

1st International CCSS Workshop

Designing the Future of Electrocatalysis with Compositionally Complex Solid Solutions

27th August 2024, ZGH, RUB

CRC 1625



RUB

Agenda

08:30 – 09:00	Registration
09:00 – 09:20	Alfred Ludwig , RUB <i>Welcome and Overview of CRC1625</i>
Session Theory and synthesis of CCSS	
09:20 – 09:50	Alexandre Nominé , UdL The challenge of Critical Metals Substitution
09:50 – 10:20	Thomas Seyller , TUC Growth and properties of epitaxial CoCrFeNi films
10:20 – 10:50	Andrea Kirsch (online) , UC Navigating the complexity of high-entropy oxide synthesis
10:50 – 11:10	Coffee Break
Session Atomic-scale characterization of CCSS	
11:10 – 11:40	Yujiao Li , RUB Accelerated atomic-scale exploration of phase evolution in CCSS using combinatorial processing platforms (CPP)
11:40 – 12:10	Sten V. Lambeets (online) , PNNL Atom Probe Microscopy techniques to image solid surface transformations and electric field-assisted surface reactions
12:10 – 13:10	Lunch Break
Session Data science and CCSS	
13:10 – 13:40	Lucas Foppa , FHI Learning Rules for Catalyst Design via Artificial Intelligence
13:40 – 14:10	Markus Stricker , RUB Computationally accelerated experimental materials characterization using pyiron
14:10 – 14:40	Peter Kraus , TUB Towards FAIR Data using Incremental Automation
14:40 – 15:00	Coffee Break
Session Electrochemical Activity of CCSS	
15:00 – 15:30	Rebecca Pittkowski , UC Structure-Function Relations in High Entropy Alloy Nanoparticles as Fuel Cell Electrocatalysts
15:30 – 16:00	Aliaksandr Bandarenka (online) , TUM Influence of electrolyte compositions on the activity of metal and composite metal electrodes
16:00 – 16:20	Final Discussion
16:20 – 17:00	Optional Labtour (ZGH, Sputterlab), Open Ending