GIST Professor Chun Taek Rim, the first in Korea and the 7th in the world to receive the Milan Jovanovic Award from the IEEE Power Electronics Society

- Highly evaluated for key achievements in the power electronics field, such as the world's longest wireless charging technology and commercialization of road-charging electric vehicles... As an IEEE Fellow and a top 0.38% researcher in the world, he has raised the status of Korea's power electronics research

- Official award to be presented at the IEEE Energy Conference (ECCE 2025) to be held in Philadelphia, USA in October

▲ Professor Chun Taek Rim of the Department of Electrical Engineering and Computer Science, GIST

The Gwangju Institute of Science and Technology (GIST, President Kichul Lim) announced that Professor Chun Taek Rim of the Department of Electrical Engineering and Computer Science was selected as the 2025 Milan M. Jovanović Award for Power Electronics Emerging Technology by the Power Electronics Society (PELS) of the Institute of Electrical and Electronics Engineers (IEEE).

The IEEE Power Electronics Society is the world's most authoritative academic society in the field of wireless power transfer, and this award is given to only one researcher each year who has developed leading technology and achieved outstanding results in the field.

With this award, Professor Rim is the first in Korea and the seventh recipient in the world.

This award recognizes Professor Rim's contributions to the development of wireless power transfer technology for electric vehicles and mobile devices.

In particular, he has developed a magnetic induction wireless charging technology that can stably transmit power even at a distance of 12m, and holds the world's longest wireless transmission record.

He has published 205 papers in renowned academic journals, applied for over 170 patents, and has continued to achieve excellent research results by winning the best paper award from the IEEE-affiliated society (PELS) and international academic journal (JESTPE).

In 2024, he was selected as a top 0.38% researcher in the field of electrical and electronic engineering by Elsevier, a global academic information analysis agency, and is also active as an IEEE Fellow.

This award is the result of a comprehensive evaluation of Professor Rim's core technological achievements in the field of power electronics.

For example, the development of the 'OLEV (On-Line Electric Vehicle)' technology, which can wirelessly supply 100kW of power with 85% efficiency at a distance of 20cm between the ground and the vehicle to electric vehicles running on the road, enabled Korea to succeed in commercialization for the first time in the world.

In addition, the development of the '6-DoF wireless charging technology', which enables stable charging even in environments where the position (x, y, z) and direction (roll, pitch, yaw) constantly change, such as robots or drones, suggested the possibility of utilizing next-generation electronic devices.

In addition, the 'Dynamic Phasor Theory', which Professor Rim developed for the first time in the world and announced through an IEEE paper in 1990, is a core technique that allows the characteristics of complex AC circuits to be interpreted simply as direct current, and greatly contributed to expanding the academic foundation of power electronics.

Professor Rim emphasized, "The wireless power market is a promising industry with a market size of approximately 27.2 billion dollars (approximately 37 trillion won) this year, and a rapid annual growth rate of 13-21% is expected," and "It is a field where Korea, with its strengths in semiconductors and circuit technology, can lead the global market."

He continued, "We will continue to contribute to the development of industry as well as the improvement of human quality of life through the development of technologies that combine practicality and ripple effect."

The awards ceremony will be officially held at the IEEE Energy Conference (ECCE 2025) to be held in Philadelphia, USA in October.

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