President's Address Entrance Ceremony, April 2019

Yuji Oie, President, Kyushu Institute of Technology

Congratulations on your entrance to our university.

On the occasion of today's entrance ceremony, I would like to offer my heartfelt congratulations to all of you on this auspicious spring day, and also express my great respect for all of the efforts you made to arrive at this point. It is the ultimate pleasure for us to welcome you to the Kyushu Institute of Technology. To all the family members in attendance, I can only imagine the great joy you must feel. On behalf of all the faculty members, I would like to deliver this celebratory address.

As you begin your academic life at Kyutech, I would have you know that the school was originally founded in 1909 as a private institution called the Meiji College of Technology. The founder, Mr. Keiichiro Yasukawa, was a prominent figure in the business world. He established a number of businesses, such as the YASKAWA Electric Corporation, in the Kitakyushu and Chikuho region, which served as the foundation of our nation's industrial growth. This year marks the 110th anniversary of our school's founding.

In the Meiji Period, Japan lagged far behind the great nations of the world both industrially and economically, so it was vital to develop human resources to support the country. Based on his belief that "profits earned thanks to the country should be used for the country," Mr. Yasukawa donated a large part of his private fortune to found the Meiji College of Technology, with the aim of training engineers who could support the industrial advancement of Japan.

He entrusted education and research at the Meiji College of Technology to Dr. Kenjiro Yamakawa, then president of Tokyo Imperial University. At the opening ceremony of the college, Dr. Yamakawa declared that the Meiji College of Technology was a school that produced "gentlemen well-versed in technological skills," aiming to develop human resources with dignity and creativity. Dr. Yamakawa's aims have been adhered to through the generations, and still guide us today after more than 100 years as our university's founding principle of "instilling a deep knowledge of science and engineering in high caliber students." I would like the new students here to learn by heart the phrase "high caliber students with a deep knowledge of science and engineering."

The science and technology that you are about to study has had a major influence on the way we live in society. In fact, in the 20th century, a variety of technologies, including electrical equipment, information and communication-related technologies, automobiles and more, had a huge influence

on and caused remarkable changes in social and economic systems. And in the 21st century, AI, biotechnology and other technologies are sure to influence a broad range of fields. Yuval Noah Harari, author of *Homo Deus: A Brief History of Tomorrow* and *Sapiens: A Brief History of Humankind*, made the following comment regarding the future, in which remarkable advances in science and technology will continue to change social and other systems in profound ways. "From time immemorial, life was divided into two complementary parts: a period of learning followed by a period of working. In the first part of life, you developed skills and built a stable identity. In the second part of life, you applied these. In the 21st century, however, this model has become obsolete. We must constantly learn and re-invent ourselves." (Diamond, J. et al., *Mirai wo Yomu – AI to Kakusa wa Sekai wo Horobosu ka* (Reading the Future: Will AI and Inequality destroy the World?"), PHP Shinsho)

What in us changes through constant learning? What do we obtain? It is said that our brains are structurally nearly identical to the brains of humans 40,000 years ago. However, current lifestyles are completely different than those of 40,000 years ago. While our brains may be structured the same, the way our brains function is greatly influenced by how we use them. That is to say, the crucial point is the configuration of the numerous synapses that connect the millions of neurons that compose our brains. As an example, we are not born with the ability to read. Humanity only invented the concept of reading a few thousand years ago. We are able to read thanks to the new connections that we formed in our brains through learning that occurred after we were born. (Wolf, M. *Proust and the Squid: The Story and Science of the Reading Brain*, Godo Shuppan)

Constant learning will help you develop your abilities and increase your potential by altering the pathways in your brains and changing the way you use your existing neural pathways. This is also sure to enhance your individuality. As you master specialized areas of knowledge and skills during your time in university and graduate school, I would also like for you to acquire the ability to leverage these abilities and to understand the importance of constant learning.

For this purpose, in addition to your formal studies in the classroom, Kyutech also provides various other opportunities for learning, including training at affiliated universities overseas, internships at companies overseas and student projects, which students plan and implement on their own. We have also established a variety of learning environments, such as a manufacturing workshop equipped with 3D printers and dormitories in which you live together with students from overseas. In fact, more than 600 of your fellow students experience studying overseas annually, and nearly 20 student projects are conducted each year.

As I previously mentioned, this year marks the 110th anniversary of our school's founding.

Traditions are built, and through your studies, new Kyutech traditions will be formed. In conclusion, I encourage you, our new students, to be mindful of your health but also to take advantage of our many learning opportunities and environments to explore a wide range of matters. Our university is a place that brings people with a love of knowledge together, and I would like to express my heartfelt hope it will be a place for you to pursue a meaningful undergraduate or graduate student life. Once again, my sincere congratulations.