

Time	Sunday 1st July	
12.30	EPDIC 16 registration, JMCC	
13.00	ICDD workshop Lunch 1 - 2 pm, Marquee Workshop 2 - 5 pm Pentland Room	From 12.30 until 18.00
16.00		
18.00		
18.00 - 19.00	Drinks reception JMCC	
Time	Monday 2nd July	
8.30 - 9.00	Opening ceremony, EPDIC awards Chairs: Paul Attfield, Paolo Scardi and Bob Cernik; Pentland	
9.00 - 10.00	Plenary Lecture; New Opportunities at European XFEL Robert Feidenhans'l (FEEL, DE) Chair Andy Fitch; Pentland	
10.00 - 10.30	Tea/coffee break and commercial exhibition	
10.30 - 12.30	MS10 New Sources and Instruments for Powder Diffraction, South Hall Chairs: Paul Henry (ISIS, UK) and Andy Fitch (ESRF, FR)	MS03 Methods in structure solution and refinement, Pentland Chairs: Angela Altomare (Bari, IT) and Jordi Rius (Barcelona, ES)
10.30 - 11.00	POWTEX – Angular- and Wavelength-Dispersive, High-Intensity Neutron TOF Diffractometer Andreas Houben (Aachen, DE)	Bigger structures, faster: optimising simulated annealing to improve structure determination from powder diffraction data Kenneth Shankland - University of Reading
11.00 - 11.30	ESRF ID15 EH3 - A new station dedicated to multi-dimensional operando materials chemistry Marco Di Michiel (ESRF, FR)	Inorganic Materials Serial Crystallography Structure Determination Kenneth Beyerlein - Max Planck Institute
11.30 - 11.50	Multi-Mythen detector for fast, high-resolution, lab-based pair distribution function characterization of nanostructures Maxwell Terban - MPI	Combining Powder & Single-Crystal Diffraction Techniques with DSC Studies to Provide Insights into C-H...F-C Interactions in C <sub>6</sub> F <sub>6</sub> :C <sub>6</sub> H <sub>(6-n)</sub> Me <sub>(n)</sub> Co-crystals Jeremy Karl Cockcroft (UCL)
11.50 - 12.10	Combining a nine-crystal multianalyser stage with a Pilatus3 X CdTe detector for high-resolution X-ray powder diffraction at ESRF-ID22 Catherine Dejoie - ESRF	Common rules of systematic absence applied to ab-initio indexing Ryoko Oishi-Tomiyasu - Yamagata Univ.
12.10 - 12.30	DanMAX – The new materials science beamline at MAX IV Mads Jørgensen - Aarhus University	New algorithms for structure solution of polycrystalline materials in EXPO software Rosanna Rizzi (IC-CNR)
12.30 - 14.00	“Discover the new diffraction platforms from Malvern Panalytical” seminar, (lunch sponsored by Malvern Panalytical is included), Kirkland Lunch and commercial exhibition, concourse/ centro/ Prestonfield Lachlan's Software Fayre, Boardroom 2 and Pentland EPDIC committee meeting (lunch included), Holyrood	
14.00 - 16.00	MS08 Total Scattering and Disorder, Pentland Chairs: Matt Tucker (Oak Ridge USA) and Aleksander Kremenovic (Belgrade, RS)	MS06 New developments in instrumentation for sample environments, South Hall Chairs: Paul Attfield (Edinburgh, UK) and Pamela Whitfield (Excelsus SS, CH)
14.00 - 14.30	DISCOVER: ORNL's Diffraction and Total Scattering Beamline for Materials Discovery Katharine Page (ORNL, USA)	In situ studies of mechanochemical milling reactions Ivan Halasz - Ruđer Bošković Institute

14.30 - 15.00	Local Structure Investigations on the XPDF Beamline at Diamond Light Source Philip Chater - Diamond Light Source	In-Situ Diffraction Studies of Uranium Oxides. How to safely reduce SrUO <sub>4</sub> at a beamline. Brendan Kennedy - University of Sydney
15.00 - 15.20	Alloying anodes for sodium-ion batteries: insights from pair distribution function analysis and solid-state NMR Phoebe Allan - University of Birmingham	Study of proton conductivity on powder samples using XRD David Havlicek - Charles University
15.20 - 15.40	Diffuse scattering masquerading as Bragg peaks: Low-dimensional magnetic order in a metal-organic framework Andrew Goodwin - University of Oxford	Rotatable load frames for neutron diffraction - analysis of strain, texture, phase transformations and elastic constants Markus Hoelzel - TUM-MLZ
15.40 - 16.00	Planar defects and dynamic disorder in lead halide perovskite nanocrystals unveiled through reciprocal space total scattering methods Federica Bertolotti - Aarhus University	Exploring real time amorphization in organic pharmaceutical compounds via in situ ball milling Mickaël Morin - Excelsus AG
16.00 - 16.30	Tea/ coffee/ commercial exhibition	
16.30 - 17.30	Plenary Lecture; Revealing local orbital degeneracy lifting and local geometric frustration relieving in complex electronic materials with total scattering Emil Bozin (Brookhaven National Lab, USA) Chair : Aleksander Kremenovic; Pentland	
17.30 - 18.30	Poster session 1 for MS01, MS03, MS04, MS06, MS08 and MS10, Marquee Commercial exhibition Beer/ wine/ soft drinks	
19.00 - 20.00	Drinks reception; The Signet Library, Parliament Square, Edinburgh EH1 1RF	
Time	<b>Tuesday 3rd July</b>	
8.30 - 9.30	Plenary Lecture; Strengths of neutron powder diffraction Maria Teresa Fernandez-Diaz (ILL, France) Chair: Pamela Whitfield; Pentland	
9.30 - 10.30	Young powder diffractionist award winner; Structure determination of polycrystalline materials using X-rays and electrons Stef Smeets (Stockholm, SE) Chair: Lynne McCusker (Stockholm, SE); Pentland	
10.30 - 11.00	Tea/coffee break and commercial exhibition	
11.00 - 13.00	MS05 XRD diffraction imaging and combined methods, South Hall Chairs: Antonia Neels (Zurich, CH) and Bob Cernik (Manchester, UK)	MS12 Microstructure phenomena in thin films, Pentland Chairs: David Rafaja (Freiberg, DE) and Radek Kuzek (Prague, CZ)
11.00 - 11.30	Materials Imaging Using Synchrotron X-ray Diffraction Jon Wright (ESRF, FR)	Structure formation during sputter deposition of thin films Bärbel Krause (Karlsruhe, DE)
11.30 - 12.00	Coherent X-Ray Diffraction Imaging of Frozen Hydrated Human Erythrocytes Infected by Malaria Parasites Motomu Tanaka (Heidelberg, DE)	Materials science: in-situ, in-operando, time-resolved Jörg Grenzer (HZ Dresden, DE)
12.00 - 12.20	Aberration-corrected scanning transmission electron microscopy imaging and its use in materials science. Thomas Vogt - University of South Carolina	Microstructure and properties of magnetron sputtered Pt, PtCu and PtNi polycrystalline coatings studied by the x-ray scattering methods Milan Dopita - Charles University

12.20 - 12.40	Diffraction imaging of catalytic materials under operating conditions – unrevealing the solid-state chemistry with full pattern Rietveld refinement Dorota Matras - University of Manchester	Film Texture as a Strain Relief Mechanism in the Cubic to Tetragonal Phase Transition in (CH <sub>3</sub> NH <sub>3</sub> )PbI <sub>3</sub> Kevin Stone - SLAC
12.40 - 13.00	Combined XRD/XRF multivariate analysis for fast chemical and crystallographic surface mapping Mauro Bortolotti - University of Trento	Analysis of functional thin films via in plane diffraction methods Zoltán Balogh-Michels - Empa
13.00 - 14.00	Lunch sponsored by Rigaku, Holyrood Lunch and commercial exhibition, concourse/ centro/ Prestonfield Lachlan's Software Fayre, Boardroom 2 and Pentland	
14.00 - 16.00	MS01 Emerging functional materials, Pentland Chairs: Robert Dinnebier (Stuttgart, DE) and Phil Lightfoot (St Andrews, UK)	MS04 Balancing conventional powder diffraction structural approaches with computation and electron diffraction, South Hall. Chairs: Bill David (STFC, UK) and Andy Goodwin (Oxford, UK)
14.00 - 14.30	Metal-organic Frameworks: Efficient Synthesis, Thermodynamic Stability and Structure Prediction Tomislav Friscic (McGill, USA)	Balancing Powder Diffraction Data and Computational Data Marcus Newmann (AMS Merzhausen, DE)
14.30 - 15.00	Soft Chemical Routes to Novel Ferroelectric and Multiferroic Materials Mike Hayward (Oxford, UK)	Combining the strengths of 3D single crystal electron diffraction and powder X-ray diffraction Xiaodong Zou (Stockholm, SE)
15.00 - 15.20	Unconventional magnetic order in GeFe <sub>2</sub> O <sub>4</sub> and $\gamma$ -SiFe <sub>2</sub> O <sub>4</sub> Giuditta Perversi - University of Edinburgh	Crystal structure of complex coordination polymers solved from X-ray powder diffraction Luzia S. Germann - Max Planck Institute
15.20 - 15.40	Compositional nanodomain formation in hybrid formate perovskites Emily Reynolds - University of Oxford	Powder-X-ray diffraction analysis of the channel occupation in disordered $\eta$ -Al <sub>5</sub> Fe <sub>2</sub> and in three of its ordered low temperature phases $\eta'$ , $\eta''$ and $\eta'''$ Hanka Becker - TUB Freiberg
15.40 - 16.00	Luminescent M(I) (M = Au, Ag) Thiophenolate Coordination Polymers: Structures / Properties Relationships Nathalie Guillou - Université Paris-Saclay	Mechanochemical synthesis and structure solution of MOF-74 intermediates by powder solution methods Jethro Beamish-Cook -University of Reading
16.00 - 16.30	Tea/ coffee/ commercial exhibition	
16.30 - 17.30	Plenary Lecture; Structural characterization of ordering phenomena in (multi)ferroic thin films Beatriz Noheda (Groningen, NL) Chair: Bob Cernik; Pentland	
17.30 - 18.30	Poster session 2 for MS02, MS05, MS07, MS09, MS11 and MS12, Marquee Commercial exhibition Beer/ wine/ soft drinks	
Time	<b>Wednesday 4th July</b>	
9.00 - 10.00	Plenary Lecture; Structure of Nanoparticles by Small-Angle X-ray Scattering: Application to LDL Lipoproteins and to Refolding of SDS-Denatured Proteins Jan Skov Pederson (Aarhus, Denmark) Chair: Antoinella Guagliardi; Pentland	
10.00 - 10.30	Tea/coffee break and commercial exhibition	
10.30 - 12.30	MS11 Materials under extreme conditions, South Hall Chairs: Malcolm McMahon (Edinburgh, UK) and Wojciech Paszkowicz (Warsaw, PL)	MS07 Nanomaterials: Structural, Microstructural and Surface Aspects, Pentland Chairs: Paolo Scardi (Trento, IT) and Antonietta Guagliardi (Como, IT)

10.30 - 11.00	Multiparametric studies of magnetocaloric materials in the system $Mn_{5-x}Fe_xSi_3$ Karen Friese - T. U. Munchen	Characterizing Disordered Ensembles of 2-D Materials: Massively Defective $MnO_2$ Scott Misture (Alfred, USA)
11.00 - 11.30	Unraveling the mechanical behaviour of an isorecticular family of Metal Organic Frameworks: UiO-66(M) with M=Zr, Hf, Ce Pascal Yot (Monpellier, FR)	Improving magnets through size, shape and texture control Mogens Christensen (Aarhus, DE)
11.30 - 11.50	High Pressure Synthesis and Characterisation of $MnFe_3O_5$ Ka Hou Hong - University of Edinburgh	Crystal structure and microstructure of $\gamma$ - $Al_2O_3$ determined by analysing the anisotropic line broadening diffuse scattering Martin Rudolph - TUB Freiberg
11.50 - 12.10	XRD and image based modelling to evaluate turbine blade failures Robert Cernik - Manchester	Quantification of Correlated Disorder in Alloy Systems Through Complex PDF Modelling Robert Koch - Alfred University
12.10 - 12.30	Synthesis and characterization, by high pressure neutron powder diffraction, of the defect perovskite $He_2-x[CaZr]F_6$ Angus Wilkinson - Georgia Inst Technology	Mapping the size dependent structure of metal oxides: A new molybdenum oxide nanostructure from X-ray total scattering Kirsten M. Jensen - Copenhagen
12.30 - 13.30	Lunch and Lachlan's Software Fayre, Boardroom 2 and Pentland	
13.30 - 15.30	MS02 Energy Materials, Pentland Chairs: Michele Brunelli (ESRF, FR) and Pierre Bordet (Grenoble, FR)	MS09 Pharmaceutical and biological materials, South Hall Chairs: Fabia Gozzo (Zurich, CH) and Irene Margiolaki (Patras, GR)
13.30 - 14.00	Lithium and sodium electrochemical (de) intercalation in layered molybdenum oxides Marie Guignard (Bordeaux, FR)	Protein Polycrystallography with GSAS-II Bob von Dreele (Los Alamos, USA)
14.00 - 14.30	Operando X-ray Diffraction Studies of Battery Materials David Wragg (Oslo, NO)	14.00 Humidity Induced Structural Changes of a Novel Monoclinic HEWLysozyme Form Investigated by In Situ Laboratory X-Ray Powder Diffraction. Detlef Beckers - Malvern Panalytical 14.15 In-situ powder diffraction study of molecular compounds under high energy milling: from amorphization to solid state transformation. Pierre Bordet - Institut Néel
14.30 - 14.50	$Na_3V_2(PO_4)_2F_3$ : an optimal cathode material for high rates In Situ Powder Diffraction studies on Operando battery Francois Fauth - Alba	Expression and preliminary Structural Determination of viral proteins via XRPD Maria Spiliopoulou - University of Patras
14.50 - 15.10	Towards an understanding of the magnetocaloric effect in $Fe_2P$ Johan Cedervall - Uppsala University	A New Malaria Pigment Structural Motif and Potential Drug Target Peter Stephens - Stony Brook University
15.10 - 15.30	Structural insights into the lithium amide-imide solid solution Josh Makepeace - University of Oxford	Identification and characterization of pharmaceutical API using Electron Energy Loss Spectroscopy (EELS) and TEM Electron Diffraction Tomography Stavros Nicolopoulos - NanoMEGAS
15.30 - 16.00	Tea/coffee break	
16.00 - 17.00	Plenary Lecture; Batteries: a playground for crystallographers Gwen Rouse (UPMC, Paris, France) Chair Michela Brunelli; Pentland	
17.00 - 18.00	EPDIC distinguished powder diffraction award lecture; The power of powder diffraction Bill David (STFC and Oxford, UK) Chair Paolo Scardi; Pentland	
18.00	Closing Ceremony, Pentland	
19.00	Pre dinner drinks reception, Kirkland Room, South Hall	
19.30 - on	Conference dinner, South Hall followed by Cèilidh (Music and Scottish Dancing)	