GIST's Department of Chemistry and the IBS Center for Quantum Conversion Research held a joint workshop to strengthen cooperation in nano, molecular, and surface research

- On Friday, the 26th, approximately 30 faculty members from the Department of Chemistry at GIST and researchers from the IBS Center for Quantum Conversion Research participated to share research results and foster mutual understanding... This is expected to overcome limitations in atomic and molecular research and uncover new joint research topics
- This event provides an opportunity to deepen and expand research cooperation between the Department of Chemistry at GIST and the IBS Center for Quantum Conversion Research... The sharing of expertise and research resources is expected to create academic synergy, and student researcher exchanges are also expected to foster future research leaders



▲ Attendees pose for a commemorative photo at the '2025 GIST CHEM & IBS QCR Joint Workshop' held at GIST University Building C on Friday, September 26.

The Gwangju Institute of Science and Technology (GIST, President Kichul Lim) announced that the Department of Chemistry (Dean Jiwon Seo) and the Institute for Basic Science (IBS) Yousoo Kim (QCR, Director and Professor Yousoo Kim of the Department of Chemistry at GIST) held the "2025 GIST Chemistry Department - IBS QCR Joint Workshop" on Friday, September 26th in Room 110 of Building C.

Located on the GIST campus, the IBS Center for Quantum Conversion Research collaborates closely with the GIST Department of Chemistry, leveraging their geographical proximity and complementary research. Through joint workshops, research achievement sharing, and student exchanges, the group explores new application possibilities in nano-, molecular-, and surface-scale research.

This workshop brought together approximately 30 faculty members from the GIST Department of Chemistry and researchers from the IBS Center for Quantum Conversion Research, broadening mutual understanding and providing an opportunity to deepen and expand future research collaboration.

By sharing the expertise and research resources of GIST and IBS, this collaboration is expected to create academic synergy that enhances research efficiency and creativity. It is also expected to have educational benefits, fostering future research leaders through student-researcher exchanges.

GIST Department of Chemistry Dean Jiwon Seo said, "Given the proximity of the IBS research center, if researchers meet and communicate frequently, unexpected ideas will emerge, naturally leading to joint research collaborations."



 $\blacktriangle \text{ GIST Department of Chemistry Dean Jiwon Seo delivers the welcoming address at the '2025 \text{ GIST CHEM \& IBS QCR Joint Workshop.'} } \\$

IBS Director Yousoo Kim (Professor, Department of Chemistry, GIST) stated, "The Center for Quantum Conversion Research has a deep connection with the Department of Chemistry. Through this workshop, we hope to overcome the limitations of nanoscale research conducted at the atomic and molecular levels and discover new joint research topics."



▲ IBS Center for Quantum Conversion Research Yousoo Kim delivers a keynote speech, emphasizing the potential for collaborative research between chemistry faculty and QCR researchers.

Meanwhile, the IBS Center for Quantum Conversion Research, launched on September 1st of last year at GIST, utilizes the quantum properties of matter to explore fundamental questions in basic science, including energy conversion, electron and spin dynamics, and molecular and surface interactions.

In particular, it uses scanning tunneling microscopy (STM) and molecular spectroscopy techniques to elucidate quantum phenomena at the atomic and molecular levels, laying the foundation for research on next-generation energy and information materials.

Recently, Yousoo Kim, Director of the IBS Center for Quantum Conversion Research and Professor of Chemistry at GIST, was selected as the recipient of the 21st Kyung-Am Prize in Natural Sciences, presented by the Kyung-Am Education and Cultural Foundation, in recognition of his groundbreaking contributions to expanding our understanding of core phenomena in basic science, such as quantum energy conversion and interface chemistry.

