Programme

8:30-9:00	Registration
9:00-9:10	Ralf Drautz, Tina Boes, RUB Welcome
	Focus Group Microstructure and mechanical properties
9:10-9:30	Leslie Stübbe, RUB, Materials Technology The abrasive wear resistance of a case-hardened steel
9:30-9:50	Nele Kretzer , RUB, Hybrid Additive Manufacturing Influence of process parameters on the chemical composition of AlSi10Mg components during powder bed-based electron beam melting
9:50-10:10	Sahir Butt, RUB, Structural Mechanics Computational fracture and fragmentation modeling using peridynamics: Application to hard rock excavation
10:10-10:30	Coffee break
	Focus Group Thermodynamic and kinetics of materials
10:30-10:50	Vanessa Eisleben, RUB, Materials Technology
	Design of Ni-free Ti-based sma using Thermo-Calc
10:50-11:10	Lan-Tien Hsu, RUB, Scale-Bridging Simulation of Functional Composites
11 10 11 00	How can the electrocaloric effect be tuned by an electric field?
11:10-11:30	Antoine Loew, RUB, Artificial Intelligence for Integrated Material Science
11:30-11:40	Neural network interatomic potential to predict structure properties Break - Group picture
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11:40-11:50	Tina Boes, Start-up Coach, Incubator Materials, RUB Science is key for innovation - how to get it on track?
11:50-12:20	Nicolas Wöhrl, Physicist and Science Communicator, Universität Duisburg-Essen
11.00 12.20	Science FACTion - Science communication by researchers
12:20-13:50	Lunch break
	Focus Group Interface dominated materials properties and processes
10.50.17.10	
13:50-14:10	Ojong Tabot, RUB, Inorganic Chemistry I Electrochemical reduction of lignin-type aromatic-carbonyls to alcohols
14:10-14:30	Mario Corbalán Gutiérrez, RUB, Inorganic Chemistry I
14.10 14.00	Novel electrode structures for CO ₂ -converting bio-electrochemical systems
14:30-14:50	Jorit Obenlüneschloß, RUB, Inorganic Materials Chemistry
	Group 6 TMDCs: MoS ₂ and WS ₂ as highly active HER catalysts, new MOCVD routes
14:50-15:10	Coffee break
	Focus Group Thin films, micro-& nanosystems
15:10-15:30	Malte Becher, RUB, Applied Laser Technologies
10.10 10.00	Laser-based modification of ALD-grown 2D-transition metal dichalcogenides
15:30-15:50	Jean-Pierre Glauber, RUB, Inorganic Materials Chemistry
	Catalytic performance of CVD-grown ZrN thin films for Nitrogen reduction reaction
15:50-16:10	Vladimir Lykov, RUB, Physical Chemistry 1
	On-surface CO ₂ capturing by electron-rich phosphines
16:10-17:30	Postersession with snacks and beverages

Partners













