Thursday II March 2021

| | Session One Session Chair: Rik Drummond-Brydson | | |
|-------|---|--|--|
| 09.00 | Welcome | | |
| 09.05 | Unravelling the structural and biochemical anomalies in human osteogenesis imperfecta bone by correlating electron microscopy and Raman microspectroscopy Professor Anat Akiva, <i>Radboudumc</i> , <i>NL</i> | | |
| 09.40 | Preparing Lamellae of the Most Fragile Interfaces with a TripleBeam FIB HITACHI Inspire the Next | | |
| 09.45 | Prospects for the analysis of complex, beam-sensitive materials by transmission electron microscopy and associated techniques Dr Andy Brown, <i>University of Leeds, UK</i> | | |
| 10.20 | Break | | |
| 10.30 | 4D imaging of soft matter in liquid water Prof. Guiseppe Battaglia, <i>University College London, UK</i> | | |
| | Poster Session | | |
| 11.05 | Gaining meaningful statistical data on TEM specimens through automated nanoparticle workflow (APW) Anil Yalcin | | |
| 11.10 | Electron ptychographic imaging of polymer and macromolecular ordering Botao Hao | | |
| 11.15 | On the local structure of amorphous CN frameworks Diana Piankova | | |
| 11.20 | Imaging and structural analysis of polymer crystallinity with STEM ptychography Hui Luo | | |
| 11.25 | The role of collagen glycosylation in bone mineralization during health and disease Luco Rutten | | |

| 11.30 | Dose and signal to noise in 4D STEM imaging of beam-sensitive materials Peter Nellist |
|-------|---|
| 11.35 | Atomically resolved tomographic reconstruction of nanoparticles from single projection: influence of amorphous carbon support Pritam Banerjee |
| 11.40 | Atomic-resolution Imaging of Small Organic Molecules on Graphene Priti Kharel |
| 11:45 | γ-Radiation Induced Engineering of Ag-Ni (oxy-hydro) oxide Interfaces for Enhanced Oxygen Reduction Reaction Activity Yi Yang |
| 11.50 | Theoretical Toolbox for the Characterization of Organic-Inorganic Interfaces Prof. Claudia Draxl, Humboldt-Universität Berlin |
| 12.25 | End of Session |

| Session Two Session Chairs: Nadja Tarakina & Sean Collins | | |
|--|---|--|
| 14.00 | Developments in high-speed AFM to reveal µs-dynamics of unlabeled biomolecules Dr George Heath, <i>University of Leeds</i> , UK | |
| 14.35 | Three Dimensional Electron Diffraction (3DED) considerations for small and beam sensitive materials and data. Dr Andy Stewart, University of Limerick, Ireland | |
| 15.10 | Break | |
| 15.20 | Visualizing the dynamics at gas-solid- and metal-support-interfaces in heterogeneous catalysis Prof Marc Willinger, ETH Zurich, Switzerland | |
| 15.55 | Bio-Geo-Material Interfaces: from nano to global processes Prof Liane G. Benning, FX Potsdam, Germany | |
| 16.30 | End of Day | |

Friday 12 March 2021

| Session One Session Chairs: Andy Brown | | |
|---|--|--|
| 09.00 | Welcome | |
| 09.05 | Novel imaging techniques enabled by direct electron detection Dr Chris Allen, EPSIC, UK | |
| 09.40 | The Latest Information on JEOL CryoTEMs | |
| 09.45 | Break | |
| 09.55 | Momentum-resolved STEM: An interdisciplinary methodological platform for materials and soft matter characterization Professor Dr Knut Müller-Caspary, Juelich, Germany | |
| 10.30 | Title TBC Professor Dr Peng Wang Nanjing University, China | |
| 11.05 | End of Session | |

| Session Two Session Chairs: Rik Drummond-Brydson & Nadja Tarakina | | |
|---|---|--|
| 14.00 | Imaging soft-hard interfaces and small organic molecules on graphene Professor Pinshane Huang, <i>University of Illinois at Urbana-Champaign, US</i> | |
| 14.35 | Exploring interfaces in metal-organic framework composites by analytical STEM Dr Sean Collins, <i>University of Leeds</i> , <i>UK</i> | |
| 15.10 | Break | |
| 15.20 | In situ STEM characterisation of chemical reactions using 2D heterostructure liquid cells Daniel J Kelly, University of Manchester | |

| 15.55 | Title TBC Prof Dr Lena F Kourkoutis Cornell University, USA |
|-------|--|
| 16.30 | What differential phase contrast may tell us about edges, interfaces, soft matter and biological materials Professor Josef Zweck, University of Regensburg |
| 17.05 | End of Day |





Europe's Leading Microscopy & Imaging Event

Taking place virtually for the first time ever! 5 - 9 July 2021

The international event combines six parallel streams of conference sessions with a free-to-attend exhibition, plus virtual meetings and workshops covering all the latest topics. It serves as a golden opportunity for companies — both large and small — to showcase a quantity and quality of equipment that never fails to impress. It also provides the perfect stage for delegates to showcase their work, make new connections and broaden their knowledge base and skill-set.



Find out more at www.mmc-series.org.uk



