



22nd International Conference on
Diffusion in Solids and Liquids
22 TO 26 JUNE 2026 | RHODES, GREECE

SHORT BIO:

Ralf Drautz is a Professor in the Department of Physics and Astronomy at Ruhr-University Bochum and the Managing Director of the Interdisciplinary Centre for Advanced Materials Simulation (ICAMS). He earned his PhD at the Max Planck Institute for Metals Research in Stuttgart, followed by a research trajectory that included developing cluster expansions with Juan Miguel Sanchez at the University of Texas at Austin and research on bond-order potentials with Professor David Pettifor at the University of Oxford.

In 2008, he was appointed as the first director of ICAMS, leading its development into a premier institution for multiscale materials modeling. Professor Drautz is particularly recognized as the primary architect of the Atomic Cluster Expansion (ACE) and the Graph Atomic Cluster Expansion (GRACE). His work focuses on bridging the gap between rigorous electronic structure theory and large-scale atomistic simulation. By developing foundational machine learning interatomic potentials, his research enables the quantum-accurate prediction of thermodynamic and kinetic properties, providing essential computational tools required to accelerate the discovery and design of novel structural and functional materials.