Registration

We look forward to your registration by July 7th, 2022 online at www.hs-aalen.de/imfaa/a2mmt.
The fee (including meals) is €110.00 plus VAT, the event is free for students. Cancellation by July 8th, 2022 at the latest is free of charge. If canceled later, the full amount will be charged.
Information on the General Data Protection Regulation can be found on our registration portal.

Organizer and venue

Hochschule Aalen
Institut für Materialforschung Aalen (IMFAA)

Beethovenstraße 1
73430 Aalen
www.hs-aalen.de/imfaa
Please address organizational questions to:
Christiane Görtz, Phone +49 (0) 7361 576-1604
@: christiane.goertz@hs-aalen.de

The event takes place in the campus part Beethovenstrasse in the Aula- und Hörsaalgebäude.

Information on hotels can be found at the Tourist Information Office of the City of Aalen at www.aalen.de

Institut IMFAA Materialforschung Aalen

Hochschule Aalen

SmartPro

4th Aalen Materials Microscopy Day

A²MMT IV

July 14th, 2022

Digitization in microscopy – use cases on materials for electromobility, energy und microelectronics

Motto:

Digitization in microscopy –
use cases on materials for electromobility, energy
und microelectronics

Institut IMFAA Materialforschung Aalen

Hochschule Aalen

SmartPro

Time	Program	Speaker
from 9:30	Arrival and registration	
10:30 h	Introduction and opening	
10:45 h	Multimodal 3D characterisation of carbon-based perovskite solar cells	Prof. Dr. Rich Johnston, Advanced Imaging of Materials (AIM) Core Facility, Swansea University, United Kingdom
11:15 h	Machine Learning in material science and in microscopy	Prof. Dr. Gerhard Schneider/ Dr. Timo Bernthaler Materials Research Institute, Aalen University, Germany
11:45 h	Coffee break	
12:15 h	Application of machine learning algorithms for defect analysis in semiconductors by using high-resolved scanning acoustic microscopy	Dr. Peter Czurratis PVA TePla Analytical Systems GmbH, Germany
12:45 h	ML framework for characterisation of sintered permanent magnets: From classification to property prediction	Amit Kumar Choudhary Materials Research Institute, Aalen University, Germany
13:15 h	Lunch break	
14:15 h	AI based image analysis on microelectronics – use cases out of research project FA 4.0	Matias Volman Stern Matworks GmbH, Germany
14:45 h	Microscopic and artificial intelligence assisted defect analysis on materials and components	Andreas Jansche Materials Research Institute, Aalen University, Germany
15:15 h	Coffee break	
15:30 h	Use cases of deep learning based image restoration methods in microscopy	Patrick Krawczyk Materials Research Institute, Aalen University, Germany
16:00 h	Breaking barriers in speed and resolution using ZEISS “Every Day” AI and Deep Learning for 3D tomographic image reconstruction	Dr. Matt Andrew Carl Zeiss Microscopy Inc, ZEISS Innovation Center California, USA
16:30 h	Lab tour and end of Materials Microscopy Day Aalen	