GIST holds 'Blue Technology and Economic Symposium'... Illuminating the interface between technology and philosophy for a sustainable future

- A symposium on the topic of 'Philosophy and practicality of blue technology' was held at GIST on the 16th (Monday)... Seeking a new paradigm based on life-centered technology philosophy and presenting a model for convergence research and practice

- Professor Eunji Lee of the Department of Materials Science and Engineering led the presentation on the topic of convergence-type blue technology linking science, technology, art, and humanities.

▲ GIST successfully held the 'Blue Technology·Economy Symposium' at Oryong Hall on Monday, June 16, and attendees are taking a commemorative photo.

The Gwangju Institute of Science and Technology (GIST) announced that it held the 'Blue Technology*·Economy Symposium' at Oryong Hall 101 on Monday, June 16.

This symposium was planned under the leadership of Professor Eunji Lee (Organizing Committee Chair, Department of Materials Science and Engineering, GIST) and, with the support of the Research Support Team, was organized to bring together experts from various fields to discuss technological and social directions for a sustainable future under the theme of 'Philosophy and Practicality of Blue Technology.'

* blue technology: Next-generation sustainable technology that realizes efficient use of resources, energy conservation, and biodiversity protection based on the circulation principles of natural ecosystems and

life-centered design. It is gaining attention as a new technological paradigm that goes beyond simple eco-friendly technology and fuses science, technology, art, and humanities.

The symposium began with a welcoming speech by GIST President Kichul Lim, and a total of six speakers presented various topics related to blue technology, suggesting and sharing the practical possibilities and future directions of the technology.

▲ Director of the Knowledge Convergence Research Institute, In-sik Lee, presented the philosophical background and technological alternatives of blue technology under the theme of 'Blue Technology and Blue Economy', and ▲ Professor Young Min Song (Department of Electrical Engineering and Computer Science, GIST) introduced robot technology that mimics the visual system of living organisms through a presentation titled 'What kind of inspiration do animal eyes give to robots?' and emphasized the importance of ecological-based technology.

Next, Professor Oh-seok Kwon (Department of Nano Engineering, Sungkyunkwan University) shared the research cases and vision of the GIST DiVAS Research Center through 'Introduction of Edge Device Receptonics Diagnostic Technology Based on Blue Technology', and ▲ Professor Jung Won Yoon (Department of AI Convergence, GIST) introduced soft robot technology suitable for the marine environment under the theme of 'Development of a strong and flexible soft robot arm based on muscle mimicry of nematodes'.

▲ Professor Seok-hee Jeong (Department of Environmental Energy Engineering, Chonnam National University) emphasized the potential of convergence technology combined with ecological imagination through 'Microbial Electrochemical System: Art of Bioelectricity Mimicking Nature', and lastly, ▲ Principal Researcher Hyeon-ju Kim (Seawater Energy Research Center, Ship and Ocean Plant Research Institute) highlighted the marine application cases of blue technology and the possibility of industrial expansion under the theme of 'Blue Technology and Marine Industry'.

GIST President Kichul Lim said in his welcoming speech, "Blue technology is a new technological approach that seeks answers from nature and seeks ways for humans and nature to coexist. GIST has paid attention to the potential of blue technology and has participated in related research and industrialization plans, and will continue to actively engage in practice for a sustainable future." He also said, "It is time for full-scale investment and research in BT, or Blue Technology, beyond AI and CT," and "I hope this symposium will be a meaningful opportunity to promote the connection between technology, policy, and market."

▲ GIST President Kichul Lim is giving a welcoming speech at the 'Blue Technology and Economy Symposium' held at Oryong Hall on Monday the 16th.

In-sik Lee, the director of the Knowledge Convergence Research Institute, who has been working hard to expand the domestic base of blue technology, said, "I hope to use this opportunity to solve social problems such as job creation with blue technology and the blue economy, which are the core of carbon-neutral industries and climate tech."

▲ In-sik Lee, the director of the Knowledge Convergence Research Institute, is giving a presentation on the topic of 'Blue Technology and Blue Economy' at the 'Blue Technology and Economy Symposium' held at Oryong Hall on Monday the 16th.

Professor Eunji Lee, the symposium organizing committee chair, said, "Blue technology is not just eco-friendly technology; it is the foundation of convergent thinking that connects science, humanities, and art," and added, "I hope this symposium will be an opportunity to spread awareness of the technology philosophy that values respect for life and sustainability as its core values."

GIST plans to further strengthen convergence research centered on blue technology through this symposium and establish a research platform that connects technology development and practice through joint research, policy proposals, and education programs based on a life-centered technology philosophy. In addition, it plans to enhance the global status of blue technology through domestic and international industry-academia cooperation and participation in international academic events, and to lead the technology philosophy and practice model to prepare for the era of climate change.

GIST
Since 1993