

第109回応用化学セミナー

共催：大阪公立大学 機能性有機材料開発研究センター・分子エレクトロニックデバイス研究所



2022年10月17日(月) 10:45-12:15 B4棟西K-301号室

演題：Optical Property of Self-assembled Bodipys

講師：Dr. Ayyappanpillai Ajayaghosh

CSIR-National Institute of Interdisciplinary Sci. & Tech., India
(インド科学・工業研究評議会－学際的科学技術国立研究所)

A. Ajayaghosh博士は、機能性色素や π 共役分子を基盤とした超分子化学・ソフトマテリアル分野の第一人者で、研究成果は、Science、Adv. Mater.、J. Am. Chem. Soc.、Angew. Chem. Int. Ed.をはじめ、著名な論文誌に多数報告されています。今回、国際会議での基調講演の目的で来日されますが、本学でもご講演いただく運びとなりました。多数の学生、教員の方々にご参加いただければ幸いです。

Summary: Supramolecular soft materials derived from chromophore-linked π -systems have generated significant attention because of their interesting stimuli responsive physicochemical properties, particularly optical properties. Since, morphological features of chromophore assemblies play important roles in the optical behavior, any attempt to control the hierarchical structures of molecular assemblies is of considerable significance. Among different chromophore-linked π -systems, 4,4-Difluoro-4-bora-3a-4a-diaza-s-indacene (Bodipy) is a preferred chromophore due to its synthetic accessibility and tunable emission behavior. Recently, we have reported a few Bodipy-linked phenyleneethynylene (Bodipy-PE) derivatives and studied their self-assembly behavior and the associated optical property changes.³⁻⁵ Rational design of molecular structures, allowed us to obtain mechanoresponsive and photonic materials with NIR emission and angle dependent optical reflection, respectively wherein noncovalent interactions play an important role. Details of these studies will be discussed.

世話人：応用化学分野 八木繁幸（内線5798）