



Prof. Young-Min Kim currently serves as an Associate Professor in the Department of Energy Science at Sungkyunkwan University in Korea. He received his Ph.D. (2010) in Materials Science & Engineering from KAIST, Korea. Prior to his appointment at Sungkyunkwan University in 2016, he dedicated 14 years to transmission electron microscopy research at the Korea Basic Science Institute (KBSI). Between 2010 and 2013, Prof. Kim further enriched his experience as a postdoctoral fellow with the STEM group at Oak Ridge National Laboratory. Prof. Kim's research primarily revolves around the multi-dimensional exploration of functional nanomaterials and thin films, utilizing advanced techniques such as 4D scanning transmission electron microscopy (STEM) in conjunction with electron energy loss spectroscopy (EELS) and energy dispersive X-ray spectroscopy (EDX). His recent scientific endeavors seek to unravel the fundamental structure-property relationships of nanomaterials through the integration of multimodal imaging and probing capabilities of STEM-EELS/EDX, complemented by deep learning approaches.