

# MSE 2024

24 - 26 Sep 2024 (Darmstadt)

dgm.de

Topic C: Characterization

## C03: 3D, Correlative, Multiscale and Multimodal Imaging for Advanced Material Science

We invite contributions developing and applying advanced high-dimensional imaging methods to drive material science. The major focus of this symposium is on the extra and unique information that becomes available when going beyond standard 2D data acquisition routines which are not available otherwise. The scope of the symposium covers 2D/3D imaging approaches based on FIB-SEM-, neutron- or synchrotron tomography, micro-XCT and X-ray microscopy for ex- and in-situ experiments as well as correlative measurement workflows incorporating structural and chemical information from multiple sources and across multiple length scales. Further we address the challenges of high-dimensional image data acquisition, processing, and image quantification utilizing novel computational approaches and infrastructure including conventional- and artificial intelligence-based analysis algorithms. Examples of relevant material classes include, but are not limited to, energy materials, materials for nano-microelectronics, lightweight materials, new structural alloys, polymers, biological materials, and composites.

### Symposium Organizer



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