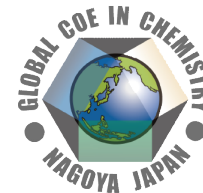




RCMS • G-COE Seminar



“THE SPIN, A NEW DIMENSION IN MOLECULAR MATERIALS SCIENCE”

–Cornerstones and new trends in molecular magnetism–



Lecturer : MICHEL VERDAGUER

(University Pierre et Marie Curie)

Date : 6 Oct 14:00 –16:00

Place : Chemistry Gallery

Molecular materials science is developing rapidly taking advantage of the versatility of molecular and macromolecular chemistries. Knowledge and applications are rapidly growing. As in current electronics, the electron is most often used for its charge and not for its spin. On the other hand molecular magnetism, relying on quantum chemistry and physics, is controlling better and better ligand fields, exchange interactions, anisotropies to synthesize new materials. Serendipity is still at work and opens unexpected horizons but the strict control of the tiny (nano...), molecules on surfaces, the unique molecule and the complex (multifunctional systems) demands more and more rational approaches and highly efficient collaborations. Time is coming for "being more and more eager to export towards other disciplines our original approach to magnetism, and to learn from others how to find new challenging areas to develop" (D. Gatteschi, ICMM 2008) and to imply more systematically the molecular spin and its specificity in new science reactivity, photonics, spintronics, biology or medicine. We point out cornerstones by pioneers (including some of our own work)⁶ and then focus on recent developments and new trends.

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