## GIST holds seminar to strengthen defense R&D capabilities... spurring future space and defense technology leadership

- Advanced Photonics Research Institute (APRI) holds a seminar to promote defense R&D on the 23rd (Friday)... Keynote speech by the head of the Civil-Military Cooperation Promotion Agency

- "K-Defense, a promising industry of the future" 50 people from the military, industry, academia, and research gather to discuss civil-military technology cooperation strategies

- GIST reorganizes and promotes talent development to become a defense R&D hub... Contributes to protecting technological sovereignty



▲ GIST held the 'Defense R&D Activation Seminar' on Friday, May 23rd at the Advanced Photonics Research Institute (APRI) auditorium, and attendees are taking a commemorative photo.

The Gwangju Institute of Science and Technology (GIST, President Kichul Lim) announced that it held a seminar to strengthen defense R&D capabilities on Friday, May 23rd at 11:00 AM at the Advanced Photonics Research Institute (APRI, President Do-kyung Ko).

This seminar was hosted by the Future Space Defense Convergence Research Center under GIST APRI, and about 50 people, including GIST professors and researchers, as well as members of the military, industry, academia, research institutes, and government agencies, attended to share the current status of defense science and technology and explore future development directions.

At the seminar, Director Joo-hyun Kim of the Civil-Military Cooperation Promotion Agency gave a keynote speech on the topic of 'Utilization of Civil-Military Technology Cooperation Projects and Future Challenge Defense Technology Projects that Create Demand.'

President Kim emphasized the importance of civil-military cooperation, introduced the entire process from discovering defense technology needs to developing tasks, and presented various directions for establishing technology transfer and commercialization strategies through industry-academia-research cooperation.



▲ At the GIST Defense R&D Activation Seminar, Director Joo-hyun Kim of the Civil-Military Cooperation Agency is giving a keynote speech on the topic of 'Utilization of Civil-Military Technology Cooperation Projects and Future Challenge National Defense Technology Projects that Create Demands.'

During the Q&A session that followed, the participants engaged in active discussions on various topics, including realistic tasks of civil-military cooperation, strategies for promoting joint research, and ways to activate technology transfer.

GIST is currently conducting defense-related R&D projects worth approximately KRW 10 billion annually, and operates a dedicated system for the development of core defense industry technologies centered around APRI.

The main research areas are  $\star$  electronic warfare technology  $\star$  high-performance high-power lasers  $\star$  nextgeneration energy systems  $\star$  military communications and network technology, and GIST is continuously achieving results in these areas as a specialized research institute designated by the Defense Acquisition Program Administration. The representative tasks currently being carried out include • development of future advanced laser technology, • defense laser system for responding to space threats, and • development of ultra-small intelligent drones that can operate in communication and GPS shadow areas. These have high potential for civilian-military dual use, and are expected to have ripple effects throughout the industry.

GIST is broadly reorganizing its organization and institutional foundations to expand research in the defense and space fields.

In March, the existing Advanced Photonics Research Institute was upgraded to the 'Advanced Photonics Research Institute' and the 'Future Space Defense Convergence Research Headquarters' was newly established under it, thereby establishing a dedicated organization for planning and executing key strategic tasks in the space and defense security fields.

In addition, by establishing the 'Civil-Military Convergence Joint Research Group' next year and fostering 20 master's and doctoral-level experts every year through the 'Space and Defense Photonics Specialization Graduate School Course', it plans to spur the development of core technologies centered on verification and the expansion of civilian-military cooperation.

APRI Director Do-Kyeong Ko said in his welcoming speech, "I hope this seminar will be an opportunity for GIST to more actively fulfill its responsibility and role in science and technology for national security," and added, "I hope that not only internal research convergence research but also cooperative networking with external related organizations will continue more actively."



▲ APRI Director Do-Kyeong Ko is giving a welcoming speech at the 'GIST Defense R&D Activation Seminar' held in the APRI auditorium on Friday, May 23.

Meanwhile, GIST plans to strengthen its status as a key research institute leading defense R&D centered around the APRI Future Space Defense Convergence Research Center and contribute to protecting the technological sovereignty of the Republic of Korea through convergence with national strategic industries such as semiconductors, future automobiles, and aerospace.

