

ORGANIZATIONAL CHART

Institute Director

Prof. Dr. habil. Alexander Michaelis

Materials

Nonoxide Ceramics

Dipl.-Krist. Jörg Adler

- Nitride Ceramics and Structural Ceramics with Electrical Function
- Carbide Ceramics and Filter Ceramics

Oxide Ceramics

Dr. Sabine Begand

- Materials Synthesis and Development
- Pilot Manufacturing of High-Purity Ceramics
- Oxide and Polymceramic Composites*

Processes and Components

Dr. Hagen Klemm

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

Sintering and Characterization / Non-Destructive Testing

Dr. habil. Mathias Herrmann

- Thermal Analysis and Thermal Physics**
- Heat Treatment
- Ceramography and Phase Analysis
- Powder and Suspension Characterization**
- Quality Assurance Laboratory** and Mechanics Laboratory

Environmental and Process Engineering

Nanoporous Membranes

Dr. Hannes Richter

- Zeolite- and Carbon Membranes
- Polymer- and Mixed Matrix Membranes
- Membrane Prototypes
- Functional Carrier Systems and Layers

High-Temperature Separation and Catalysis

Dr. Ralf Kriegel

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

Biomass Technologies and Membrane Process Engineering

Dr. Burkhardt Faßauer

- Biomass Conversion and Nutrient Recycling
- Systems Engineering for Water and Wastewater
- Membrane Process Technology and Modeling
- Technical Electrolysis and Geothermal Energy
- Reaction Engineering Water

Chemical Engineering

PD Dr. habil. Matthias Jahn

- Modeling and Simulation
- Process Systems Engineering

* certified in accordance with DIN EN ISO 13485

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

Fraunhofer IKTS sites

- Headquarters Dresden-Gruna, Saxony
- Site Dresden-Klotzsche, Saxony
- Site Hermsdorf, Thuringia
- Site Forchheim, Bavaria
- Site Rostock, Mecklenburg-Western Pomerania
- Site Cottbus, Brandenburg
- Fraunhofer Project Center for Energy Storage and Systems ZESS, Braunschweig, Lower Saxony
- Battery Innovation and Technology Center BITC, Arnstadt, Thuringia
- Fraunhofer Technology Center High-Performance Materials THM, Freiberg, Saxony

Application centers

- Bioenergy, Pöhl, Saxony
- Bio-Nanotechnology Application Lab BNAL, Lipsia, Saxony
- Membrane Technology, Schmalkalden, Thuringia
- Tape Casting Center, Hermsdorf, Thuringia

Technische Universität Dresden

ifWW – Institute of Inorganic-Nonmetallic Materials

Prof. Dr. habil. Alexander Michaelis

IAVT – Institute of Electronic Packaging Laboratory

Prof. Dr. Henning Heuer

IFE – Institute of Solid State Electronics

Prof. Dr. habil. Thomas Härtling

DCN – Dresden Center for Nanoanalysis

Prof. Dr. habil. Ehrenfried Zschech

Deputy Institute Director / Head of Administration
Deputy Institute Director / Marketing and Strategy
Deputy Institute Director
Deputy Institute Director

Dr. Michael Zins
Prof. Dr. Michael Stelter
Prof. Dr. Ingolf Voigt
Dr. Christian Wunderlich

- Chemical and Structural Analysis
- Hardmetals and Cermets

Correlative Microscopy and Materials Data
Prof. Dr. Silke Christiansen
- Correlative Microscopy and Materials Data

Electronics/Microsystems-/Biomed. Engineering

Smart Materials and Systems

Dr. Holger Neubert

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

Energy Systems

Materials and Components

Dr. Mihails Kusnezoff

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

System Integration and Technology Transfer

Dr. Roland Weidl

- System Concepts
- Validation
- Stationary Energy Storage Systems
- Thin-Film Technologies
- Sodium Battery Materials and Prototype Manufacturing
- Industrial Data Concepts
- Smart Machine and Production Design

Energy Storage Systems and Electrochemistry

Dr. Mareike Wolter

- Electrochemistry
- Cell Concepts
- Electrode Development
- Electrochemical Energy Storage Systems and Converters

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
- Software 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

Prof. Dr. habil. Ehrenfried Zschech

- 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

Friedrich Schiller University Jena

Technical Environmental Chemistry

Prof. Dr. Michael Stelter

Ernst Abbe University of Applied Sciences

SciTec department – Materials Engineering

Prof. Dr. Ingolf Voigt

Freie Universität Berlin

Institute of Experimental Physics

Prof. Dr. Silke Christiansen