining the award goes to my advisors including Dr. Yoshizawa, my supervisor in Kyoto University, joint

researchers, staff and students who have participated in the research, I hereby truly appreciate their support.

Although contribution for research on biological physics has been evaluated this time, our research belongs to not only biological physics but also physical science and photobiology. This field ranges between physics and biology and is also able to be developed into medicine and engineering. I would like to keep making efforts to conduct fundamental research on rhodopsin in various colors with students with high motivation in NITech.

TOPIC 04

Implemented On-Campus COVID-19 Vaccinations

From July 12 to September 9, 2021 (excluded the Bon holidays), NITech collaboratively implemented on-campus Covid-19 vaccinations at the Toyota Auditorium/ Symposion, Nagoya University with other neighboring institutions such as Nagoya University, Meijo University, Chukyo University, Nanzan University and National Institute of Technology, Toyota College. During the period, with the cooperation with medical professions including doctors, nurses and pharmacists from Nagoya University Hospital, over 34,000 people both students and staff members had been vaccinated, which was implemented everyday including weekends for five to six hours and vaccinated 1,000 to 1,500 people per day.

Although many local governments proceeded to vaccination from the elderly, vaccination of students was prior to staff members due to a sense of crisis that vaccination of the young with higher infectious rate would be far behind. Therefor we accepted a reservation from students on a priority basis, which enabled us to achieve more than 60% of students in NITech being vaccinated within the scheme of this on-campus vaccinations.

Side effects from vaccination of the youth being frequently reported, a number of young people hesitated to be vaccinated. However, we tried to disseminate the information which showed the efficacy of the vaccine to them and collect a reservation. Taking advantage of this on-campus vaccination, we would like to pursue normalization of students' life including the implementation of face-to-face classes.

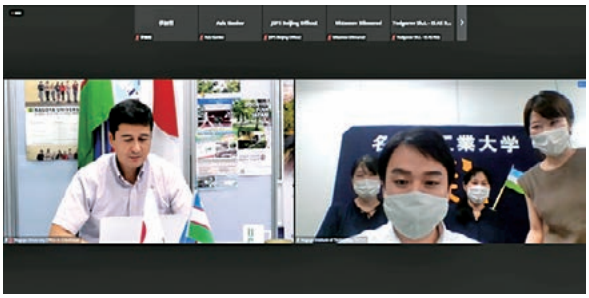
TOPIC 05

Participated in Study in Japan Fair 2021 in Tashkent

NITech participated in “Study in Japan Fair in Tashkent” from August 19 to 25, 2021.
This is the only Study in Japan Fair in Uzbekistan and sponsored by the Ministry of higher and secondary specialized education of Uzbekistan. It is a high-profile Study Fair in Uzbekistan which attracts a large number of students mainly from senior high schools and universities every year. Due to the pandemic of COVID-19, it was held online via zoom this time.

The information of NITech including curriculum, scholarships, dormitories and tuition fees were introduced in Power Point. So many questions from Uzbek students participated to us show their intense interests in NITech.

Website of Study in Japan Fair in Tashkent:
Japan Education Fair 2021 in Tashkent – Nagoya University office in Uzbekistan (japan-edufair.uz)



TOPIC 06

Collaborative Project with Coimbra University (Portugal) was Selected

Collaborative project with Coimbra University, which is one of our partners has been successfully selected by Fundação para a Ciência e a Tecnologia (FCT) this time.
With an aim to be aware of the trend of other countries by involving globally active researchers, this project team consists of a representative from Germany, the U.S. and Japan respectively as well as researchers from Coimbra University and EU Joint Research Centre. Assoc. Prof. Atsushi Sato (Architecture, Civil Engineering and Industrial Management Engineering) participates in this project as the representative from Japan.
With Assoc. Prof. Sato playing a key role, Coimbra University and NITech have achieved a great performance in bilateral collaboration both in research and student exchange, which led to the conclusion of the Agreement for Academic Exchange in March 2020. Consequently, this background also brought the successful result this time.
This program with the theme “Assessment of the effects of climate change on the safety of steel and composite structures using Generative Adversarial Networks (GAN) and Advanced Surrogate Models” will be implemented for five years from now, and it is highly expected to contribute to the quantitative structural performance evaluation against various external factors that the recent climate change will cause.

In November 2019 at Coimbra University
From left, Prof. Silva, Coimbra University, Mr. Shinpei Yoshioka (in the first year of the Master’s program as of 2019), Mr. Takeshi Onogi (in the second year of the Master’s program as of 2019), and Assoc. Prof. Sato

TOPIC 07

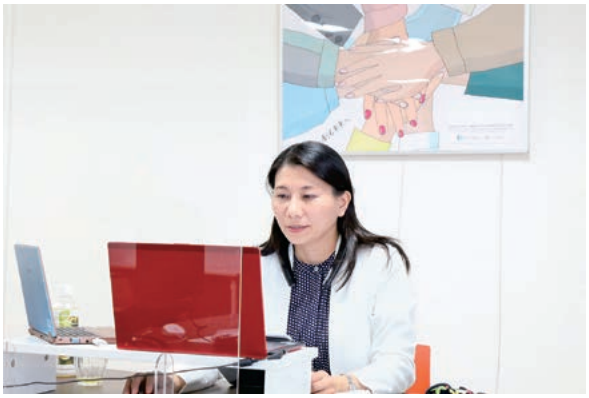
Honorary Doctor Conferring Ceremony for Dr. Peter Greil was Conducted

On March 15, 2021, Honorary Doctor Conferring Ceremony in NITech for Dr. Peter Greil, Friedrich-Alexander University Erlangen-Nuremberg (FAU) was conducted on-line.
Dr. Peter Greil is specialized in Ceramic Engineering and achieved a worldwide performance especially on ceramic synthesis from polymer derivative, and synthesis and evaluation on biomimetic cellular ceramics.
He had been making efforts for the 21st Century COE Program from 2010 to 2015 as a visiting professor followed by an advisor for the Frontier Research Institute, NITech from 2015. And furthermore, we must mention his extraordinary efforts to the conclusion of academic exchange agreement between FAU and NITech (March 11, 2011), establishment of the NITech Europe Liaison Office (July 15, 2013) and the launching of the Joint Doctoral Program (Cotutelle) (October, 2019) which led to the significant contribution toward our international quality assurance both in education and research.
Based on the said achievements, Dr. Kinoshita, President of NITech conferred on Dr. Peter Greil Honorary Doctor in NITech and praised his achievements through many years.
Also, in commemoration of the conferment, on-demand special lecture by Dr. Peter Greil, “Advanced Ceramics – Challenges and Chances –” is delivered for all staff members and students in NITech.

TOPIC 08

Diversity and Inclusion Symposium was Held

On September 15, NITech Diversity and Inclusion Symposium, “Create an environment to transform diversity into power” was held online.
NITech has been adopted by the Human Resource Development Program for Science and Technology of the Ministry of Education, Culture, Sports, Science and Technology (MEXT), and developing activities focusing on support for female researchers and fostering next generation toward the promotion of diversity. The purpose of this symposium was jointly learning viewpoints deemed significant but not sufficiently disseminated yet and sharing issues. The committee members for Diversity and Inclusion including our President, executives, heads of departments and those who were from outside the university, 66 people were participated in the event.
Starting with an opening address by President Kinoshita, Dr. Kano, a coordinator of the NITech Center for Diversity and Inclusion, explained our projects for the promotion of diversity.



Dr. Kano, a coordinator of the NITech Center for Diversity and Inclusion

Dr. Yasuko Yamamura from Japan Science and Technology Agency was invited as a keynote speaker and gave us a speech on “Achievement of the initiative in diversified research environment and future trend” and followed by a special lecture titled “For the creation of environment embracing diversified gender” by Prof. Miho Mitsunari from Nara Women’s University which was about the importance of taking measures for Sexual Orientation and Gender Identity.

Prof. Yasushi Ido, Director of NITech Center for Diversity and Inclusion, made a closing address and expressed his gratitude to speakers and participants.

We received feedback from participants such as “Thanks to a speech based on data, I could deepen my understanding”, “My idea that environmental improvement on diversity is an important factor which is directly connected to the productivity of university became stronger.”

TOPIC 09

Official Announcement: New Education and Research System will be launched in April 2022 in Doctoral Courses, Graduate School of Engineering

NITech reforms five existing departments in Doctoral courses, Graduate School of Engineering and will launch “Department of Engineering (Doctoral courses)” from April 2022. In the field of engineering, it is all the more required to acquire interdisciplinary technology and knowledge in order to resolve issues in the real world and industry. It means that a learning environment where students are able to participate actively is also urgently required. Therefore, in the new department, we do not establish individual education programs so that students can select a main supervisor according to their research theme and plan approaches to solve issues on the research. Furthermore, it will be a flexible system which enables students to broadly receive advice from experts in various engineering fields by the involvement of other faculty members from different fields* in the university as sub-supervisors, also, researchers such as from other research institutes, companies, and invited researcher from abroad as advisors.

With acquiring advanced knowledge and technique and incorporating advice from experts from various fields, NITech will produce human resources who are able to collaboratively reform the society while creating new values by planning new approaches on problem-solving from wide ranges of knowledge in engineering, technology and method and cultivating abilities to ingenious research.

* Five fields: Life Science and Applied Chemistry, Physical Science and Engineering, Electrical and Mechanical Engineering, Computer Science, Architecture, Civil Engineering and Industrial Management Engineering