

## "Making semiconductors imitating insect compound eyes" GIST holds a launch ceremony for regional innovation mega projects

- Held on the 26th (Wednesday) at GIST Oryong Hall... Gwangju/ Jeonnam Regional Innovation Mega Project Launch
- Developing a neuromorphic semiconductor that mimics the insect's optic nerve system to realize surveillance AI



▲ Commemorative photo on the morning of the 26th (Wednesday), GIST is holding a launch ceremony for the Regional Innovation Mega Project at Oryonggwan, attended by 50 industry, academia, research, and government experts

(From the second from the left in the front row) Gwangju R&D Special District Manager Jun-seong Bae, Gwangju Metropolitan City Head of Artificial Intelligence Industry Division Yong-seung Kim, GIST President Kichul Lim, Korea Energy Engineering University Vice President Seong-joo Park, Jeollanam-do Head of New Growth Industry Division Jae-woong Cho, Korea Photonics Research Institute Vice President Do-duk Kim, Korea Energy Engineering University Professor Jaehyung Jang, GIST Research Innovation Center Director Dukjo Kong

GIST (Gwangju Institute of Science and Technology, President Kichul Lim) held a launch ceremony for the 'Regional Innovation Mega Project' project to develop 'neuromorphic semiconductors imitating compound eyes for surveillance AI' with the support of the Ministry of Science and ICT and Gwangju Metropolitan City and Jeollanam-do.

The event was attended by GIST President Kichul Lim, Gwangju Metropolitan City Artificial Intelligence Industry Director Yong-seung Kim, and Jeollanam-do New Growth Industry Director Jae-woong Cho, Vice President of Korea Energy Engineering University Vice President Sungjoo Park, and Korea Photonics Technology Institute Vice President Deok Kim. It was held at GIST Oryong Hall on the morning of the 26th (Wednesday) with the attendance of about 50 experts from industry, academia, research, and government, including Jun-seong Bae, head of the management support office in the Gwangju R&D Special Zone.

The 'Regional Innovation Mega Project' aims to nurture local science and technology innovation capabilities by discovering current science and technology issues led by the local community and developing core source technologies linked to regional strategic industries. In Gwangju and Jeollanam-do, GIST School of Electrical Engineering and Computer Science Professor Young Min Song was the research director, and the compound eye imitation neuromorphic semiconductor for surveillance AI was selected.

The goal of this project is to implement neuromorphic semiconductors and systems to develop world-class surveillance AI that mimics the optic nerve system of insects with a compound eye structure.

GIST, the host organization, is expected to receive a total budget of 6.9 billion won over three years, and researchers from various fields such as artificial intelligence and semiconductors will participate in the project.

It is an opportunity for Gwangju and Jeonnam to lead next-generation neuromorphic semiconductor technology, and it is expected that this project will foster relevant talents and strengthen industrial competitiveness.

After the launch ceremony, the attendees took a tour of GIST's 'high-performance computing-based artificial intelligence (HPC-AI) public infrastructure', the largest in Korea for education and research.

President Kichul Lim said, "Based on the research capabilities and infrastructure related to artificial intelligence and semiconductors that GIST has accumulated over the years, it will enhance its R&D capabilities in the AI field by linking national strategic industries such as semiconductors. We will spare no support at the institutional level to lead neuromorphic semiconductor research and contribute to the creation of new local industries."