

WEBINAR WEBINAR

OMINHTPIA: Dr. Rebecca Musgrave, Lecturer

King's College London, UK

OEMA: Multimetallic Materials: Polymers, clusters, and their

properties

ΗΜΕΡΟΜΗΝΙΑ: Τρίτη, 10 Νοεμβρίου 2020

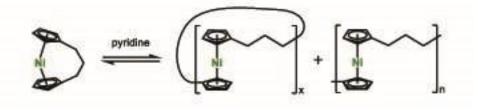
ΩPA: 12:30

Link: Πατήστε εδώ

ΠΕΡΙΛΗΨΗ

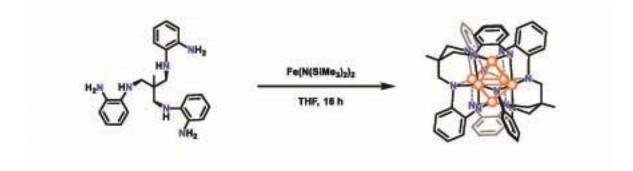
This talk will cover two classes of multi-metallic materials:

1) **Metallopolymers**, which combine the inherent functionality of metal centres with the mechanical properties and processing advantages of macromolecules. These are of interest in fields of self-healing, light emission, photovoltaics, stimuli-responsive materials, and nanopatterning. The polymerisation of strained metallacycles to yield polymetallocenes (iron-, cobalt- and nickel-based), their thermodynamic properties and self-assembly behavior will be discussed.



2) **Metal clusters**, which are well-known in biological cofactors, exhibit remarkable small molecule activation behaviour and feature fascinating electronic and magnetic properties.

A series of hexanuclear metal clusters will be presented, as well as strategies towards alteration of their electronic structure and incorporation into coordination polymers, for use in charge and magnetic data storage applications.



Βιογραφικό σημείωμα

Rebecca Musgrave completed her undergraduate degree at the University of Oxford (UK), working in her final year with Jose Goicoechea on low coordinate iron carbene complexes. She then moved to the University of Bristol (UK), where her PhD with Ian Manners involved the synthesis and macromolecular properties of various metal-containing polymers. She then won a Marie Curie Global Fellowship to work jointly with Ted Betley at Harvard University (US) and Rodolphe Clérac at the CNRS in Bordeaux (France), investigating metal clusters and their magnetic properties. In July this year she started as a Lecturer (assistant professor) at King's College London (UK), and is currently setting up her research group there.