



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

**Docteur Eva JAKAB TOTH
Directrice**

**SEMINAIRE EXTERNE
Avril 2012
SALLE DE CONFÉRENCES**

Vendredi 27 avril 2012 à 11 h 00

À l'invitation de Stéphane Petoud

**« On the synthesis, characterisation, and application of
core-shell nanoparticles and quantum dots ;
progress and challenges »**

Professeur Frank C.J.M. Van Veggel

Professor and Canada Research Chair
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One main research trust is based on Ln^{3+} doped NaLnF_4 nanoparticles for optical and magnetic resonance imaging. To this purpose, we have developed synthesis techniques to make core-shell architectures which allows the optical and magnetic properties to be optimized separately. The other research trust is based on PbS(e) based (core-shell) quantum dots for optical bio-imaging and for quantum computing application. The characterisation will be discussed in detail.