

화학고 세미나

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Exciton and Charge-Carrier Dynamics Through Pump-Probe Spectroscopy

For semiconductors in molecular optoelectronics, photoinduced dynamics of excitons and free-carriers (electrons and holes) such as exciton-dissociation and carrier-recombination dynamics is the key process of the device operation. To probe this dynamics, various spectroscopic and electrical techniques have been utilized. In this presentation, first, I will introduce flash-photolysis time-resolved microwave conductivity (fp-TRMC) experiments, which are visible-pump/microwave-probe spectroscopic measurements and specialized in examining the dynamics of free-carriers. Exemplary free-carrier dynamics in various organic and inorganic systems studied by fp-TRMC will be discussed. Secondly, my presentation will discuss the exciton/carrier dynamics studies in organic semiconductors.

Date : 2024년 9월 26일 (목) 오후 5시

Venue : 과학관 B130호

Host : 연세대학교 화학과

