



*UPR 4301 Conventionnée
avec l'Université d'Orléans
et affiliée à l'Inserm*

**Docteur Eva JAKAB TOTH
Directrice**

**SEMINAIRE EXTERNE
Juin 2012
SALLE DE CONFÉRENCES**

Vendredi 8 juin 2012 à 11 h 00

À l'invitation de Stéphane Petoud

**« Supramolecular Assembly of Metallacrowns: A Journey
Toward Synthetically Controlled Molecular Magnets »**

Professor Vincent L. Pecoraro
John T. Groves Collegiate
Associate Editor, Inorganic Chemistry
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Metallacrowns are the inorganic analogues of crown ethers, forming ring structures using an (M-N-O)_x topology that is reminiscent of the (C-C-O)_x linkages in organic recognition agents. This presentation will discuss how a variety of structural topology can be prepared that allow numerous transition metals or lanthanides to be brought within close proximity in order to optimize metal ion interactions. Specifically, examples will be presented to illustrate a rationale design approach to prepare and then systematically vary structures that exhibit slow magnetic relaxation, a requisite for molecular magnets. We also will discuss the preparation and characterization of NIR luminescent complexes.