

"Young Scientists of the World Who Communicate with the Language of Light" GIST Advanced Photonics Research Institute holds 15th Laser and Photonics Summer School 'SSOLLA 2025'

- From Monday, July 14, for 5 days, a training camp and advanced research facility experience for participants from 7 Asian countries will be held... Research results based on ultra-strong laser technology will be spread through international education programs
- GIST, leaping forward as a hub for international photonics education and research centered on the Advanced Photonics Research Institute



▲ GIST Advanced Photonics Research Institute held the 'Summer School on Lasers and Laser Applications (SSOLLA) 2025' for five days from Monday, the 14th to Friday, the 18th, and participants are taking a commemorative photo.

The Gwangju Institute of Science and Technology (GIST, President Kichul Lim) announced that the 'Summer School on Lasers and Laser Applications (SSOLLA 2025)', an international education program hosted by the Advanced Photonics Research Institute (APRI, President Do-Kyeong Ko), ended on Friday, July 18th after completing its five-day schedule.

'SSOLLA (Summer School on Lasers and Laser Applications)' is an international education program that the Advanced Photonics Research Institute has hosted annually since 2010, and this year marks its 15th year. It is designed so that students and researchers majoring in photonics from around the world can broadly learn about the basics of laser and optical technology to applications through a five-day training camp and directly experience cutting-edge research infrastructure.

This year, 13 students and researchers from 7 Asian countries, including Vietnam, the Philippines, Malaysia, Cambodia, Taiwan, Indonesia, and Pakistan, participated, creating a venue for exchange and cooperation of photonics talents between countries.

Participants were from major Asian universities and research institutes, including the Vietnam Academy of Science and Technology's research institute, the Royal University of Phnom Penh in Cambodia, and the University of Malaya in Malaysia. They participated in a total of seven specialized lectures and practical trainings conducted by GIST faculty and researchers at the Advanced Institute of Photonics.

The lectures covered the entire spectrum of cutting-edge laser and photonic technologies, including ▲ basics and applications of high-power and fiber lasers, ▲ nonlinear optics, ▲ nano-optics, ▲ biomedical optics, ▲ quantum optics, and ▲ laser safety. They also directly visited world-class research sites, such as GIST's ultra-high-power laser facility, the 'Ultrafast Photon Beam Special Research Building,' and experienced the competitiveness of Korean photonics technology.



▲ Participants of the 'Summer School on Lasers and Laser Applications (SSOLLA) 2025' are touring the Ultrafast Photon Beam Special Research Building, the core research facility of the Advanced Photonics Research Institute.

"SSOLLA has gone beyond a simple educational program and has established itself as an international cooperation platform where Asia's next-generation photonics talents can interact and collaborate," said Director Do-Kyeong Ko of the Advanced Photonics Research Institute. "We will continue to expand ties with more countries, share GIST's photonics capabilities with the world, and further strengthen its role as a hub for global joint research."



▲ Director Do-Kyeong Ko of the Advanced Photonics Research Institute is giving a welcoming speech at the 'Laser and Photonics Summer School (SSOLLA) 2025' event.

Meanwhile, the GIST Advanced Photonics Research Institute, which celebrated its 24th anniversary this year, is the only specialized research institute in Korea specializing in photonics science and technology, and has succeeded in developing the world's first 20 femtosecond (1 femtosecond = 1,000 trillionth of a second) and 4.2 petawatt (1 petawatt = 1,000 terawatt)-class ultra-powerful laser.

The Advanced Photonics Research Institute, which was promoted from a 'research institute' to a 'research institute' in March of this year, is accelerating research in future strategic fields such as space, defense, bio, and quantum information based on ultra-powerful lasers and optical-based source technologies, and is further solidifying its status as a world-class specialized photonics research institute.