CBC SEMINAR ANNOUNCEMENT

Professor Shigehiro Yamaguchi
Nagoya University

Functional π Materials with Rigidity and Flexibility

Construction of new \(p\)-conjugated skeletons is crucial for pursuing photo/electronic functions of organic molecules. In the molecular designs, rigidity and flexibility of the skeletons are fundamental concerns. In the development of boron-containing \(p\)-conjugated materials, we have recently proposed that a rigid structural constraint is a potent strategy for the stabilization of Lewis acidic tri-coordinate boron compounds.\(^1\) On the basis of this concept, we have synthesized a series of planarized organoboron materials, including boron-doped nanographenes \(1\), with high stabilities.\(^2\) On the other hand, the control of the flexibility or dynamic motion of \(p\)-skeleton leads to production of interesting properties.\(^3\) In particular, the control of the structural change in the excited state enables us to produce intriguing fluorescent molecular systems \(2\).\(^4\) In this lecture, our recent results along these two lines will be discussed.

References:


Date: 13th December 2013 (Friday)
Time: 11:00am – 12:30pm
Venue: NTU SPMS CBC Building Level 2, Conference Room
Host: Assoc Professor Shunsuke Chiba