先導物質化学研究所講演会

Molecular Design with a 3D Rigid π -Scaffold

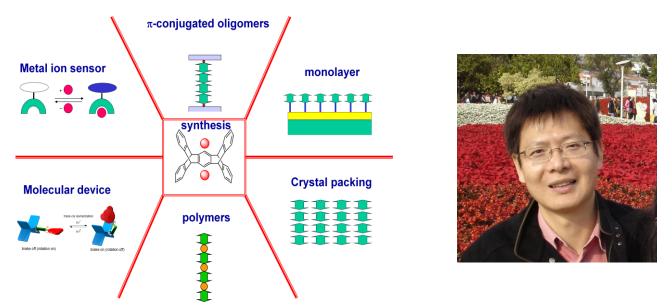
Professor Jye-Shane Yang [楊 吉水教授]

Department of Chemistry, National Taiwan University 先導物質化学研究所客員研究員

日時:平成24年8月3日(金)午後3時30分より

場所:理学部化学科第3講義室(理学部2号館2階2273号室)

Pentiptycene is a larger member than triptycene in the iptycene family. The nonplanar H-shaped rigid scaffold of pentitpycene contains a central phenylene ring that is sterically shielded by the peripheral phenylene rings. Such a structural feature has led us to explore its possible applications. For example, the nonplanar structure can function as a metal ion receptor in fluorescent chemosensors or as a 4-bladed molecular rotor in molecular devices. The bulky scaffold can also function as conformation regulator for molecular, supramolecular, and polymeric systems. The synthesis of pentiptycene derivatives relies on the central-ring prefunctionalized pentiptycene building blocks. A useful approach toward the preparation of these building blocks is the derivatization of pentiptycene quinone. In this talk, the story of our pentiptycene chemistry will be presented with an emphasis of the design concept.



世話人: 新名主 輝男 TEL (092) 642-2720 五島 健太 TEL (092) 642-4350