

GIST, 'Advanced Photonics Research Institute (APRI)' officially launched... APRI 2050 vision to lead future photonics convergence technology declared

- Declaration of leap forward as a specialized institution for ultra-strong laser and optical technology that will lead the space, defense, medical, and semiconductor fields based on the development and operation of the world's best ultra-strong laser facility and laser technology
- Signing of a four-party business agreement for the development of the optical convergence industry... President Kichul Lim "We will leap forward as a world-class optical technology research institution that contributes to solving global challenges while fostering the nation's next-generation optical industry."



▲ GIST is holding an opening ceremony and vision declaration ceremony on Friday, May 9 to commemorate the official promotion of the former 'Advanced Photonics Research Institute (고등광기술연구소)' to the 'Advanced Photonics Research Institute (고등광기술연구원)' and taking a commemorative photo.

The Gwangju Institute of Science and Technology (GIST, President Kichul Lim) announced that it held an opening ceremony and vision declaration ceremony on Friday, May 9 to commemorate the official promotion of the former 'Advanced Photonics Research Institute (고등광기술연구소)' to the 'Advanced Photonics Research Institute (고등광기술연구원)' (APRI, Director Do-Kyeong Ko).

The event was attended by key figures from major organizations, including National Assembly members In-chul Jo and Hyung-bae Min, Institute for Basic Science (IBS) President Do-Young Noh, Gwangju Technopark President Young-jip Kim, Korea Photonics Research Institute President Yong-jin Shin, Korea Photonics Convergence Promotion Association Vice President Dong-geun Kim, Korean Physical Society President Jin-

hee Yoon (Professor of Physics at Inha University), and Korean Optical Society President Sang-min Lee, as well as representatives of approximately 50 regional SMEs and executives from approximately 10 defense and defense industry companies. About 100 people from GIST, including President Kichul Lim, Vice President for R&DB Sungho Jeong, and Vice President for Public Affairs Yonghwa Chung, graced the occasion.

In his commemorative speech, Director Do-Kyeong Ko (Professor of Physics and Photon Science at GIST) stated, “Based on the research capabilities we have accumulated so far, we will lead ultra-strong lasers and optical technologies and focus on research in future strategic fields such as space, defense, bio, quantum information, and energy.” He also expressed his ambition to “make a leap forward as a world-class optical technology research institute that contributes to solving global challenges while fostering the nation’s next-generation optical industry.”

The event was divided into two parts.

In the first part, ‘Post-Optical Industry Technology Exchange Meeting,’ a laser specialist (Lumenics CEO Woo-jin Shin, Senior Researcher at the Advanced Photonics Research Institute) was introduced as a successful case of technology commercialization at the Advanced Photonics Research Institute. In the ‘Open Tech Session,’ researchers at the Advanced Photonics Research Institute, including Dr. Ik-bu Son, Dr. Ki-hyun Kim, Dr. Nan-i Yoo, and Dr. Bok-hyun Kim, directly participated, sharing their patented technologies with local SMEs. Through this, a venue for practical technology exchange and cooperation between universities and companies was established.

The second part of the event began with an unveiling ceremony to announce the launch of the research institute, followed by an opening declaration, introduction of domestic and foreign guests, congratulatory remarks by National Assembly members In-chul Jo and Hyung-bae Min and IBS President Do-Young Noh, an introduction to the history of the research institute, an announcement of the ‘APRI 2050 Vision,’ a business agreement ceremony between related organizations for cooperation in the development of the optical convergence technology industry, and a presentation of a plaque of appreciation to the first director of the Advanced Photonics Research Institute.



▲ Unveiling a plaque at the opening ceremony commemorating the promotion of the GIST Advanced Photonics Research Institute.

In his congratulatory remarks, Assemblyman In-chul Jo stated, “The GIST Advanced Photonics Research Institute is an institution recognized for its world-class research capabilities in the fields of photonics and lasers,” and “I hope that it will play a leading role in securing national strategic technologies at a time of great transition centered on science and technology.”

Rep. Hyung-bae Min also said, “Optical technology is a key area for strengthening strategic technology capabilities such as semiconductors, nano, ultra-fine processing, defense, and laser systems,” and added, “We will not spare our active support in the National Assembly.”

In his congratulatory remarks, IBS President Do-Young Noh shared his thoughts on the process of growth since the establishment of the Advanced Photonics Research Institute, and said, “As we gain greater independence in the future, efforts to strengthen our self-reliance foundations, such as budget and personnel, will become even more important,” and added, “I hope that the IBS Photonics Cluster Research Group and the Advanced Photonics Research Institute will work together to play a leading role in the nation’s key basic and applied research fields.”

GIST President Kichul Lim said, “It is meaningful that we are taking a leap forward under the new name of ‘Advanced Photonics Research Institute’ based on the journey we have built as the Advanced Photonics Research Institute,” and emphasized, “Photonics is a core field of cutting-edge industries such as semiconductors, bio, energy, and aerospace, and is at the center of national competitiveness.”

He continued, “Based on world-class research achievements, we will foster next-generation talents through collaboration with the IBS research group and interdisciplinary education, and grow into a global

photonics technology institute covering everything from basics to applications,” and “Under the spirit of GIST’s ‘Up & Together,’ we will establish ourselves as a hub institution connecting research and industry.”



▲ GIST President Kichul Lim is giving a congratulatory speech at the opening ceremony and vision declaration ceremony commemorating the promotion of the Advanced Photonics Research Institute. Also, at the event that day, the GIST Advanced Photonics Research Institute, Gwangju Technopark, the Korea Institute of Photonics Technology, and the Korea Photonics Convergence Promotion Association signed a four-party business agreement.

This agreement is the starting point for establishing a cooperative system for the joint development of the photonics convergence industry and technology, and they agreed to closely cooperate with each other for research cooperation, technology development, and talent cultivation in the field of advanced photonics technology.



▲ A four-party business agreement ceremony is being held for cooperation in optical convergence technology and industrial development. (From left) President Yong-jin Shin of the Korea Institute of Photonics and Photonics, Director Do-Kyeong Ko of the Advanced Photonics Research Institute, President Young-jip Kim of Gwangju Technopark, and Vice President Dong-geun Kim of the Korea Association for the Advancement of Photonics and Photonics

The 'APRI 2050 Vision' announced on this day contains a mid- to long-term goal of growing Korea into a global hub for optical convergence technology centered on advanced optical technology and ultra-strong laser technology.

This vision is expected to become an important milestone as a key roadmap for the development of optical convergence technology and expanding cooperation with domestic and international research institutes and industries in the future.

The event concluded with a plaque of appreciation to Dr. Jong-min Lee, the first director of the Advanced Photonics Research Institute, for his contributions to the development of optical technology since the establishment of the institute.



▲ Director Do-Kyeong Ko of APRI is presenting a plaque of appreciation to Dr. Jong-min Lee, the first director of the Advanced Photonics Research Institute.