

Seminar

The Fifth Element: An Element with unlimited Potentials

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There has been a great deal of resurgence in boron chemistry in recent years. In the relatively small span of a decade, tricoordinate triarylboranes and tetracoordinate BODIPY dyes have emerged as one of the most sought after candidates in various fields of "Organic Materials." The coordinatively unsaturated tricoordinated boron is inherently Lewis acidic and forms complex with Lewis bases. In biology, the active site of several protein catalases is nothing but Lewis basic hydroxyl / amine groups. Obviously a simple Lewis acid can be employed to control the activity of Lewis basic biocatalysts. It took nearly 100 years for medicinal chemists to successfully implement this simple concept in drug design. Combining our academic curiosity on boron with quest for developing new materials and medicines we are trying to find answer for fundamental questions pertaining to our day-to-day life. In this talk, some quite interesting aspects of boron materials would be presented.

Wednesday, May 2nd 2018

5:00 PM (Tea/Coffee at 04:30 PM)

Auditorium, TIFR-H