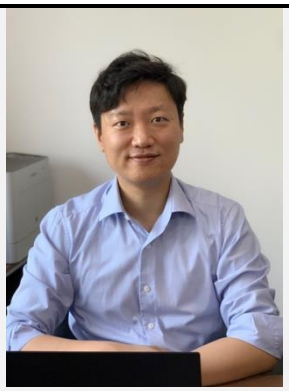

Prof. Cheol-Joo Kim

Pohang University of Science and technology, South Korea

Research Interest

We are an interdisciplinary research group in the Department of Chemical Engineering at POSTECH. Our work focuses on developing innovative platforms for designing nanomaterials at the atomic scale through growth, assembly, and chemical processing. We investigate the fundamental electronic and mechanical properties of artificial materials, aiming to create emerging nano-devices with advanced functionalities, such as two-dimensional transistors, ionic devices, and deformable electronics.

Keywords: Growth of two-dimensional materials, structure/property correlations, defect engineering, semiconductor devices

Experiences

- 2022-Present Associate Professor, Dept. of Chemical Engineering, **Pohang University of Science and Technology, Korea**
- 2017-2022 Assistant Professor, Dept. of Chemical Engineering, **Pohang University of Science and Technology, Korea**
- 2011-2016 Postdoctoral Associate, Dept. of Chemistry and Chemical Biology, **Cornell University**

Education

- 2006-2011 Ph. D., Dept. of Materials Science and Engineering, **Pohang University of Science and Technology, Korea**
- 2002-2006 B.S., Dept. of Materials Science and Engineering, **Pohang University of Science and Technology, Korea**

Awards

- Young Scientist Academic Award, Korean Graphene Society 2023
- Fostering Next-generation Researchers Fellowship, National Research Foundation of Korea 2012
- Chang Kun Soo Best Thesis Award, Pohang University of Science and Technology 2011
- Best Paper Award, The 18th Korean Conference on Semiconductors 2011