



Conference Program

Venue: West Auditorium, Administration Hall

November 19, Tuesday

09:00 – 09:30

Opening Ceremony

Session I – Phase Transitions, Ferroelectricity and Multiferroicity

Masahiro Yamashita

09:30 – 10:20	Physical Properties of Metal–Organic Frameworks: an Overview	Tony Cheetham <i>University of Cambridge, UK/ University of California, Santa Barbara, USA</i>
10:20 – 10:50	Coffee Break	
10:50 – 11:40	Ferroelectrics Go Chemical Design	Ren–Gen Xiong <i>Southeast University, China</i>
11:40 – 12:10	Microscopic Mechanisms and Origins of Ferroelectricity in Hybrid Inorganic–Organic Compounds	Alessandro Stroppa <i>CNR-SPIN Institute, Italy</i>
12:10 – 13:40	Lunch	

Wei-Yin Sun

13:40 – 14:10	Multiferroic and Thermal Expansion Properties of Metal–Organic Frameworks	Young Sun <i>Institute of Physics, CAS, China</i>
14:10 – 14:40	Magnetoelectric and Multiferroic Behavior	Vivien Zapf <i>Los Alamos National Lab, USA</i>

Session II – Energy

14:40 – 15:10	Pore Space Control in MOFs for Gas Adsorption and Separation	Pingyun Feng <i>University of California, Riverside, USA</i>
15:10 – 15:40	Metal–Organic–Framework–Derived Functional Nanomaterials for Electrochemical Energy Storage and Conversion	Xiongwen (David) Lou <i>Nanyang Technological University, Singapore</i>
15:40 – 16:10	Coffee Break	

Chun-Ying Duan

16:10 – 16:40	Photocatalysis and Molecular Recognition with Functionalized Metal–Organic Frameworks	Caroline Mellot–Draznieks <i>Collège de France, France</i>
16:40 – 17:10	Photoactive Ti Carboxylate MOFs	Christian Serre <i>ENS, France</i>
17:10 – 17:40	Designing Functional Sites in Metal–Organic Frameworks for Energy Storage Applications	V. Sara Thoi <i>Johns Hopkins University, USA</i>



November 20 , Wednesday

Session III - Magnetism

Jun Tao

09:00 - 09:50	Lanthanide Single-Molecule Magnets	Ming-Liang Tong <i>Sun Yat-Sen University, China</i>
09:50 - 10:20	Phase Switchable Porous Magnets	Hitoshi Miyasaka <i>Tohoku University, Japan</i>
10:20 - 10:50	Coffee Break	
10:50 - 11:20	Combining Multiple Functions within Metal-Organic Framework Materials	Cameron Kepert <i>University of Sydney, Australia</i>
11:20 - 11:50	2D Metal-Organic Frameworks with Metalloporphyrin Qubits Nodes for Hybrid Quantum Computing Devices	Olivier Roubeau <i>Universidad de Zaragoza, Spain</i>
11:50 - 14:20	Lunch and Poster Session	

Session IV - Electronics

Jun-Feng Bai

14:20 - 15:10	Mimicking Nature by Metal-Organic Frameworks: Perspective and Applications	Natalia Shustova <i>University of South Carolina, USA</i>
15:10 - 15:40	Towards Conjugated 2D Metal-Organic Framework Electronics	Xinliang Feng <i>TU Dresden, Germany</i>
15:40 - 16:10	Chemical Vapor Deposition of Nanoporous Metal-Organic Frameworks (MOF-CVD) and Their Integration as Low-k Dielectrics	Rob Ameloot <i>KU Leuven, Belgium</i>
16:10 - 16:40	Coffee Break	

He-Xiang Deng

16:40 - 17:10	Metal-Organic Frameworks for Sustainability and Human Health	Wenbin Lin <i>University of Chicago, USA</i>
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Session V - Optoelectronics

17:10 - 17:40	Fabricating Designer Solids with Bespoke Physical Properties: The SURMOF Approach	Christof Wöll <i>Karlsruhe Institute of Technology, Germany</i>
17:40 - 18:10	Ultrafast Photo-Thermal-Chemical Conversion of MOFs to Graphene-Metal-Metamaterials and Their Applications	Gary Cheng <i>Purdue University, USA</i>



a nature conference

Physical Properties of Metal-Organic Frameworks



November 21 , Thursday

Session V - Optoelectronics

Pingyun Feng

09:00 - 09:50	A 3E Approach Toward LCN Based Energy-Efficient Lighting Devices	Jing Li <i>Rutgers University, USA</i>
09:50 - 10:20	Toward Artificial Photosynthetic MOFs: Energy and Electron Transfer in Metal Organic Frameworks	Amanda Morris <i>Virginia Tech, USA</i>
10:20 - 10:50	Coffee Break	

Session VI - Optics

10:50 - 11:40	Metal-Organic Frameworks: a New Platform for Coherent Light Up-Conversion and Quantum Phenomena	Wei Ji <i>National University of Singapore, Singapore</i>
11:40 - 12:10	Metal-Organic Frameworks: Structures Whose Performances are Shaped by Their Dynamics	Monique van der Veen <i>Delft University of Technology, Netherlands</i>
12:10 - 13:40	Lunch	

Jing Li

13:40 - 14:10	Multi-Photon Absorption and Stimulated Emission from Metal-Organic Frameworks	Roland Fischer <i>Technical University of Munich, Germany</i>
14:10 - 14:40	Coordination Supramolecular Engineering of Metal-Organic Materials for Photoluminescence and Photocatalysis	Cheng-Yong Su <i>Sun Yat-Sen University, China</i>

Session VII - Mechanical Properties and Structural Phase Transitions

14:40 - 15:10	Developing Complementary in situ Methods for Characterizing Porous Crystalline Materials	Len Barbour <i>Stellenbosch University, South Africa</i>
15:10 - 15:40	Coffee Break	
15:40 - 16:10	Operando Modelling of the Dynamic Behaviour of Metal Organic Frameworks	Veronique Van Speybroeck <i>Ghent University, Belgium</i>
16:10 - 16:40	Ion-conductive Metal-Organic Framework Glasses	Satoshi Horike <i>Kyoto University, Japan</i>
16:40 - 17:00	Closing Remarks	