



3rd International Workshop

From Magnetron Sputtering to Electrochemical Performance:
Fabrication, Characterization, and Reliable Measurement of Thin Films

01 July 2026 – Wednesday at ZGH 03/121	
08:45 – 09:00	Registration & Coffee
09:00 – 09:10	Welcome and Introduction Prof. Alfred Ludwig – Ruhr University Bochum, Germany
Workshop Sessions (Chair: TBA)	
09:10 – 10:10	From Target to Film: The Art of Magnetron Sputter Deposition of Metals Prof. Diederik Depla - Ghent University, Belgium
10:15 – 11:15	EDS - Element analysis of thin films Dr. Igor Németh - Bruker Corporation
11:15 – 11:25	Coffee Break
11:25 – 12:25	Tutorial on SECCM (online , 19:20 AET) Dr. Kaye Mikyung Kang – The University of Sydney
12:25 – 13:30	Lunch and Group Photo
13:30 – 14:30	XRD - Characterization of Thin Films Dr. Kirill Yusenko – Ruhr-University Bochum, Germany
14:35 – 15:35	Preparation of TEM specimens and TEM characterisation of thin films Dr. Aleksander Kostka – Ruhr-University Bochum, Germany
15:35 – 16:00	Coffee Break
Panel Discussion (Chair: Prof. Alfred Ludwig)	
16:00 – 17:15	Good vs. Great Papers: Where Editors Draw the Line Dr. Prateek Dongare (Nature Journals) Dr. Alexandra Groves (Nature Synthesis) Dr. Rosalba Rincon Ovalles (ChemElectroChem)
17:15 – 18:00	Networking with finger foods



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09:00 – 09:10

Welcome and Introduction
Prof. Günther Meschke, Prof. Alfred Ludwig

Session I — Thin Film Deposition, Growth and MEMS Technologies (Chair: Prof. Tong Li)

09:10 – 09:55

Grayscale nano-lithography using thermal scanning probes and strain engineering in 2D materials
Invited: Prof. Juergen Brugger - Ecole polytechnique fédérale de Lausanne, Switzerland

09:55 – 10:25

From high-throughput screening of polycrystalline CCSS films to model epitaxial films
M.Sc. Natalia Pukhareva, M.Sc. Arnimesh Nayak – Ruhr-University Bochum, Germany

10:25 – 10:40

Coffee Break

Session II — Functional & Electrochemical Properties (Chair: Dr. Ridha Zerdoumi)

10:40 – 11:25

Interface engineering - potential opportunities in energy conversion devices
Invited: Prof. Lam Yeng Ming - Nanyang Technological University, Singapore

11:25 – 11:55

Atomic-scale insights into activation and degradation of compositionally complex materials during electrocatalytic reactions
Prof. Tong Li – Ruhr University Bochum, Germany

11:55 – 12:25

Nanoscale Structure–Activity Correlations in Compositionally Complex Solid-Solution Electrocatalysts Enabled by Correlative Studies Conducted at the Nanoscale
Prof. Corina Andronesu – University Duisburg-Essen, Germany

12:25 – 13:40

Lunch + botanic garden

Session III — Fundamentals of Composition-Structure-Property Relationships and AI-Driven Materials Research (Chair: Prof. Ralf Drautz)

13:40 – 14:25

Variable-Temperature Plasmonic High-Entropy Carbides - CarboNitrides: toward ultra-high-temperature metamaterials ([online, 07:40 EDT](#))
Invited: Prof. Stefano Curtarolo – Duke University, USA

14:25 – 14:55

Autonomous Scanning Electrochemical Cell Microscopy – with Robots
M.Sc. Felix Thelen – Ruhr-University Bochum, Germany

14:55 – 15:25

Mapping the multi-modal data space of CRC1625
Prof. Markus Stricker – Ruhr-University Bochum, Germany

15:25 – 15:40

Coffee Break

Invited Talk

15:40 – 16:25

Macroscopic and microscopic yield in superalloys
Invited: Prof. Cathie Rae – University of Cambridge, UK

16:25 – 16:45

Lab Tour

16:45 – 18:00

Poster Session and Discussions (with Snacks and Beverages)