President's Address at the 2015 Saitama University Graduation Ceremony

On behalf of all the members of Saitama University, I would like to extend my sincere congratulations on your graduation on this beautiful day with cherry trees' coming into bloom in our campus. In addition, I express much respect and warm congratulations to your families who have given support to you until today.

Out of 501 graduates in total, the 68 of them are from globally distributed, 12 overseas countries. I believe most of you will significantly contribute to your own countries' development. But, at the same time, I do expect all of you to be involved in global issues of human society by fully utilizing the experiences through your graduate research at SU.

In January 2016, the Cabinet of Japan resolved the fifth Science and Technology Basic Plan of Japan, which is a plan of strongly promoting the science and technology innovation policies for coming five years. Because the concept of Basic Plan could be useful for all the graduates who have now their own determination and hope for new life after graduation, let me introduce a little about it. The Basic Plan begins with the following sentences in its introductory part.

"Our country and the world are now in the midst of turbulent times. Can the science and technology innovation contribute to domestic and international, sustainable and inclusive development? It is demanded for the fifth Science and Technology Basic Plan to respond to this question, and to become the compass which leads Japanese citizens as well as world people to truly richer future."

It is very stimulating, but we should understand it as creating the richer futures in turbulence is duties of each and every one of us living in now. And the sentence in the Basic Plan continues as follows.

"There appeared presently-named Live Organ Transplant and Satellite Positioning System in the future prediction written down by Scientist Boyle in the 17th century, when the modern science raised the first cry. We needed long time for their realization, but the recent development of science and technology, especially Information and Communication Technology, ICT, changes economic and social rules in an instant, and brings much influences on human lifestyle and way of being. The innovation now emerges in the few place on the past extension line, and comes to spread instantly in the world."

I think that everybody can understand this fact enough with an actual feeling and should keep it in their minds. By the way, in relation to the ICT development, there was shocking news recently. That is, the Artificial Intelligence, AI, has beaten a world-class Go player for a fourth time to win the five-game series 4-1 overall. The game of Go has fewer rules and more choices for every turn than chess does. There is a significant strategy involved in the game, making it an extremely complex game despite its relatively simple rules. Therefore, Go was long thought to be unwinnable by AI. Some thought it would take at least another decade for computers to beat human Go champions. It is explained that the winning was made possible by introducing so-called Deep Learning that AI can find an

existence of "anything unusual" by learning a big data of the human way of thinking.

Then how should the human being live together with AI in the future? The comment of the professional Go player has a hint. “I had thought whether I really enjoyed Go in the past, but was able to enjoy the game of Go with AI. In the game, I feel like having had some questions about the old way of thinking. In addition, it increased learning, more from now on.” It may be said that it is possible for human beings to raise intelligence by learning from the AI new framework, which human being did not hit on, and that AI has taught the importance of one’s continuing learning. The fifth Science and Technology Basic Plan points out also that one’s flexibility and acceptability are indispensable for enjoying diverse values in the society, which makes rapid progress in the information networking and the mobility of various people. I understand that the flexibility and acceptability will be necessary also for coexistence with AI.

The society today is called knowledge society. Because a future prediction is difficult for an individual as well as for the society and an innovation is necessary for the social system, we must concentrate the human wisdom in order to break free from this severe situation. In this knowledge society, the progress of knowledge often accompanies paradigm shift, and the judgment based on wide knowledge and flexible thought becomes more important. The knowledge can have a meaning only when it is tied to the thought and the action that are going to solve a problem. At the same time, in the knowledge society where surrounding environment changes every moment, possible solutions for "a problem without a correct answer" are cross-cutting and various, and therefore cooperating with experts in various fields becomes important without persisting in one’s specialized field. Diversity, flexibility, and acceptability become the keywords again.

Most of you might have been on the side of enjoying the innovation until now. However, all of you will take a role to cause an innovation from now on. Keeping in mind the importance of diversity, flexibility, and acceptability, you are expected to be a talented person contributing to the knowledge society, namely a professional of the intellect. I want you to continue having an emotional attachment to Saitama University and to play an active part in knowledge society. I do wish you a great success in your future.

Almost two years have passed since I, who graduated from SU 41 years ago, was appointed as the SU President. The passion that I want to brighten my graduating school, Saitama University, becomes stronger and stronger. In this sense, I was so pleased to receive the news of our alumnus, Prof. Takaaki Kajita’s winning the Nobel Prize in Physics in October last year. All the faculty, staff, student and alumni of SU were very glad of this splendid achievement and proud of SU. By all SU members having the same aim and collaborating in solidarity, Saitama University continues to work on high quality education, research, and social contribution from now on.

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