

## **GIST Senior Researcher Chul Kang and Senior Administrative Officer Na-young Lee receive Deputy Prime Minister's Commendation on 'Science and Information & Communications Day'**

- Senior Researcher Chul Kang secures next-generation sensing competitiveness in future space and defense sectors with world-class 'terahertz' light source control technology utilizing ultra-powerful lasers
- Senior Administrative Officer Na-young Lee has served as a bridge connecting the research field and the public for 9 years... Driving the leap forward as an 'open research-focused university' by spreading a science culture that communicates with society



▲ (From left) Senior Researcher Chul Kang (Head of Future Space and Defense Research Division at GIST Photonics Research Institute), Senior Administrative Officer Lee Na-young The Gwangju Institute of Science and Technology (GIST, President Lim Ki-chul) announced that Senior Researcher Chul Kang and Senior Administrative Officer Lee Na-young received commendations from the Deputy Prime Minister and Minister of Science and ICT in recognition of their contributions to creating world-class research achievements and promoting science and technology promotion and communication, respectively, in observance of the 59th Science Day (April 21) and the 71st Information and Communications Day (April 22).

Senior Researcher Chul Kang, who serves as the Head of the Future Space and Defense Research Division at GIST Advanced Photonics Research Institute, has been leading the field of terahertz (THz) optics since 2006. Terahertz is a "dream frequency" domain that possesses both the penetrability of radio waves and the rectilinear propagation of light, playing a pivotal role in the development of next-generation communication and advanced sensing technologies.

Senior Researcher Kang has been developing high-efficiency terahertz light source technology based on 'femtosecond laser' technology, which concentrates powerful energy for an extremely short period of one quadrillionth of a second, and has published more than 70 papers in international academic journals (SCI-level) of world authority to date.

Senior Administrative Officer Lee Na-young was recognized for her contributions to revitalizing science communication by delivering GIST's outstanding research achievements in a way that resonates with the public.

In particular, she has recently been leading the development of technology that allows for the free control of terahertz signal intensity and frequency by utilizing GIST's 150 TW (terawatt, an ultra-high output equivalent to the nation's total electricity consumption in an instant) ultra-powerful laser facility. This achievement is expected to play a key role in advancing cutting-edge sensing technologies in the space and defense sectors, extending beyond ultra-high-speed communication and non-destructive inspection.

Based on her extensive practical experience in academic information and school administration, Senior Officer Lee has led the external dissemination of complex and specialized research findings over the past nine years by restructuring them into news content that is easily accessible to the media.

In particular, she contributed to enhancing the university's brand value by strategically promoting key GIST news based on her deep understanding of the research field. These efforts served as a bridge for GIST to advance as an "open research-focused university" that communicates organically with society, marking its 30th anniversary in 2023.

Senior Researcher Chul Kang stated, "Terahertz optics technology is a core source technology to be utilized across future industries, ranging from next-generation communications to advanced defense sensing." He added, "I want to contribute to Korea securing global technological competitiveness by further advancing light source control technology based on GIST's ultra-powerful laser infrastructure."

Senior Administrative Officer Na-young Lee remarked, "Over the past nine years, I have deeply realized the importance of scientific communication while conveying the intense deliberations and achievements of the research field to the public." She continued, "I will do my utmost to combine my practical administrative experience with public relations expertise so that GIST's excellent research capabilities bear fruit as social value and connect more closely with the public."