



POSCO Future M Signs MOU with U.S.-based Factorial for All-Solid-State Battery Technology Development

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- The two companies agreed to cooperate in the development of all-solid-state battery materials.
- In sample testing of materials from multiple suppliers, POSCO Future M demonstrated good rate capability.
- Synergy expected between POSCO Future M's competitiveness in cathode/anode materials and Factorial's battery cell technology.



BOSTON--([BUSINESS WIRE](#))--POSCO Future M, a leading battery materials supplier, and Factorial Inc. (Factorial), a leader in solid-state battery technology, signed a Memorandum of Understanding (MOU), for the development of all-solid-state battery technology.



The MOU signing ceremony which took place at the Future Battery Forum in Berlin, was attended by POSCO Future M Head of Technology Research Laboratory Hong Young-Jun and Factorial CEO Siyu Huang, along with executives from both companies.

Under the MOU, the two companies plan to explore cooperation in developing materials for all-solid-state batteries, which are powering progress in next-generation industries such as electric vehicles, robotics, energy storage systems and more. All-solid-state batteries use solid electrolytes instead of liquid between the cathode and anode, offering higher safety, superior energy density, and excellent charging performance compared to conventional lithium-ion batteries.

Factorial decided to sign the MOU after testing cathode material samples for all-solid-state batteries and concluding that POSCO Future M's materials demonstrated good rate capability.

Through this MOU, POSCO Future M aims to further strengthen its competitiveness in the all-solid-state battery materials business. The company is currently conducting R&D on cathode materials for all-solid-state batteries, and silicon anode materials, while the POSCO Group is also continuing R&D on lithium metal anode materials and sulfide-based solid electrolytes.

POSCO Future M Head of Technology Research Laboratory Hong Young-Jun said, "We expect synergy in the next-generation all-solid-state battery business based on Factorial's battery technology and market presence with global automakers, and POSCO Future M's competitiveness in cathode and anode materials."

"Solid-state batteries are entering a new era of commercial readiness," said Siyu Huang, CEO of Factorial. "We expect work with POSCO Future M to not only accelerate innovation in critical cathode and anode materials, but also strengthen a resilient global supply chain and drive meaningful cost reductions at scale."

Factorial, headquartered in Massachusetts, USA, has a global footprint with pilot manufacturing operations in Cheonan, Chungnam, South Korea.

Meanwhile, POSCO Future M plans to build a product portfolio of cathode and anode materials covering entry-level, standard, and premium electric vehicles through continuous R&D, preparing to supply customized products to customers. The company will also actively pursue the development of next-generation materials to lead the future mobility industry by leveraging the capabilities of the POSCO Holdings N.EX.T Hub, the group's research institute, and the group as a whole.

The MOU is non-binding, except for certain customary binding provisions. The terms of the commercial partnership are expected to be set forth in definitive binding agreements.

About POSCO Future M:

POSCO Future M is a Korea-based battery materials company. It is the only company in Korea that produces both cathode and anode materials — the core components of batteries — and supplies them to global customers including Ultium Cells, LG Energy Solution, Samsung SDI, and SK On.

Through POSCO group-level investments, the company has established a robust supply chain for key raw materials such as lithium, nickel, and graphite. By leveraging the POSCO Group's integrated R&D capabilities, POSCO Future M develops customer-tailored mass production technologies to meet evolving market demands.

Its cathode portfolio includes high-nickel single crystal and mid-nickel products. High-voltage mid-nickel and LMR cathode materials are nearing commercialization, while the LFP cathode material business is also being pursued. Its anode portfolio spans from natural graphite to artificial graphite and silicon anodes.

About Factorial:

Founded and headquartered in the United States, Factorial is at the forefront of solid-state battery development, offering safe, high-performance alternatives to traditional lithium-ion technologies. Its proprietary FEST® (Factorial Electrolyte System Technology) and Solstice™ platforms deliver greater energy density, enhanced safety, and compatibility with existing manufacturing systems. Factorial's commercial partnerships include global automotive leaders such as Mercedes-Benz, Stellantis, Hyundai Motor Company, and Kia Corporation. For more information, visit www.factorialenergy.com.