



IBS Center for Molecular Spectroscopy and Dynamics

Seminar

■ **SPEAKER**

Prof. Byung Mook Weon (Sungkyunkwan University)

■ **TITLE**

X-ray imaging and light holotomography for colloidal particles

■ **ABSTRACT**

Colloidal particles ranging from several nanometers to several micrometers are essential elements in modern research to understand atomic-like behaviors and self-assemblies. Colloidal particles uniformly dispersed in solution are very important for many current studies. However, direct observations of their structure and dynamics are difficult because small colloidal particles move very quickly in thick solutions. Many new technologies are being tried to overcome the limitations of colloidal particle observations. Advanced technologies using high-resolution, high-speed X-ray microscopy are actively developed and performed. In addition, light holotomography technology is being introduced as a very powerful method to study the structure and dynamics of colloidal particles in microfluidics. This presentation will show the latest research trends on the structure and dynamics of colloidal particles in liquids using X-ray microscopy and light holotomography and discuss their possibilities and limitations. Recent studies on the structural analysis of colloidal particles through X-ray microscopy and holotomography will be demonstrated.

■ **DATE AND VENUE**

March 23, 2022 (Wednesday, 11:00 - 12:00)
Virtual Seminar

■ **LANGUAGE**

Korean

■ **INVITED BY**

Dr. Jin-Sung Park