

MCIC 2022: Future Energy Materials and Systems



Preliminary Conference Programme

August 29th, 2022 Convention Center, Ruhr-Universität Bochum

8:30 – 9:00 a.m.	Registration
9:00 – 9:10 a.m.	Ralf Drautz (Ruhr-Universität Bochum, Germany): Welcome on behalf of the Materials Chain, room 2a
Session 1	Machine Learning and AI Methods
9:10 – 9:45 a.m.	Jason Hattrick-Simpers (University of Toronto, Canada): "Using artificial intelligence to transform data into actionable knowledge."
9:45 – 10:00 a.m.	Yury Lysogorskiy (Ruhr-Universität Bochum, Germany): "t.b.a."
10:00 – 10:15 a.m.	Christopher Stein (University of Duisburg-Essen, Germany): "Neural network potentials for chemical reactivity."
10:15 – 10:30 a.m.	Coffee Break
Session 2	Electrocatalysis
10:30 – 11:05 a.m.	Elena Savinova (University of Strasbourg, France): "Noble metal-free electrocatalysts for anion exchange membrane fuel and electrolysis cells."
11:05 – 11:20 a.m.	Julia Linnemann (Ruhr-Universität Bochum, Germany): "Transformation lability as a design criterion for water-splitting electrocatalysts."
11:20 – 11:35 a.m.	Daniel Siegmund (Fraunhofer Institute UMSICHT Oberhausen, Germany): "t.b.a."
11:35 – 12:00	Coffee Break
Session 3	Energy Storage
12:00 – 12:35 p.m.	Nuria Tapia-Ruiz (Lancaster University, UK): "High-performance layered sodium transition metal oxides for sodium-ion batteries: Present and future perspectives."
12:35 – 12:50 p.m.	Constanze N. Neumann (Max-Planck-Institut für Kohlenforschung, Germany): "MOF structure changing the reactivity of its components."
12:50 – 1:05 p.m.	Fatih Özcan (University of Duisburg-Essen, Germany): "t.b.a."
1:05 – 2:00 p.m.	Lunch Break
Session 4	Coatings and Processing
2:00 – 2:35 p.m.	Ruud van Ommen (Delft University of Technology, The Netherlands): "Scalable manufacturing of nanostructured materials for energy applications using gas phase deposition."
2:35 – 3:10 p.m.	Robert Vaßen (Jülich Research Centre, Germany): "Ceramic materials for energy conversion and storage: A perspective."
3:10 – 3:25 p.m.	Hannsjörg Freund (TU Dortmund University, Germany): "t.b.a."
3:25 – 3:30 p.m.	Anjana Devi (Ruhr-Universität Bochum, Germany): Summary of sessions
Postersession	Current Research on Future Energy Materials and Systems
3:30 – 4:30 p.m.	Poster presentations, room 1
4:30 p.m.	End of Conference