President's Commencement Address

First and foremost, I would like to extend my heartfelt congratulations to all of you who have just been awarded degrees from our university. It is a great pleasure to be here with you today at this Millennium Hall, celebrating your academic achievements and the beginning of a new chapter in your lives. I would also like to express my sincere gratitude to Mr. Tetsuya Kobayashi, President of Foundation for NAIST, and Dr. Kiyoshi Kiyokawa, Chairperson of NAIST Alumni Association, for their congratulatory addresses today.

I would also like to congratulate your families and friends, as well as the faculty members who have mentored you with passion and dedication. Today is also a special day for our Dean, Directors, and all the faculty and staff who have supported your learning journey at NAIST in various ways. Let us take this opportunity to extend our heartfelt applause to everyone who has contributed to your graduate training at NAIST, including those who could not be here today.

As you prepare to leave NAIST and enter society, I would like you to take a moment to reflect on our university's "Declaration of Co-creative Community." I encourage you to reread it and consider its significance in light of your learning experiences here.

In general, students of most graduate schools in Japan consist primarily of those who have completed their undergraduate studies at the same institution. However, as a graduate university, NAIST stands out for its exceptional diversity. We welcome not only domestic students but also researchers and international students from about 40 different countries and regions. As stated in the Declaration of the Co-Creation Community, "the different ways of thinking and various experiences of our community members support multi-faceted perspectives and unique approaches." This diversity is one of the greatest strengths of NAIST's education and research in science and technology.

At present, the values of diversity and inclusion are being challenged in some countries around the world. However, at NAIST, you have engaged with fellow students and faculty members with different backgrounds, knowledge, and perspectives while studying and conducting thesis research. Such a training environment enriched your learning and promoted research output, leading to your degree today. Upon your successful completion of graduate education at NAIST, I hope we can reaffirm the importance of diversity and inclusion on this occasion.

A highly influential paper was published in the journal *Science* in 2007 by Brian Uzzi, a sociologist from the United States. His research team analyzed approximately 20 million academic papers and 2 million patents from the past 50 years and identified a significant shift; research and development, which were once conducted by individual researchers, are now increasingly carried out by teams of multiple researchers. Moreover, they found that papers authored by more than one researcher tend to have a greater impact than those written by a single author.

So, how are highly impactful papers created? Professor Uzzi and his team continued their research and analyzed approximately 18 million papers across various scientific fields. They discovered a common pattern among the most frequently cited, high-impact papers. These papers were authored by multiple researchers and included novel combinations of concepts, ideas, and approaches beyond the traditional boundaries of existing disciplines.

The idea that innovation emerges from new combinations of existing knowledge or technologies was already pointed out over a hundred years ago by the economist Joseph Schumpeter, who first proposed the concept of innovation. Through large-scale analyses, Professor Uzzi and his team provided supporting evidence for this notion. Furthermore, psychologists have conducted comparative studies on problem-solving abilities in teams composed of members with homogeneous backgrounds versus those with diverse backgrounds. So, there is a growing body of scientific validation for the concept that teams with diverse perspectives are more effective at problem-solving and value creation.

A U.S. Supreme Court Justice once stated that you can "choose diversity or to be super-duper." Unfortunately, the long-standing misconception that pursuing diversity leads to a decline in quality persists in various forms today. As you leave NAIST and encounter new opportunities to meet and collaborate with others, I would like to share a famous quote by the British philosopher John Stuart Mill:

"It is hardly possible to overrate the value, in the present low state of human improvement, of placing human beings in contact with persons dissimilar to themselves, and with modes of thought and action unlike those with which they are familiar ... Such communication has always been, and is peculiarly in the present age, one of the primary sources of progress."

As you leave NAIST and embark on your journey, you will meet people from all walks of life. Sometimes, you will work with individuals whose perspectives differ from yours, and you may even find yourself collaborating with those whose opinions you do not always agree with. I believe you will leverage the experiences and lessons you gained at NAIST to work in teams with diverse members, foster cooperation, and generate innovative solutions to complex challenges. By doing so, you will drive the creation of new value and groundbreaking innovations. I have high hopes for the remarkable contributions that NAIST graduates will make to society in the future.

Finally, once again, I sincerely congratulate all of you. Even after graduation, you remain a member of the NAIST community. Our alumni association serves as a global network for graduates, so I encourage you to participate actively. On this day, you have joined a distinguished group of over 10,000 NAIST alumni. I look forward to seeing our newly minted alumni again in the future.

March 24th, 2025 Kaz Shiozaki President