

Students' Annual Seminar

Efficient p-type dopants for electronic devices

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Organic semiconductors (OSCs) are organic compounds that are either conjugated molecules or polymers. OSCs are preferred over inorganic semiconductors because of their attractive properties like lightweight, low-cost production, low-temperature processing, mechanical flexibility, and abundant availability. OSCs are used in various electronic devices like organic light-emitting diodes (OLEDs), solar cells, transistors and photodetectors. Because of the low conductivity of OSCs compared to inorganic semiconductors, there is often a need for precise electronic doping.

In this talk, I will discuss efficient p-type dopants required for the doping of OSCs. These dopants will be based on chemically synthesised cation radicals, oxoammonium salt-based dopants, adduct systems and UV light-induced doping using an acid.

Tuesday, Mar 14th 2023

08:15 AM (Tea / Coffee 8.00 AM)

CR-4, TIFR-H