



CM

Computational Materials Design

Prof. J. Neugebauer

Atomistic Modelling of Material Interfaces

Dr. T. Brink

Computational Phase Studies

Dr. T. Hickel

Computer Center

Dr. C. Freysoldt

Defect Chemistry and Spectroscopy

Dr. C. Freysoldt

Electrochemistry and Corrosion

Dr. M. Todorova

Materials Informatics

Dr. J. Janßen

Microstructure and Mechanics

Prof. E. Bitzek

Complex Concentrated Alloys

Dr. F. Körmann
(guest group leader)

GO

Interface Chemistry and Surface Engineering

N.N./Provisional Head: Prof. J. Neugebauer

Corrosion

Dr. M. Rohwerder

RUB-MPI Junior Research Group Spectroscopy at Electrochemical Interfaces

Dr. M. Rohwerder
(provisional head)

Surface Science for Future Materials

Dr. P. Jovičević-Klug

MA

Circular Metallurgy and Alloy Design

Prof. D. Raabe



Atom Probe Tomography

Dr. A. Saksena

Integrated Metallurgy Processing

Dr. S. Wei

Mechanism-based Alloy Design

Dr. D. Ponge

Microscopy and Diffraction

Dr. S. Zaefferer

Microstructure and Interfaces of Battery Materials

Dr. Y. Joshi

Theory and Simulation

Dr. F. Roters

SusMax: Sustainable Materials for a Circular Economy

Dr. T. Beyazay

Funded by ERC Advanced Grant Sustainable Synthesis of Materials

U. Manzoor

SN

Structure and Nano-/Micromechanics of Materials

Prof. G. Dehm

Chemo-Mechanics of Battery Materials

Dr. Y. Zhang

Environmental & Analytical Electron Microscopy

Dr. L. M. Vogl

Hydrogen Mechanics and Interfaces

Dr. M. J. Duarte Correa

Intermetallic Materials

Dr. F. Stein

Thermo-Chemomechanics and Interfaces

Dr. A. Kanjilal

Nanomechanical Instrumentation and Extreme Nanomechanics

Dr. R. Ramachandramoorthy
(guest group leader)

Quantitative Transmission Electron Microscopy

Dr. P. Schweizer

ERC Starting Grant Additive Micromanufacturing

Prof. R. Ramachandramoorthy



I

Independent research groups, members and schools

Independent Max Planck Research Group Nanoanalytics and Interfaces

Prof. C. Scheu

Max Planck Fellow Group Electrochemistry and Nanoscale Materials

Prof. K. Tschulik

International Max Planck Research School for Sustainable Metallurgy

Prof. E. Bitzek
E. Lorenz

Emeritus Group Electrochemical Surface Science

Prof. M. Stratmann

External Members

Prof. R. Kirchheim

Interdepartmental Groups

Artificial Intelligence for Materials Science

Dr. A. Bajpai

Atomic Scale Dynamics of Sustainable Materials

Dr. X. Zhou

Hydrogen at Interfaces

Dr. A. Saksena

Interfacial Processes/ Reactions at Atomics Scale

Dr. T. Schwarz

Materials Science of Additive Manufacturing

Prof. R. Ramachandramoorthy & Prof. H. Springer

Sustainable Magnets and Recycling

Prof. D. Raabe

Partner Groups

Max Planck Partner Group Extreme mechanics of 3D nano-architected oxides

Prof. S.-G. Kang

Max Planck Partner Group Degradation of High Temperature Materials

Prof. S. K. Makineni

Max Planck Partner Group High Performance Materials for Harsh Energy Applications

Dr. J. Zavasnik

Max Planck Partner Group Properties of Decorated Grain Boundaries

Dr. H. Bishara

Max Planck Partner Group Stress and Defects Driven Phase Transformations

Prof. R. S. Meka

Jiao Tong University Computational Energy Storage Materials

Dr. C. Liu

Suzhou Laboratory High-Entropy Materials

Dr. L. Han

University Duisburg-Essen Sustainable Materials Science and Technology

Prof. H. Springer

MPG Groups

MPG Group De Magnet Designing Magnetism

Prof. O. Gutfleisch

MPG Group Thin Film Materials Design

Prof. J. Schneider

Scientific Service Groups

Hydrogen Laboratory

- Electrochemical and gas-phase hydrogen charging
- Thermal desorption spectroscopy

Dr. M. Rohwerder

Materials Testing

- Mechanical & physical properties
- Varying environments

Dr. D. Ponge

Metallography

- Light microscopy
- Metallographic sample preparation
- Scanning Electron Microscopy

Dr. S. Zaefferer

Synthesis and Processing

- Alloy production
- Annealing and welding
- Thermomechanical treatments

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X-Ray Diffraction

- XRD phase analysis
- Advanced XRD techniques
- Pole figure and residual stress measurements

B. Breitbach

Administration & Non-Scientific Service Groups – Dr. K. de Weldige

Accounting and Third Party Funds

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Human Resources

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Procurement

A. Moll

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I. Gonzalez

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