

Monday 19th October. Session 1. 13:25-15:30. Chair : Matt Tucker (ISIS).

13:25-13:30. Matt Tucker (ISIS). Welcome to the PCG/SCMP Winter Meeting.

13:30-14:00. Andrew Wills (UCL). Frustrating orbitals in the ‘vesignieites’, $S = 1/2$ kagome antiferromagnets.

14:00-14:15. William Brant (Uppsala). “Investigating lithium ion batteries using in operando neutron diffraction”.

14:15-14:30. Giles Flowitt-Hill (Edinburgh/ISIS). “Short range order of small molecules in crystals”.

14:30-15:00. Josh Makepeace (Oxford). “In-situ diffraction studies of hydrogen storage and release processes”.

15:00-15:15. Andy Dent (Diamond). “Introduction to EXAFS at Diamond”.

15:15-15:30. Yuanpeng Zhang (Queen Mary). “Structural origins of light emission in matrix-free Ge quantum dots by combination of XAS and optically-detected XAS”.

15:30-16:00. Coffee.

Monday 19th October. Session 2. 15:30-16:00. Chair : Mark Senn (Oxford).

16:00-16:30. Hazel Sparkes (Bristol). “Crystallographic studies of metal complexes”.

16:30-16:45. Lewis Owen (Cambridge/ISIS). “Short range order in metal alloys”.

16:45-17:00. Josefa Vidal Laveda (Glasgow). “Microwave synthesis of olivine nanostructured insertion electrodes for Li-ion batteries”.

17:00-17:30. Jan-Wilhelm Bos (Heriot-Watt). “Characterisation of half-Heusler thermoelectrics using neutron powder diffraction”

18:00-19:30. Posters followed by dinner.

Tuesday 20th October. Session 1. 09:00-10:45. Chair : Anthony Powell (Reading).

09:00-09:05. Anthony Powell (Reading). Welcome to the ISIS Crystallography User Group Meeting.

09:05-09:25. Sean Langridge (ISIS). ISIS Facility update.

09:25-09:45. Steve Hull (ISIS). ISIS Crystallography update.

09:45-10:15. Bob von Dreele (Argonne). “Development of GSAS-II”.

10:15-10:45. Emma McCabe (Kent) “Ferroelectricity in Dion-Jacobson phases”.

10:45-11:15. Coffee and Discussion.

Tuesday 20th October. Session 2. 11:15-13:15. Chair : Silvia Capelli (ISIS).

11:15-11:45. Matthias Gutmann (ISIS). “Beyond the static structure”.

11:45-12:00. Arkadiy Simonov (Oxford). “Analysis of diffuse scattering from single crystals with pair distribution function”.

12:00-12:15. Bo Dong (Sheffield/ISIS). “Synthesis, structure and electrical properties of N-doped Li_3VO_4 ”.

12:15-12:30. Phillip Tucciarone (Oxford) “NTE, spaghetti dynamics and hydration driven volume collapse in $\text{Zr}_2\text{W}_2\text{O}_8$ ”.

12:30-12:45. Alistair Overy (Oxford/Diamond). “Disorder-phonon coupling in crystal-like aperiodic solids”.

12:45-13:15. Michael Carpenter (Cambridge). “Patterns of elastic strain relaxation in materials with multiple phase transitions”.

13:15. Close and buffet lunch.

14:30-16:00. GSAS-II demonstration by Bob von Dreele (Argonne).