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Dr. Ik Hwan Kwon is a senior researcher at the Nano-Bio Measurement Group, Bio-Medical Measurement Division, Korea Research Institute of Standards and Science (KRISS). He received his Ph.D. in Physics through an integrated M.Sc./Ph.D. program at Pohang University of Science and Technology in 2018. Dr. Kwon served as a postdoctoral researcher at KRISS to 2024. Since October 2025, he has been a senior researcher at KRISS, leading projects focused on the development of advanced bio-optical imaging and analytical technologies.

His research expertise lies in developing optical imaging platforms for real-time monitoring of biological responses. He focuses on high-throughput and high-efficiency measurement systems for cardiotoxicity assessment, environmental toxicity evaluation, and 3D cellular and organoid imaging. By integrating digital holography, light-sheet microscopy, and multimodal optical systems, his work enables single-shot, high-speed 3D bio-imaging with quantitative analysis capabilities. He has published extensively in international journals and holds patents related to his research. His work spans applications such as heart rate monitoring, real-time 3D cellular analysis, and high-speed multispectral imaging, contributing to both fundamental research and translational biomedical applications. He is an active member of the scientific community, serving as a T14 Division Committee member for Nano Korea 2026 and as a SPIE member, advancing the development and application of bio-optical imaging technologies.