Professor Seoin Back

Korea University, Republic of Korea

Prof. Seoin Back received his PhD from KAIST under the supervision of Prof. Yousung Jung, followed by postdoctoral research in the Nørskov group at Stanford University. During these periods, he employed density functional theory (DFT) calculations to elucidate catalytic reaction mechanisms and discover novel catalysts. He subsequently joined Prof. Zachary Ulissi's group at Carnegie Mellon University as a postdoctoral researcher, where he focused on applying Artificial Intelligence to catalyst discovery. In 2020, he established his independent research group at Sogang University before joining Korea University in 2025. His current research integrates DFT, generative AI, and Large Language Model (LLM)-based agents to accelerate the discovery of next-generation catalysts.