## Welcoming Remarks for RENEW Workshop

**X** RENEW: Rehabilitation Engineering for Neurological Disorders Worldwide (November 18, 2019 @ The Academic Cultural Complex Chung Kunmo Hall)

Good morning distinguished scholars, colleagues, researchers, and students.

It is indeed my great pleasure to welcome you all to the RENEW workshop this morning. In particular, I would like to thank and welcome the invited speakers from abroad who made the long trip to our campus despite their busy schedules.

I would also like to thank Professor Hyung-Soon Park, director of the RENEW project and the organizing committee who put their time and efforts into hosting this workshop. Thank you all once again.

As president, I am especially pleased to see the successful launching of the RENEW project. This RENEW project is one of the two projects that the Global Singularity Research Program selected as the most creative and future-oriented research projects out of more than 20 applications.

This year I have launched the Global Singularity Research Program to pursue the world's first or most unique research achievements in preparing for the future. The project selected under this program will be funded for up to 10 years.

This RENEW project aims to provide healthcare solution for the aging population around the world, where rehabilitation technology is emerging as a key issue. I look forward to the RENEW project leading to breakthroughs in neuro-rehabilitation engineering.

I am sure that Professor Park and the participating professors will describe the idea and the progress of the project during the workshop.

Now, let me take this opportunity to briefly introduce the status and role of KAIST in Korea, especially for our foreign participants.

KAIST was established in 1971, when Korea was one of the poorest countries in the world. Back then, the per capita GDP was about 300 US dollars, which was even lower than that of North Korea.

General Douglas MacArthur, the commander of the UN Forces during the Korean War said, "It will take at least 100 years to rebuild this country." The future of the country seemed hopeless.

But now, Korea has witnessed the Miracle on the Han River and joined the ranks of the world's top 10 economies.

All the economic indicators underscore Korea's impressive growth. GDP increased 720 fold from 1962 to 2018, to become the 11th highest in the world, with per capita GDP growing 340 fold. Our export volume rose more than 10,000 fold to become the fifth largest in the world.

The growth of the R&D sector is also astonishing. Half a century ago, Korea didn't publish any SCI papers. Today, nearly 60,000 SCI papers have been published, placing Korea 12th in the world. Before 1984, Korea had no US patents registered. Now, it has nearly 20,000 registered US patents, the fourth largest number in the world.

Then, the question is "what made such phenomenal growth possible?" Without doubt, KAIST is one of the most critical driving forces.

KAIST has been a beacon of hope to the Korean people. We have fulfilled our mission passionately and faithfully, thus far producing over 64,000 graduates, including 13,000 PhD holders. Our alumni have played pivotal roles in Korea's remarkable economic growth as well as the advancement of science and technology over the past half-century.

For instance, 25% of the PhDs working in the Korean semiconductor industry, which is dominating the global market, are KAIST graduates. 25% of the PhD researchers working in national research institutes and 20% of the science and engineering faculty in Korean universities are KAIST graduates.

USAID, which offered a six-million US dollar loan to establish KAIST 50 years ago, stated that "KAIST provides an example of how Korea, once a recipient of international aid, has become a leader of science and technology innovation."

KAIST has now earned a global reputation as a world-class university. We will continue to move forward for our next chapter. To ensure this, I have set up Vision 2031 and announced the C<sup>3</sup> spirits which entails Challenge, Creativity, and Caring to realize our new vision.

Our new vision is to become a Global Leading University that creates new knowledge and fosters elite students with global impact for the prosperity and happiness of humankind in the era of the Fourth Industrial Revolution.

The Global Singularity Research Program is one of our innovative research

initiatives under Vision 2031. I worked very hard to persuade the government to

receive the block funding for this research program. This is actually the first block

funding grant the government has implemented in Korea.

So, KAIST has full autonomy for operating the program. But you know there is

no such things as a 'free lunch.' The RENEW project should produce the world's

first or the world's most unique research outputs.

For that, I believe that international collaboration with eminent scholars is very

important. In this regard, I am very pleased that leading scholars are participating

in this exciting RENEW project from the beginning.

It is my sincere hope that the RENEW project will become one of KAIST's

flagship projects and will make a global impact worldwide.

Let me close my speech by once again expressing my deepest gratitude to all the

speakers and participants in this workshop.

Thank you very much.

November 18, 2019

**Sung-Chul Shin** 

President, KAIST

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