Professor. Hyungcheoul Shim

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Hyungcheoul Shim is an Assistant Professor in the School of Materials Science and Semiconductor Engineering at the University of Ulsan. He earned his BS and MS in Mechanical Engineering from Sogang University and KAIST, respectively, and received his PhD in Mechanical Engineering from KAIST. His doctoral research focused on the fabrication and characterization of optoelectronic devices based on nanocrystal quantum dot-carbon nanotube heterostructures.

Dr. Shim's professional journey spans both academia and industry. He served as a Senior Research Engineer at Samsung Corning Precision Materials, where he developed cathode materials for lithium-ion batteries. He later held positions as a Senior and Principal Researcher at the Korea Institute of Machinery and Materials (KIMM), focusing on functional nanomaterials and device applications for energy storage and solar energy.

In 2018, Dr. Shim broadened his research scope as a visiting scholar at the National Renewable Energy Laboratory (NREL), working on perovskite quantum dot solar cells. His research interests include advanced battery materials, nanomaterial-based optoelectronic devices, and next-generation energy conversion systems. With a multidisciplinary approach, Dr. Shim continues to contribute to the development of high-performance materials and devices for energy and electronics applications.