KAIST International MSE/CBE Workshop 2018
- Opening Remarks -

Good morning!
Distinguished guests, professors, and students!

It is indeed my great pleasure to welcome you all to this wonderful workshop entitled “Big Ideas in Emerging Materials.”

On behalf of KAIST, let me first express my thanks to all participating this morning in this hot weather. In particular, I would like to deliver my heartfelt gratitude to all the distinguished speakers who made the long journey to join us here at KAIST.

I also would like to thank the chair of this workshop, Professor Il-Doo Kim, and the head of the Department of Materials Science and Engineering, Professor Hyuck-Mo Lee, for making this workshop possible.

I am pleasantly surprised that many editors of prestigious journals are attending this workshop to give invited talks despite their tight schedules. Personally, I am very excited about this workshop, since my major is materials physics.

I am expecting that today’s workshop will provide a good opportunity to learn more about the current status of various areas of materials research and get inspiration for its future directions from the world-leading scientists’ presentations. I wish all participants, especially young scientists and students get Big Ideas from the presentations as the theme of this workshop.

History defines a civilization by the materials we develop and use often. Looking for better materials and new processes has continued to impact the world. Now, we are moving into producing new concept nanomaterials and inorganic materials using biotechnology. All these innovations have extended a new paradigm that will transform our lives.

Especially, international collaborations to make new materials and the scholarly passion to evaluate the materials’ characteristics made this significant progress possible. Innovative materials made of unthinkable and noble combinations will

be the key factor in determining the competitiveness of new technology and new industries.

Fortunately at KAIST, materials science and chemical engineering researches are very active. More than 200 professors are conducting materials research, producing about 800 SCI papers every year. Our scholarship and research have already been well recognized globally. The QS World University Ranking by subject ranked the materials science and chemical engineering subjects 13th and 14th respectively this year.

KAIST research aims to be the best, the first, and the only one in the world. It's always a pleasure for me to work with pioneering colleagues. In this workshop, two of the pioneering colleagues at KAIST will give talks.

One is Professor Sang Ouk Kim. He is a pioneering scholar who has extended the idea of directed nanoscale assembly for various low-dimensional nanomaterials including carbon nanotubes and graphene.

The other is Distinguished Professor Sang Yup Lee. He is another pioneering scholar in the metabolic engineering field. He integrates systems biology and synthetic biology with metabolic engineering to create novel materials. This year alone, his research swept three notable prizes including the George Washington Carver Award.

Well, as the President, I am obliged to introduce how KAIST has grown, especially to our foreign participants. KAIST was established in 1971 by the government as the first research university during the budding stage of industrialization.

That was a time for Korea to transform from an agricultural country to an industrialized one. KAIST was tasked two clear missions: to foster highly talented manpower in science and technology and to conduct basic and applied research, both of which were desperately needed for the nation's economic development.

KAIST has played a key role in Korea's remarkable economic growth and the advancement of science and technology over the past half-century. Our 62,000 graduates, including 12,400 Ph.D.s, have played pivotal roles behind Korea's innovation and development in industries, universities, and research institutes. For

instance, in the semiconductor industry, which is dominating the global market, one in every four Ph.D.s is a KAIST alumnus. Currently, KAIST graduates account for 23% of leading positions in the scientific community of Korea.

KAIST now has earned a global reputation as a world-class university. Thomson Reuters ranked KAIST as the sixth most innovative university in the world and the top in the Asia-Pacific region for three consecutive years from 2016.

KAIST does not want to be satisfied with its success we made. KAIST will continue to move toward a new vision for our next chapter. For that, we set up the Vision 2031 for the year which will mark the 60th anniversary of KAIST.

Our new vision is to become a Global Value-Creative Leading University creating academic value, technological value, economic value, and eventually creating social value at the global standard.

As the first alumnus president, I have a mission to achieve this new vision, together with all our passionate professors, students, and staff members.

For realizing our new vision, international collaborations with world-leading scholars is a must. In this regard, KAIST would like to collaborate closely with the foreign scholars participating in this workshop. Please let me know if you have any ideas and suggestions for collaborations in the future.

With its new vision, KAIST will emerge as a key university of science and technology innovation, contributing to the happiness and prosperity of humankind in the era of the Fourth Industrial Revolution.

Well, let me close my speech here by welcoming all of you once again and wishing you a wonderful and fruitful workshop.

Thank you very much.

August 7, 2018
Sung-Chul Shin
President of KAIST