

Suhrit Ghosh 先生 講演会

講演日時： 2014 年 10 月 31 日(金) 17 時より

講演会場： 千葉大学工学部 4 号棟 3 階 319 セミナー室

講演者： Prof. Dr. Suhrit Ghosh

Associate Professor, Indian Association for the Cultivation of Science,
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講演題目： Co-assembly of Donor-Acceptor Chromophores: Mixing vs. Segregation

講演の概要： Ghosh 先生は、芳香族ドナ-アクセプター相互作用と水素結合を巧妙に用いた超分子集合体・ソフトマテリアル創製に関する研究を推進されており、近年目覚ましい成果をあげられています。詳細は以下のアブストラクトをお読みください。

Abstract: Directional non-covalent forces (primarily H-bonding) form the basis of structural evolution and amazingly elegant functions of biological systems. In the recent past, we have been engaged in studying H-bonding driven self-assembly of aromatic donor (D) and acceptor (A) chromophores (small molecules and macromolecules) with an aim to control their supramolecular assembly by molecular engineering and correlating it with macroscopic properties. Systems those have been investigated include isolated D and A, D- π -A and D- σ -A type systems and also chromophore-conjugated amphiphilic macromolecules. We have shown by appropriate molecular engineering it is possible to gain precise control over their inter-chromophoric interaction (J- or H-aggregation), photophysical properties, mode of co-assembly (alternate or segregated assembly, parallel or anti-parallel stacking) and morphology (fibrillar gel, organic-nanotubes, vesicle, reverse-vesicle and micelle) both in organic and aqueous medium. Highlights of our recent findings in this area will be the topic of the presentation.

References

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