

Symposium on Crystallography - Bridging Materials and Molecules in Modern Chemistry
9-10 June 2014, Djurönäset, Building 5, 5A

9 June

Building 5, 5E

- 11.30-13.00 **Registration and lunch**
- 13.00-13.05 *Welcome*
Xiaodong Zou
- Session I: Modern inorganic chemistry**
Chair: Xiaodong Zou
- 13.05-13.35 *Structures in motion - In situ studies of future battery concepts*
Kristina Edström, Department of Chemistry, Uppsala University, Sweden
- 13.35-14.05 *Dye-sensitized solar cells – Some aspects of coordination and solid state chemistry*
Lars Kloo, Department of Chemistry, Chemical Science and Engineering, KTH Royal Institute of Technology, Sweden
- 14.05-14.20 *Ca-Pd/Pt-Ge Compounds on the Zintl Border*
Isa Doverbratt, Centre for Analysis and Synthesis, Lund University, Sweden
- 14.20-14.35 *Syntheses, structure determination, magnetic and thermoelectric properties of quasicrystal approximants in RE-Au-Sm systems (RE = Gd, Tb and Yb, SM = Si, Ge)*
Girma Gebresenbut, Department of Chemistry - Ångström Laboratory, Uppsala University, Sweden
- 14.35-15.05 *Heusler compounds - From semiconductors to spintronics*
Claudia Felser, Max Planck Institute for Chemical Physics of Solids, Dresden, Germany
- 15.05-15.35 **Coffee and poster session**
- Session II: Career development**
Chair: Annika Pohl
- 15.35-16.05 *CO₂ separation with narrow pore zeolite A*
Niklas Hedin, Department of Materials and Environmental Chemistry, Stockholm University, Sweden
- 16.05-16.25 *Open-Framework Germanates - Local structural information to solve crystal structures*
A. Ken Inge, Awardee Anna Sundström Award 2013, Kiel University, Germany
- 16.25-16.45 Awardee Anna Sundström Award 2014
- 16.45-17.00 *Au₃M₅ (M=Cd and Mg) - Synthesis, crystal structure and stability*
Partha Pratim Jana, Centre for Analysis and Synthesis, Lund University, Sweden
- 17.00-17.15 *Rotation electron diffraction - Single-crystal electron diffraction from powders*
Wei Wan, Berzelii Center EXSELENT on Porous Materials, Department of Materials and Environmental Chemistry, Stockholm University, Sweden
- 17.15-17.30 *Cutting edge technology*
Tommy Larsson, Materials and Coating Technology, Seco Tools AB, Sweden
- 17.40-18.10 Annual meeting of the Inorganic chemistry section within the Swedish Chemical Society
- 19.30- **Symposium dinner, jointly with participants at Analysdagarna**

10 June
Building 5, 5E

Session III: New crystallographic methods and applications

Chair Sten Eriksson

- 09.00-09.30 *Correlated disorder in molecular framework materials*
Andrew Goodwin, Inorganic Chemistry Laboratory, University of Oxford, UK
- 09.30-10.00 *Structure solution by electron crystallography and X-ray diffraction*
Junliang Sun, Department of Materials and Environmental Chemistry, Stockholm University, Sweden
- 10.00-10.15 *In-situ hydration and structural studies of $Ba_2In_{2-x}M_xO_5$ ($M = \text{trivalent cation}$) brownmillerites*
S. M. H. Rahman, Department of Chemical and Biological Engineering, Chalmers University of Technology, Sweden
- 10.15-10.45 **Coffee and poster session**
- Session IV: Development of crystallography and its impact in organic and inorganic chemistry**
Chair:
- 10.45-11.15 *Does crystallography blind us with its images?*
Sven Lidin, Division of Polymer & Materials Chemistry, Chemical Centre, Lund University, Sweden
- 11.15-11.45 *A momentum in space – A reciprocal space odyssey*
Karl Wilhelm Törnroos, Department of Chemistry, University of Bergen, Norway
- 11.45-12.00 *The structures of non-redox active 3d-transition metal cation oximate complexes as molecular models for studies of biologically related dioxygen activation mechanisms*
Vadim Kessler, Department of Chemistry and Biotechnology, BioCenter, Swedish University of Agricultural Sciences, Sweden
- 12.00-12.10 *Concluding remarks*
- 12.10-13.00 **Lunch**

Poster list Crystallography – Bridging materials and molecules

Postersessions Monday 9 June, 15.05-15.35

Tuesday 10 June, 10.15-10.45

- P101** *A novel, smart and selective metal-organic framework (SUMOF-7II) for Fe(III) sensing in aqueous media*
Hani Abdelhamid, Stockholm University
- P102** *Functionalization of metal-organic frameworks with transition-metal complexes for catalysis*
Fabian Carson, Stockholm University
- P103** *Lithiation induced structural changes in $Ni_{0.5}TiOPO_4$*
Rickard Eriksson, Uppsala University
- P104** *Twinning in the structure of zeolite ITQ-39*
Elina Kapaca, Stockholm University
- P105** *Study of local ordering in lead-free ferroelectrics*
Alexandra Neagu, Stockholm University
- P106** *Synthesis and characterization of CuHCF nanoparticles, a promising battery electrode material*
Dickson Ojwang, Stockholm University
- P107** *One-pot synthesis of metal-organic frameworks multifunctionalised with transition metal complexes*
Ana Eva Platero-Prats, Stockholm University
- P108** *Pair distribution function analysis of $(Co_{1-x}Ni_x)_3Sb_4O_6F_6$*
Viktor Renman, Uppsala University
- P109** *Tuning the structural modulation in $Re(SiAl)_{2-x}$ ternary compounds*
Fei Wang, Lund University
- P110** *Indexing electron diffraction patterns from randomly-oriented crystals*
Yunchen Wang, Stockholm University