

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

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

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

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

Chemical Engineering

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

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

Sites and Competence Centers of Fraunhofer IKTS

- Headquarters Dresden-Gruna, Saxony
- Site Dresden-Klotzsche, Saxony
- Site Hermsdorf, Thuringia
- Site Forchheim, Bavaria
- Site Berlin, Berlin
- Fraunhofer Project Center for Energy Storage and Systems ZESS, Braunschweig, Lower Saxony
- Fraunhofer Technology Center High-Performance Materials THM, Freiberg, Saxony
- Fraunhofer Smart Ocean Technologies SOT research group, Rostock, Mecklenburg-Western Pomerania
- Biological Materials Analysis research group at Fraunhofer IZI, Leipzig, Saxony
- Circular Carbon Technologies KKT project group, Freiberg, Sachsen
- Cognitive Material Diagnostics project group, Cottbus, Brandenburg
- Fraunhofer Center for Smart Agriculture and Water Management AWAM, Porto, Portugal
- Battery Innovation and Technology Center BITC, Arnstadt, Thuringia
- Industrial Hydrogen Technologies Thuringia WaTTh, Arnstadt, Thuringia
- Application Center Water, Hermsdorf, Thuringia
- Application Center Membrane Technology, Schmalkalden, Thuringia

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

Deputy Institute Directors

Administrative Director Dr. Michael Zins
Marketing and Strategy Prof. Dr. Michael Stelter

Site manager Hermsdorf Prof. Dr. Ingolf Voigt
Site manager Dresden-Klotzsche Dr. Christian Wunderlich
Site manager Arnstadt Dr. Roland Weidl

- Chemical and Structural Analysis
- Hardmetals and Cermets
- Thin-Film Technologies

Correlative Microscopy and Materials Data

Prof. Dr. Silke Christiansen

- Correlative Microscopy
- Correlative Spectroscopy

Energy Systems

Materials and Components

Dr. 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

Energy Storage Systems and Electrochemistry

Dr. Mareike Partsch

- Cell Design and Testing
- Recycling and Green Battery
- Process Development and Process Control

Freie Universität Berlin

Institute for Experimental Physics

Prof. Dr. Silke Christiansen

Friedrich Schiller University Jena

Institute for Technical Environmental Chemistry

Prof. Dr. Michael Stelter

Ernst Abbe University of Applied Sciences 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

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
- 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

Dr. Birgit Jost / 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