

# Organizational chart

## Institute Management

### Institute Director

Prof. Dr. habil. Alexander Michaelis

## Materials

### Nonoxide Ceramics

Dipl.-Krist. Jörg Adler

- Structural Ceramics with Electrical Function
- Carbide Ceramics and Cellular Ceramics
- Nitride Ceramics and Fiber Composites
- Protective Ceramics
- Filter Ceramics and Exhaust Gas Aftertreatment

### Oxide Ceramics

Dr. Sabine Begand

- Pilot Manufacturing of High-Purity Ceramics
- Oxide and Polymerceramic Composites\*
- Transparent Ceramics

### Processes and Components

Dr. Tassilo Moritz

- Powder Technology
- Shaping
- Component Development and Manufacturing
- Additive and Hybrid Manufacturing

## Technology Economics and Sustainability Analysis

Dr. Daniela Pufky-Heinrich

- Technology and Operations Management
- Economic Analysis and Sustainability

## Materials and Process Characterization

### Sintering and Characterization

Dr. Annegret Potthoff / Dr. Johannes Pötschke

- Thermal Analysis and Thermal Physics\*\*
- Heat Treatment
- Ceramography and Phase Analysis
- Powder and Suspension Characterization\*\*
- Quality Assurance Laboratory\*\* and Mechanics Laboratory
- Chemical and Structural Analysis
- Hardmetals and Cermets
- Thin-Film Technologies

## Energy Systems

### Materials and Components

PD Dr. habil. Mihails Kusnezoff

- Hydrogen Technologies
- Joining Technology
- Materials for Printed Systems
- Ceramic Energy Converters
- High-Temperature Electrochemistry and Functionalized Surfaces

### Stationary Energy Storage Systems

Dr. Matthias Schulz

- Ceramic Electrolytes and Electrodes
- Cell Concepts and Prototypes

### Mobile Energy Storage Systems and Electrochemistry

Dr. Mareike Partsch

- Cell Design and Testing
- Process Development and Process Control

### Technische Universität Dresden

- ifWW – Institute for Inorganic-Nonmetallic Materials  
Prof. Dr. habil. Alexander Michaelis
- IAVT – Electronic Packaging Laboratory  
Prof. Dr. Henning Heuer
- IFE – Institute of Solid State Electronics  
Prof. Dr. habil. Thomas Härtling

### Freie Universität Berlin

- Institute for Experimental Physics  
Prof. Dr. Silke Christiansen

### Ernst Abbe University of Applied Sciences Jena

- Institute for Technical Environmental Chemistry  
Prof. Dr. Michael Stelter

### Ernst-Abbe-Hochschule Jena

- SciTec – Materials Engineering  
Prof. Dr. Ingolf Voigt

### Technische Universität Bergakademie Freiberg

- Chemical Technology  
Prof. Dr. habil. Martin Bertau
- Energy Process Engineering and Chemical Engineering  
Prof. Dr. Martin Gräbner

### Brandenburg University of Technology Cottbus-Senftenberg

- Cognitive Material Diagnostics  
Prof. Dr. Constanze Tschöpe

### HTWD - University of Applied Sciences Dresden

- Renewable und Sustainable Energy Systems  
Prof. Dr. Laura Nousch

### Universitas Gadjah Mada (Indonesia)

- Faculty of Dentistry  
Adj. Prof. Dr. Natalia Beshchasna

## Deputy Institute Directors

**Administrative Director**  
**Marketing and Strategy**

**Dr. Michael Zins**  
**Prof. Dr. Michael Stelter**

**Site manager Hermsdorf**  
**Site manager Dresden-Klotzsche**  
**Site manager Arnstadt**

**Prof. Dr. Ingolf Voigt**  
**Dr. Christian Wunderlich**  
**Dr. Roland Weidl**

**Business Development**  
**Prof. Dr. habil. Thomas Härtling**

## Correlative Microscopy and Materials Data

**Prof. Dr. Silke Christiansen**

- Correlative Microscopy
- Correlative Spectroscopy

## Digitally supported Systems and Services

**Dipl.-Math. Michael Brand**

- Industrial Data Technologies
- Chemometrics and Test Design
- Machine and Production Design
- Software for Testing Systems

## Environmental and Process Engineering

### Nanoporous Membranes

**Dr. Hannes Richter**

- Zeolite- and Carbon Membranes
- Polymer- and Mixed Matrix Membranes
- Membrane Prototypes

### High-Temperature Separation and Catalysis

**Dr. Jörg Richter**

- High-Temperature Membranes and Storages
- Catalysis and Materials Synthesis

### Circular Technologies and Water

**Dr. Burkhardt Faßbauer / Dr. Marcus Weyd**

- Biomass Conversion and Nutrient Recycling
- Systems Engineering for Water and Wastewater
- Electrochemistry
- Hydrometallurgical Recycling and Raw Materials Chemistry
- Membrane Characterization and Modeling
- Technical Electrolysis and Geothermal Energy
- Reaction Engineering Water
- Applied Membrane Technology

### Energy and Process Engineering

**PD Dr. habil. Matthias Jahn / Prof. Dr. Martin Gräbner**

- Modeling and Simulation
- Process Systems Engineering
- Circular Carbon Technologies
- Systems Integration
- Energy System Concepts

## Electronics/Microsystems- and Biomedical Engineering

### Smart Materials and Systems

**Dr. Holger Neubert**

- Multifunctional Materials and Components
- Applied Material Mechanics and Solid-State Transducers

### Hybrid Microsystems

**Dr. Uwe Partsch**

- Thick-Film Technology and Functional Printing
- Microsystems, LTCC and HTCC
- Functional Materials for Hybrid Microsystems
- Systems Integration and Electronic Packaging
- Ceramic Tapes

### Testing of Electronics and Optical Methods

**Dr. Mike Röllig**

- Optical Test Methods and Nanosensors
- Speckle-based Methods
- Reliability of Microsystems

### Systems for Testing and Analysis

**Prof. Dr. Henning Heuer**

- Electronics for Testing Systems
- Eddy-Current Methods
- Ultrasonic Sensors and Methods
- Machine Learning and Data Analysis
- Project Group Cognitive Material Diagnostics Cottbus

### Microelectronic Materials and Nanoanalysis

**Dr. André Clausner**

- Nanoscale Materials and Analysis
- Nanomechanics and Reliability for Microelectronics

### Condition Monitoring and Test Services

**Dr. Lars Schubert**

- Condition Monitoring Hardware and Software
- Methods for Monitoring Systems
- Model-based Data Evaluation
- NDT Lab\*\*

### Bio- and Nanotechnology

**Dr. Jörg Opitz**

- Biological Materials Analysis
- Characterization Technologies
- Biodegradation and Nanofunctionalization
- Biologized Materials and Structures

\* certified in accordance with DIN EN ISO 13485

\*\* accreditation in accordance with DIN EN ISO/IEC 17025