

Students' Annual Seminar

Exploring the Diradicaloid Chemistry of p-Block Elements: Boron, Carbon, and Nitrogen

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Kekulé diradicals (diradicaloids) have been widely investigated due to their tunable electronic states, ambipolar character, and low band gap energy.^[1] Generally, diradicaloids are defined as a subset of diradicals in which two molecular orbitals are nearly degenerate.^[2] However, the incorporation of hetero-atom(s) in the skeleton of π -conjugation is challenging. Here we were interested to developed new synthetic strategies for the synthesis of hetero-atom(s) (such as boron, carbon, and nitrogen) incorporated (into π -conjugation)/centered diradicaloids. At the same time, we have also tried to introduce special π -conjugated spacer - that will also be discussed in my presentation.

References:

- [1] X. Hu, W. Wang, D. Wang, Y. Zheng, J. Mater. Chem. C. Mater. 2018, 6, 11232–11242.
[2] M. Abe, Chem. Rev. 2013, 113, 7011–7088.

Friday, May 3rd 2024

14:30 Hrs (Tea / Coffee 14:15 Hrs)

Seminar Hall, TIFR-H