



IBS Center for Molecular Spectroscopy and Dynamics

COLLOQUIUM

- **SPEAKER**

Prof. Myung Mo Sung (Department of Chemistry, Hanyang University)

- **TITLE**

Heterogeneous Monolithic Integration of Single Crystalline Organic Materials

- **ABSTRACT**

The manufacturing of high-performance organic electronic circuits requires an effective heterogeneous integration of different nanoscale organic materials with uniform morphology and high crystallinity in a desired arrangement on a substrate. In particular, the development of high-performance organic electronic and optoelectronic devices relies on high-quality single crystals, which show optimal intrinsic charge-transport properties and high electrical performance. Moreover, the heterogeneous integration of organic materials on a single substrate in a monolithic way is highly demanded in the production of fundamental organic electronic components as well as complex integrated circuits. This review describes various methods designed for patterning of multiple heterogeneous organic materials on a substrate, and heterogeneous integration of organic single crystals along with their crystal growth. It also addresses critical issues encountered in the development of high-performance organic integrated electronics.

- **DATE AND VENUE**

October 19, 2016 (Wednesday, 5:00–6:00 p.m.)
Seminar room 116, R&D Center