For favour of posting

The Chinese University of Hong Kong
Department of Chemistry
Research Seminar Series

Speaker: Dr. Tuck Seng Wong
Department of Chemical and Biological Engineering
University of Sheffield
U.K.

Title: Directed evolution: A power algorithm for advancing synthetic biology

Date: July 2, 2014 (Wednesday)

Time: 2:30 p.m.

Venue: L3
Science Centre

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Contact Person:
Prof. Bo Zheng

For favour of posting

The Chinese University of Hong Kong
Department of Chemistry
and
Institute of Molecular Functional Materials
Research Seminar Series

Speaker: Prof. Simon Aldridge
Department of Chemistry
University of Oxford
U.K.

Title: Radicals, E-H Bond Activation and Nanoparticles: Tuning Main Group Elements to Behave as Transition Metals

Date: July 18, 2014 (Friday)

Time: 2:30 p.m.

Venue: L3
Science Centre

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Contact Person:
Prof. H.F. Chow

For favour of posting

The Chinese University of Hong Kong
Department of Chemistry
Research Seminar Series

Speaker: Prof. HU Wenping
Institute of Chemistry
Chinese Academy of Sciences

Title: Organic Semiconductors for Field-Effect Transistors

Date: July 22, 2014 (Tuesday)

Time: 2:30 p.m.

Venue: L3
Science Centre

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Contact Person:
Prof. Qian Miao

For favour of posting

The Chinese University of Hong Kong
Department of Chemistry
Research Seminar Series

Speaker: Prof. John S. Tse
Department of Physics and Engineering Physics
University of Saskatchewan
Saskatoon, Canada

Title: Crystal Engineering of single molecule magnet, conductor and superconductor from neutral radicals

<< Abstract >>

In a recent series of papers [1-7], we have demonstrated moderate pressure can induce magnetic and electrical properties of a novel series of stable crystalline neutral radicals. Particularly, it is shown that the solids can be converted to a ferromagnet with the highest Curie temperature ever reported for a molecular magnet [1,2]. Moreover, with selective derivatives, crystals with an anti-ferromagnetic ground state can be synthesized [5,6]. Compression has led to the first molecular conductor [5,6]. It is also shown that heat, pressure and light can Induced similar spin crossover interconversion in these systems [7]. Moreover, the temperature-pressure phase diagrams of these materials show remarkable resemblance to the organic and high T_c superconductors. In this presentation, the central role of synchrotron and neutron spectroscopy in the characterization of the physical phenomenon will be emphasized.

[1] *J. Am. Chem. Soc.*, **2009**, *131* (44), pp 16012–16013
[2] *J. Am. Chem. Soc.*, **2010**, *132* (45), pp 16212–16224
[3] *J. Am.* Chem. Soc., **2010**, *132* (13), pp 4876–4886
[4] *J. Am. Chem. Soc.*, **2011**, *133* (15), pp 6051–6060
[5] *J. Am. Chem. Soc.*, **2012**, *134* (24), pp 9886–9889
[6] *J. Am. Chem. Soc.*, **2014**, *136* (3), pp 1070–1081
[7] *J. Am.* Chem. Soc., **2014**, *136* (22), pp 8050–8062

Date: July 28, 2014 (Monday)

Time: 10:30 a.m.

Venue: L5, Science Centre

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Contact Person:
Prof. Zhifeng Liu