



Emerging Applications and Developments in Spin Crossover Systems

Guest Editor:

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Message from the Guest Editor

Dear colleagues,

There are potential applications of Spin Crossover (SCO) complexes that rely on their bistability, two electronic ground states in the field of electronic devices (switches and memory device), sensors and the incorporation of SCO molecules into larger materials. Manuscripts dealing with these topics are invited to a forthcoming Special Issue on spin crossover (SCO) in magnetochemistry.

For potential applications in electronics, the existence of an abrupt SCO itself suggests applications as a switch, on or off. In addition to electronics, there are potential applications of a spin state change as a chemical sensor. A complex may undergo a spin state change in response to an environmental change. The thermochromic nature of SCO complexes may allow for easy incorporation into sensing devices. Functionalization of the SCO complex so that it could easily react with other substrates of technical importance is another area of interest. An additional way to modify or finetune the SCO phenomena is to make bi- or polynuclear SCO complexes. These species have magnetic coupling or cooperativity in addition to SCO.



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