

IBS Center for Molecular Spectroscopy and Dynamics

COLLOQUIUM

■ SPEAKER

Prof. Taeho Shin (Department of Chemistry, Chonbuk National University)

■ TITLE

Pixelation of Solid-State Photochemistry and Photophysics

ABSTRACT

Since the advent of femtosecond pump-probe spectroscopy, ultrafast dynamics of small molecules, complex biological materials such as proteins, and nanomaterials have been unveiled. However, because of experimental restrictions that samples should return or relax back to their original states between every pump-probe pair or fresh samples must be supplied for each measurement employing a pump-probe pair, the conventional scheme of pump-probe spectroscopy has been rarely implemented for the study of irreversible dynamics of photochemical reactions occurring in solid-state materials. To overcome the experimental difficulties and to examine various irreversible ultrafast dynamics of photochemical and photophysical processes in solid-state materials, femtosecond single-shot spectroscopy has been recently developed. In this talk, I will introduce dual echelon femtosecond single-shot spectroscopy by presenting its motivation, concept, implementation details, and some experimental data obtained from bismuth using the new spectroscopy method.

DATE AND VENUE

August 25, 2016 (Thursday, 1:00-2:00 p.m.) Seminar room 116. R&D Center