

### Seminar

#### Impact of doping in metal halide perovskite and organic semiconductors

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Electronic doping is a requirement in order to realize p-n homojunctions based devices or improved control of electronic contact at the surfaces. In this seminar, I will present a novel way of electronic doping of organic semiconductors which is essential for realizing highorganic-based and metal halide performance perovskite-based optoelectronic devices, particularly the solar cells. I will discuss the mechanism of the doping process and its applications in devices. I will then discuss the impact of heterovalent doping in halide perovskites which is contrary to earlier conclusions. In passing, I will present a comparative study on single crystals and polycrystalline thin films of metal halide perovskites.

# Tuesday, Nov 6<sup>th</sup> 2018 4:00 PM (Tea/Coffee at 3:30 PM) Seminar Hall, TIFR-H