

## **Professor Hyunglok Kim of GIST appointed as Associate Editor of *IEEE TGRS*, a world-renowned remote sensing journal**

*- Professor Hyunglok Kim of the Department of Environment and Energy Engineering will serve as Associate Editor of IEEE TGRS from 2026 to 2029... Recognized for his academic contributions to satellite data and AI-based Earth system prediction models*

*- "I will contribute to academic exchange and cooperation so that the research achievements of Korean researchers can be disseminated internationally"*



### **▲ *Professor Hyunglok Kim of the Department of Environment and Energy Engineering at GIST***

The Gwangju Institute of Science and Technology (GIST, President Kichul Lim) announced that Professor Hyunglok Kim of the Department of Environment and Energy Engineering has been appointed as an Associate Editor for the world-renowned journal *IEEE Transactions on Geoscience and Remote Sensing (IEEE TGRS)*.

Professor Kim will serve a key role in maintaining the journal's quality and fairness, overseeing the entire paper review process and providing editorial recommendations based on review results for a minimum of three years, from 2026 to 2029.

Founded in 1962, *IEEE TGRS* is an international journal published by the Geoscience and Remote Sensing Society (GRSS), a division of the Institute of Electrical and Electronics Engineers (IEEE). It is a world-class academic journal covering all areas of remote sensing, including Earth observation, satellite remote sensing, electromagnetic-

based surface observation, Earth system physics, and signal processing and artificial intelligence (AI) applications. The editorial staff is comprised of internationally renowned scholars representing each field.

Professor Kim was honored with this appointment in recognition of his academic contributions in the fields of satellite microwave remote sensing, soil moisture and hydrological-climatic interactions, and AI-based Earth system prediction.

Professor Hyunglok Kim has been leading research utilizing diverse satellite data to observe changes in soil moisture and the water cycle, analyze the interactions between water, energy, and climate, and develop AI-based Earth system prediction models.

He signed the nation's first Memorandum of Understanding (MOU) with the U.S. National Aeronautics and Space Administration (NASA) for academic exchange and established a Core Validation Site (CVS)\* in Hampyeong County, South Jeolla Province, to verify the accuracy of soil moisture data measured by satellites.

This observation site integrates various means, including satellite data, ground observation equipment, L-band sensors mounted on drones, LiDAR, and multispectral sensors, to precisely measure the surface environment and operate as an international standard verification system to enhance the reliability of satellite observations.

*\* core validation site (CVS): A reference observation area selected to verify the accuracy of satellite observation data. It serves as a "standard verification infrastructure" that ensures the reliability of satellite data and corrects observational errors.*

Professor Hyunglok Kim has also been leading sessions integrating remote sensing, AI, and hydrological modeling in the Hydrology section of the American Geophysical Union (AGU), the world's largest geosciences academic society, since 2023, spearheading trends in Earth-Water-Environment research.

Furthermore, as a member of the AGU's Remote Sensing Technical Committee, he contributes to the global research environment through research directions, academic events, and policy development.

Recently, he is conducting AI-based satellite analysis research that combines satellite microwave observations with AI models trained on the atmosphere and Earth systems. He is focusing on developing next-generation Earth system prediction technologies, including soil moisture prediction, early drought detection, and understanding extreme weather phenomena.

Professor Hyunglok Kim stated, "I am deeply honored to serve as an editor for a leading international journal in the field of remote sensing. I will contribute to academic exchange and cooperation so that the outstanding research achievements of Korean researchers can be disseminated internationally."