

## **Internal Seminar**

### **Switching of Electronic States of Cobalt Dioxolene Complexes Triggered by Spin-Crossover Process and Valence Tautomerism**

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Synthesis and characterization of the novel types of spin-crossover and valence tautomeric cobalt dioxolene complexes are discussed. For the first time, valence tautomeric transition from a low-spin cobalt(III) catecholate to low-spin cobalt(II) semiquinonate species is observed, rather than the usually observed valence tautomeric transition from a low-spin cobalt(III) catecholate to high-spin cobalt(II) semiquinonate species. In addition, the properties exhibited by the cobalt bis(dioxolene) complexes have opened up a new way to manipulate the electronic states of an organic moiety.

***Friday, Feb 28<sup>th</sup> 2020***

***2:30 PM (Tea/Coffee at 2:00 PM)***

***Seminar Hall, TIFR-H***