# Chemistry Postgraduate Symposium, 29th & 30th June

All presentations in Haworth 101

## Thursday 29th June

#### 10:00 Welcome

## **10:15 - 11:15 Solid State Chemistry**

Rebecca Bird Atomistic simulation of cerium brannerite – a candidate matrix for HLW

Ryan George Switching on ion exchange in metal germanates

## 11:45 - 13:00 Physical & Theoretical Chemistry

Heidar Hussein Computational investigations into the structures and physical properties of

Au-Pd sub-nanometre clusters

Emma Thompson Magnetic resonance imaging of phase-separation in vesicle-polymer mixtures

Abhishek Rao Prediction of crystal structure polymorphism

## **14:00 - 15:25 Solid State Chemistry**

Dean Fletcher Porous oxide ceramics

Kanika Gupta Functional materials derived from the schafarzikite mineral framework

Ivan Trussov Development of new materials for use in Li/Na ion batteries

## Friday 30th June

#### 09:50 - 10:50 Physical & Theoretical Chemistry

Phil Jemmett Structural investigations of glycolipids: how do chemically similar molecules

perform so many different biological functions?

Marcus Taylor A direct dynamics approach to proton transfer in the GFP chromophore

#### 11:20 - 13:00 Molecular Synthesis

Gary Peczkowski Asymmetric organocatalysis: aryl triketopiperazines

Giacomo Chiodarelli Development of new synthetic inhibitods of Mycobacterium tuberculosis

DprE2

Elsa Martinez Novel gold catalysed formal [3+2]-dipolar cycloaddition to access highly

functionalised imidazo heteroaryls

## 14:00 - 15:25 Biomolecular, Supramolecular & Nanochemistry

Francia Allabush Modifying DNA aptamers for sensing applications

Dennis Zhao Triphenylenes for use in nanofabrication and luminescent applications

Media Ismail Organometallic nucleoside analogues: overview, synthesis and cytotoxic

activity

## 15:55 - 16:45 Molecular Synthesis

Xingjian Li Natural product isolation and derivatisation towards leukaemia therapeutics

Bogdan Duma Synthesis of active pharmaceutical ingredients