<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>8:30-9:00</td>
<td>Registration</td>
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| 9:00-9:10  | **Ralf Drautz, Tina Boes**, RUB  
Welcome                                                    |
| 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                                                                                                    |
| 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  
How can the electrocaloric effect be tuned by an electric field? |
| 11:10-11:30| **Antoine Loew**, RUB, Artificial Intelligence for Integrated Material Science  
Neural network interatomic potential to predict structure properties |
| 11:30-11:40| Break - Group picture                                                                                          |
| 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  
Science FACTion - Science communication by researchers        |
| 12:20-13:50| Lunch break                                                                                                     |
| 13:50-14:10| Focus Group **Interface dominated materials properties and processes**                                           |
| 14:10-14:30| **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  
Novel electrode structures for CO₂-converting bio-electrochemical systems |
| 14:30-14:50| **Jorit Obenlüneschloß**, RUB, Inorganic Materials Chemistry  
Group 6 TMDCs: MoS₂ and WS₂ as highly active HER catalysts, new MOCVD routes |
| 14:50-15:10| Coffee break                                                                                                    |
| 15:10-15:30| Focus Group **Thin films, micro- & nanosystems**                                                               |
| 15:10-15:30| **Malte Becher**, RUB, Applied Laser Technologies  
Laser-based modification of ALD-grown 2D-transition metal dichalcogenides |
Catalytic performance of CVD-grown ZrN thin films for Nitrogen reduction reaction |
| 15:50-16:10| **Vladimir Lykov**, RUB, Physical Chemistry I  
On-surface CO₂ capturing by electron-rich phosphines             |
| 16:10-17:30| Postersession with snacks and beverages                                                                         |