

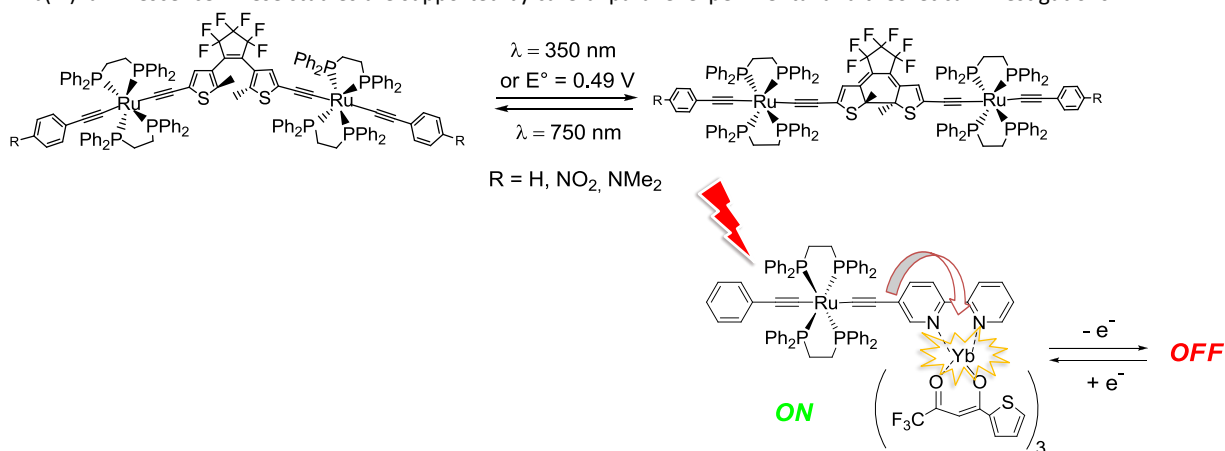
CBC SEMINAR ANNOUNCEMENT



Professor Stéphane Rigaut
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Organometallic Molecular Wires and Switches with Carbon-Rich Ruthenium Units

Unique synergetic properties can be obtained with accurate combinations of metal complexes and functional units. Ruthenium carbon-rich complexes have been involved in the building of original redox active molecular wires and junctions, owing to the excellent ability of the system to promote a strong electronic coupling between the metal centers and the conjugated organic ligands. We are now taking advantage of the perturbation of different systems with the ruthenium moiety to reach multifunctional materials that gather efficient switching behaviors, i.e. to achieve the photo or redox modulation of properties such as absorption, luminescence, conductance, or magnetism. For example, the perturbation of a dithienylethene (DTE) system with ruthenium moieties led to a multifunctional responsive material, and the association between an ytterbium ion and a ruthenium carbon-rich complex enabled the first redox switching of the near-IR Yb(III) luminescence. These studies are supported by careful parallel experimental and theoretical investigations.



Date:	30th March 2012 (Friday)
Time:	2pm – 3pm
Venue:	NTU SPMS CBC Building Level 2, Conference Room
Host:	Assoc Professor Chen Hongyu