<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>12.30</td>
<td>ICDD workshop</td>
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<tr>
<td>13.00</td>
<td>Lunch 1 - 2 pm, Marquee</td>
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<tr>
<td>16.00</td>
<td>Workshop 2 - 5 pm Pentland Room</td>
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<tr>
<td>18.00 - 19.00</td>
<td>Drinks reception JMCC</td>
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**Sunday 1st July**

**Monday 2nd July**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8.30 - 9.00</td>
<td>Opening ceremony, EPDIC awards</td>
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<tr>
<td></td>
<td>Chairs: Paul Attfield, Paolo Scardi and Bob Cernik; Pentland</td>
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<tr>
<td>9.00 - 10.00</td>
<td>Plenary Lecture; New Opportunities at European XFEL</td>
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<tr>
<td></td>
<td>Robert Feidenhans’I (FEEL, DE)</td>
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<td></td>
<td>Chair Andy Fitch; Pentland</td>
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<tr>
<td>10.00 - 10.30</td>
<td>Tea/coffee break and commercial exhibition</td>
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<tr>
<td>10.30 - 12.30</td>
<td>MS10 New Sources and Instruments for Powder Diffraction, South Hall</td>
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<tr>
<td></td>
<td>Chairs: Paul Henry (ISIS, UK) and Andy Fitch (ESRF, FR)</td>
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<tr>
<td>10.30 - 11.00</td>
<td>POWTEX – Angular- and Wavelength-Dispersive, High-Intensity Neutron TOF</td>
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<tr>
<td></td>
<td>Andreas Houben (Aachen, DE)</td>
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<tr>
<td>11.00 - 11.30</td>
<td>ESRF ID15 EH3 - A new station dedicated to multi-dimensional operando materials chemistry</td>
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<td>Marco Di Michiel (ESRF, FR)</td>
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<tr>
<td>11.30 - 11.50</td>
<td>Multi-Mythen detector for fast, high-resolution, lab-based pair distribution function</td>
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<td>characterization of nanostructures</td>
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<td>Maxwell Terban - MPI</td>
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<tr>
<td>11.50 - 12.00</td>
<td>Combining a nine-crystal multianalyser stage with a Pilatus3 X CdTe detector for high-</td>
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<td>resolution X-ray powder diffraction at ESRF-ID22</td>
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<td>Catherine Dejoie - ESRF</td>
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<tr>
<td>12.10 - 12.30</td>
<td>DanMAX – The new materials science beamline at MAX IV</td>
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<td>Mads Jørgensen - Aarhus University</td>
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<tr>
<td>12.30 - 14.00</td>
<td>“Discover the new diffraction platforms from Malvern Panalytical” seminar,</td>
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<td>(lunch sponsored by Malvern Panalytical is included), Kirkland</td>
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<td></td>
<td>Lunch and commercial exhibition, concourse/ centro/ Prestonfield</td>
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<td></td>
<td>Lachlan’s Software Fayre, Boardroom 2 and Pentland</td>
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<td></td>
<td>EPDIC committee meeting (lunch included), Holyrood</td>
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<tr>
<td>14.00 - 16.00</td>
<td>MS08 Total Scattering and Disorder, Pentland</td>
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<tr>
<td></td>
<td>Chairs: Matt Tucker (Oak Ridge USA) and Alexsander Kremenovic (Belgrade, RS)</td>
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<tr>
<td>14.00 - 14.30</td>
<td>DISCOVER: ORNL’s Diffraction and Total Scattering Beamline for Materials Discovery</td>
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<td>Katharine Page (ORNL, USA)</td>
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<td>In situ studies of mechanochemical milling reactions</td>
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<td>Ivan Halasz - Ruder Bošković Institute</td>
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<td>MS06 New developments in instrumentation for sample environments, South Hall</td>
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<tr>
<td></td>
<td>Chairs: Paul Attfield (Edinburgh, UK) and Pamela Whitfield (Excelsus SS, CH)</td>
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<tr>
<td>Time</td>
<td>Session</td>
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<tr>
<td>14.30 - 15.00</td>
<td>Local Structure Investigations on the XPDF Beamline at Diamond Light Source</td>
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<td>In-Situ Diffraction Studies of Uranium Oxides.</td>
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<tr>
<td>15.00 - 15.20</td>
<td>Alloying anodes for sodium-ion batteries: insights from pair distribution function analysis and solid-state NMR</td>
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<td>Study of proton conductivity on powder samples using XRD</td>
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<td>15.20 - 15.40</td>
<td>Diffuse scattering masquerading as Bragg peaks: Low-dimensional magnetic order in a metal–organic framework</td>
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<td>Rotatable load frames for neutron diffraction - analysis of strain, texture, phase transformations and elastic constants</td>
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<tr>
<td>15.40 - 16.00</td>
<td>Planar defects and dynamic disorder in lead halide perovskite nanocrystals unveiled through reciprocal space total scattering methods</td>
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<td>Exploring real time amorphization in organic pharmaceutical compounds via in situ ball milling</td>
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<tr>
<td>16.00 - 16.30</td>
<td>Tea/ coffee/ commercial exhibition</td>
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<tr>
<td>16.30 - 17.30</td>
<td>Plenary Lecture; Revealing local orbital degeneracy lifting and local geometric frustration relieving in complex electronic materials with total scattering</td>
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<td>Chair: Alexander Kremenovic; Pentland</td>
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<tr>
<td>17.30 - 18.30</td>
<td>Poster session 1 for MS01, MS03, MS04, MS06, MS08 and MS10, Marquee Commercial exhibition</td>
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<td>Beer/ wine/ soft drinks</td>
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<tr>
<td>19.00 - 20.00</td>
<td>Drinks reception; The Signet Library, Parliament Square, Edinburgh EH1 1RF</td>
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**Tuesday 3rd July**

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<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>8.30 - 9.30</td>
<td>Plenary Lecture; Strengths of neutron powder diffraction</td>
<td>Maria Teresa Fernandez-Diaz (ILL, France)</td>
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<td>Chair: Pamela Whitfield; Pentland</td>
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<tr>
<td>9.30 - 10.30</td>
<td>Young powder diffractionist award winner; Structure determination of polycrystalline materials using X-rays and electrons</td>
<td>Lynne McCusker (Stockholm, SE); Pentland</td>
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<td>Chair: Lynne McCusker (Stockholm, SE); Pentland</td>
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<tr>
<td>10.30 - 11.00</td>
<td>Tea/coffee break and commercial exhibition</td>
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<tr>
<td>11.00 - 13.00</td>
<td>MS05 XRD diffraction imaging and combined methods, South Hall</td>
<td>David Rafaja (Freiberg, DE) and Radek Kuzek (Prague, CZ)</td>
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<td></td>
<td>Chairs: Antonia Neels (Zurich, CH) and Bob Cernik (Manchester, UK)</td>
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<tr>
<td>11.00 - 11.30</td>
<td>Materials Imaging Using Synchrotron X-ray Diffraction</td>
<td>Bärbel Krause (Karlsruhe, DE)</td>
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<td>Jon Wright (ESRF, FR)</td>
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<tr>
<td>11.30 - 12.00</td>
<td>Coherent X-Ray Diffraction Imaging of Frozen Hydrated Human Erythrocytes Infected by Malaria Parasites</td>
<td>Jörg Grenzer (HZ Dresden, DE)</td>
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<td>Motomu Tanaka (Heidelberg, DE)</td>
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<tr>
<td>12.00 - 12.20</td>
<td>Aberration-corrected scanning transmission electron microscopy imaging and its use in materials science.</td>
<td>Milan Dopita - Charles University</td>
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<td>Thomas Vogt - University of South Carolina</td>
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<tr>
<td>Time</td>
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<td>Presenters/Institutions</td>
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<tr>
<td>12.20 - 12.40</td>
<td>Diffraction imaging of catalytic materials under operating conditions –</td>
<td>Film Texture as a Strain</td>
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<td>unrevealing the solid-state chemistry with full pattern Rietveld</td>
<td>Relief Mechanism in</td>
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<td>refinement</td>
<td>the Cubic to Tetragonal</td>
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<td>Dorota Matras - University of Manchester</td>
<td>Phase Transition in</td>
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<td>(CH3NH3)PbI3</td>
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<td>Kevin Stone - SLAC</td>
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<tr>
<td>12.40 - 13.00</td>
<td>Combined XRD/XRF multivariate analysis for fast chemical and crystallographic surface mapping</td>
<td>Analysis of functional thin films via in plane diffraction methods</td>
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<td>Zoltán Balogh-Michels - Empa</td>
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<tr>
<td>13.00 - 14.00</td>
<td>Lunch sponsored by Rigaku, Holyrood</td>
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<td>Lunch and commercial exhibition, concourse/ centro/ Prestonfield</td>
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<td>Lachlan’s Software Fayre, Boardroom 2 and Pentland</td>
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<tr>
<td>14.00 - 16.00</td>
<td>MS01 Emerging functional materials, Pentland</td>
<td>MS04 Balancing conventional powder diffraction structural approaches with computation and electron diffraction, South Hall. Chairs: Bill David (STFC, UK) and Andy Goodwin (Oxford, UK)</td>
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<td>Chairs: Robert Dinnebier (Stuttgart, DE) and Phil Lightfoot (St Andrews, UK)</td>
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<td>Tomislav Friscic (McGill, USA)</td>
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<tr>
<td>14.30 - 15.00</td>
<td>Soft Chemical Routes to Novel Ferroelectric and Multiferroic Materials</td>
<td>Combining the strengths of 3D single crystal electron diffraction and powder X-ray diffraction Xiaodong Zou (Stockholm, SE)</td>
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<td>Mike Hayward (Oxford, UK)</td>
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<tr>
<td>15.00 - 15.20</td>
<td>Unconventional magnetic order in GeFe2O4 and γ-SiFe2O4</td>
<td>Crystal structure of complex coordination polymers solved from X-ray powder diffraction Luzia S. Germann - Max Planck Institute</td>
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<td>Giuditta Perversi - University of Edinburgh</td>
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<tr>
<td>15.20 - 15.40</td>
<td>Compositional nanodomain formation in hybrid formate perovskites</td>
<td>Powder-X-ray diffraction analysis of the channel occupation in disordered η-Al5Fe2 and in three of its ordered low temperature phases η, η′ and η′′ Hanka Becker - TUB Freiberg</td>
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<td>Emily Reynolds - University of Oxford</td>
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<td>15.40 - 16.00</td>
<td>Luminescent M(I) (M = Au, Ag) Thiophenolate Coordination Polymers:</td>
<td>Mechaehemical synthesis and structure solution of MOF-74 intermediates by powder solution methods Jethro Beamish-Cook - University of Reading</td>
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<td>Structures / Properties Relationships</td>
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<td>Nathalie Guillou - Université Paris-Saclay</td>
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<tr>
<td>16.00 - 16.30</td>
<td>Tea/ coffee/ commercial exhibition</td>
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<td>16.30 - 17.30</td>
<td>Plenary Lecture; Structural characterization of ordering phenomena in</td>
<td></td>
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<td>(multi)ferroic thin films</td>
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<td>Beatriz Noheda (Groningen, NL)</td>
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<td>Chair: Bob Cernik; Pentland</td>
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<tr>
<td>17.30 - 18.30</td>
<td>Poster session 2 for MS02, MS05, MS07, MS11 and MS12, Marquee</td>
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<td></td>
<td>Commercial exhibition</td>
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<td>Beer/ wine/ soft drinks</td>
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<tr>
<td>Time</td>
<td>Wednesday 4th July</td>
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<tr>
<td>9.00 - 10.00</td>
<td>Plenary Lecture; Structure of Nanoparticles by Small-Angle X-ray Scattering: Application to LDL Lipoproteins and to Refolding of SDS-Denatured Proteins</td>
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<td>Jan Skov Pederson (Aarhus, Denmark)</td>
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<td>Chair: Antoinella Guagliardi; Pentland</td>
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<tr>
<td>10.00 - 10.30</td>
<td>Tea/coffee break and commercial exhibition</td>
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<tr>
<td>10.30 - 12.30</td>
<td>MS11 Materials under extreme conditions, South Hall</td>
<td>MS07 Nanomaterials: Structural, Microstructural and Surface Aspects, Pentland Chairs: Paolo Scardi (Trento, IT) and Antonietta Guagliardi (Como, IT)</td>
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<td>Chairs: Malcolm McMahon (Edinburgh, UK) and Wojciech Paszkowicz (Warsaw, PL)</td>
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<tr>
<td>Time</td>
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<td>Presenter/Institution</td>
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<tr>
<td>10.30 - 11.00</td>
<td>Multiparametric studies of magnetocaloric materials in the system MnS-xFeSxSi3</td>
<td>Karen Friese - T. U. Munchen</td>
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<td>Characterizing Disordered Ensembles of 2-D Materials: Massively Defective MnO2</td>
<td>Scott Misture (Alfred, USA)</td>
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<tr>
<td>11.00 - 11.30</td>
<td>Unraveling the mechanical behaviour of an isoreticular family of Metal Organic Frameworks: UiO-66(M) with M=Zr, Hf, Ce</td>
<td>Pascal Yot (Monpellier, FR)</td>
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<td>Improving magnets through size, shape and texture control</td>
<td>Mogens Christensen (Aarhus, DE)</td>
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<tr>
<td>11.30 - 11.50</td>
<td>High Pressure Synthesis and Characterisation of MnFe3O5</td>
<td>Ka Hou Hong - University of Edinburgh</td>
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<td>Crystal structure and microstructure of y-Al2O3 determined by analysing the anisotropic line broadening diffuse scattering</td>
<td>Martin Rudolph - TUB Freiberg</td>
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<tr>
<td>11.50 - 12.10</td>
<td>XRD and image based modelling to evaluate turbine blade failures</td>
<td>Robert Cernik - Manchester</td>
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<td>Mapping the size dependent structure of metal oxides: A new molybdenum oxide nanostructure from X-ray total scattering</td>
<td>Kirsten M. Jensen - Copenhagen</td>
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<tr>
<td>12.10 - 12.30</td>
<td>Synthesis and characterization, by high pressure neutron powder diffraction, of the defect perovskite He2-x[CaZr]F6</td>
<td>Angus Wilkinson - Georgia Inst Technology</td>
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<tr>
<td></td>
<td>Mapping the size dependent structure of metal oxides: A new molybdenum oxide nanostructure from X-ray total scattering</td>
<td>Kirsten M. Jensen - Copenhagen</td>
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<tr>
<td>12.30 - 13.30</td>
<td>Lunch and Lachlan’s Software Fayre, Boardroom 2 and Pentland</td>
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<tr>
<td>13.00 - 14.30</td>
<td>Lithium and sodium electrochemical (de) intercalation in layered molybdenum oxides</td>
<td>Marie Guignard (Bordeaux, FR)</td>
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<td>Protein Polycrystallography with GSAS-II</td>
<td>Bob von Dreele (Los Alamos, USA)</td>
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<td>13.30 - 14.00</td>
<td>Operando X-ray Diffraction Studies of Battery Materials</td>
<td>David Wragg (Oslo, NO)</td>
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<td>Expression and preliminary Structural Determination of viral proteins via XRPD</td>
<td>Maria Spiliopoulou - University of Patras</td>
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<tr>
<td>14.00 - 14.30</td>
<td>Na3V2(PO4)2F3 : an optimal cathode material for high rates In Situ Powder Diffraction studies on Operando battery</td>
<td>Francois Fauth - Alba</td>
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<td>14.00 Humidity Induced Structural Changes of a Novel Monoclinic HEWlysozyme Form Investigated by In Situ Laboratory X-Ray Powder Diffraction.</td>
<td>Detlef Beckers - Malvern Panalytical</td>
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<tr>
<td>14.30 - 14.50</td>
<td>Towards an understanding of the magnetocaloric effect in Fe2P</td>
<td>Johan Cedervall - Uppsala University</td>
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<td>A New Malaria Pigment Structural Motif and Potential Drug Target</td>
<td>Peter Stephens - Stony Brook University</td>
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<td>15.10 - 15.30</td>
<td>Structural insights into the lithium amide-imide solid solution</td>
<td>Josh Makepeace - University of Oxford</td>
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<td>Identification and characterization of pharmaceutical API using Electron Energy Loss Spectroscopy (EELS) and TEM Electron Diffraction Tomography</td>
<td>Stavros Nicolopoulos - NanoMEGAS</td>
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<td>15.30 - 16.00</td>
<td>Tea/coffee break</td>
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<tr>
<td>16.00 - 17.00</td>
<td>Plenary Lecture; Batteries: a playground for crystallographers</td>
<td>Gwen Rousse (UPMC, Paris, France)</td>
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<td>Chair Michela Brunelli; Pentland</td>
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<tr>
<td>17.00 - 18.00</td>
<td>EPDIC distinguished powder diffraction award lecture; The power of powder diffraction</td>
<td>Bill David (STFC and Oxford, UK)</td>
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<td>Chair Paolo Scardi; Pentland</td>
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<td>18.00</td>
<td>Closing Ceremony, Pentland</td>
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<td>19.00</td>
<td>Pre dinner drinks reception, Kirkland Room, South Hall</td>
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<tr>
<td>19.30 - on</td>
<td>Conference dinner, South Hall</td>
<td>followed by Cèilidh (Music and Scottish Dancing)</td>
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