

Ph. D. Open seminar

Department of Chemistry, IISER Bhopal.

Speaker: Adiki Raja Sekhar

Title of seminar: “Towards Multi-BODIPy Macrocyclic Porphyrinoids”

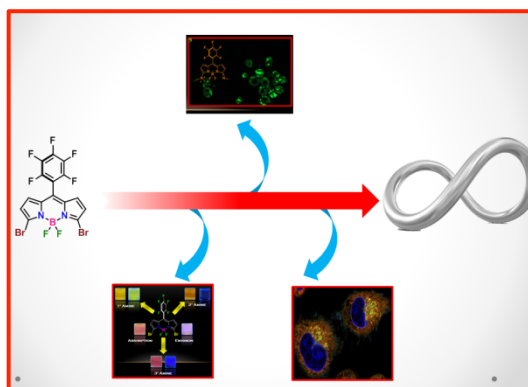
Date: February, 10, 2017.

Time: 3.00 pm

Venue: AB-II 401.

Abstract:

π - conjugated materials embedded with hetero-atoms enable access to functional materials possessing intriguing aromaticity, optoelectronics and photophysical properties. Interestingly, boron-containing molecules brought in unique photophysical properties.¹ In this seminar, I will discuss on π - conjugated boron-pyrrolic materials and their opto-electronic properties. As a highlight, boron containing π - conjugated octaphyrin have been synthesized from a BODIPY precursor and characterized by spectroscopic methods.² In this journey, highly fluorescent dibromo-borondipyrromethene was utilized towards aliphatic amine discrimination,³ aqueous soluble zwitterionic BOIDPYs⁴ and as biomarker for living cells. Since being inherently fluorescent, these functional materials are used for bio-imaging applications.



References:

1. (a) Entwistle, C. D; Marder. T. B. *Angew. Chem., Int. Ed.* **2002**, *41*, 2927; (b) Entwistle, C. D.; Marder. T. B. *Chem. Mater.* **2004**, *16*, 4574.
2. Sekhar, A. R.; Sankar, J. *manuscript under preparation*.
3. Sekhar, A. R.; Kaloo, M. A.; Sankar, J. *Chem. Asian J.*, **2014**, *9*, 2422.
4. Sekhar, A. R.; Sariki, S. K.; Bisa, A.; Sahu, P. K.; Tomar, R. S.; Sankar, J. *Chem. Commun.*, **2016**, *53*, 1096.