

March 24, 2025

9 am – 6 pm

A symposium of the Research and Transfer Center of Bioactive Matter

b-ACT<sup>matter</sup>

# INNOVATIVE BIO-BASED MATERIALS AND TECHNOLOGIES:

## Shaping Future Regional Development and Perspectives

The Research and Transfer Center for Bioactive Matter kindly invites you to engage in a dynamic discussion centered on bio-based materials and cutting-edge technologies for novel applications.

### Key Topics

1. New methodologies and principles in bioactive matter and AI for advancing sustainable technologies
2. Technology transfer in natural and life sciences, with a focus on fostering innovation and start-ups in these fields
3. Chemical production within a circular economy framework
4. Resource management and sustainability, including critical areas such as energy, feed, and water
5. Sensor technologies for applications in medicine and environmental monitoring

### VENUE

BIO CITY LEIPZIG

Centre for Biotechnology and Biomedicine (BBZ)

Leipzig University

Deutscher Platz 5, 04103 Leipzig

### THANKS TO OUR SPONSORS

**BIOTOPA**

Zentrum für Angewandte Aquakultur & Bioökonomie

The STARK project 46SKD023X "Establishment of an interfaculty center for bioactive matter (b-ACTmatter) at the University of Leipzig" is funded by the Federal Ministry for Economic Affairs and Climate Protection (BMWK) on the basis of a resolution of the German Bundestag and is co-financed from tax funds on the basis of the budget adopted by the Saxon State Parliament.



Supported by:



Federal Ministry for Economic Affairs and Energy

on the basis of a decision by the German Bundestag

# Agenda

## 9:00 am OPENING

### Prof. Dr. Jens-Karl Eilers

Leipzig University, Vice-Rector for Excellence Development:  
Research and Transfer

### Dr. Konstantin Pötschke

Saxon State Ministry for Regional Development (SMR)

### Dr. Lutz Bryja

State Ministry of Science and Cultural Affairs of Saxony  
(SMWK)

### Prof. Dr. Frank Cichos

Leipzig University, b-ACT<sup>matter</sup>

## 9:35 am TECHNOLOGY TRANSFER IN THE NATURAL AND LIFE SCIENCES

Knowledge and technology transfer to  
encourage a regional bioeconomy

### Dr. Felix Krujatz

biotopa GmbH

What happens after the company is  
founded?

### André Hofmann

biosaxony e.V. (leap:up GmbH)

## 10:05 am BREAK

## 10:35 am NEW APPROACHES IN BIOACTIVE MATTER AND ARTIFICIAL INTELLIGENCE FOR SUSTAINABLE TECHNOLOGIES

Engineered viscoelasticity in stem cell  
microenvironments

### Prof. Dr. Manuel Salmeron-Sanchez

University of Glasgow / Universitat de Barcelona

How can deep learning enhance microscopy?

### Prof. Dr. Giovanni Volpe

University of Gothenburg

Building Intelligence with AI and Simulation  
for Sustainable Innovation in Chemical and Life  
Sciences

### Prahallad CR Rao, and

### Dr. Jagannath Rao Marati

Bosch Digital Twin Industries

## 12:05 pm LUNCH BREAK

## 1:00 am RESOURCES – ENERGY, FOOD, WATER

tba

### Dr. Rohan Karande

Leipzig University, b-ACT<sup>matter</sup>

Barriers to the transition to circular  
bio-based economy: Findings from an  
industry perspective

### Dr. Elina Dace

University of Latvia

## Poplar fiber based nonwovens

### Prof. Dr. Alper Gurarslan

Technical University of Istanbul

## A Technology Platform for the Production of Meat Alternatives

### Washington Logroño

Pacifico Biolabs GmbH

## Climate Neutrality – Brief Introductio

### Janine Henkel

Saxon State Office for Environment, Agriculture and  
Geology (LfULG)

## 2:25 pm CHEMICAL PRODUCTION AND CIRCULAR ECONOMY

Electrochemical synthesis as gearwheel  
in biorefineries

### Prof. Dr. Falk Harnisch

Helmholtz Centre for Environmental Research (UFZ)

Rethinking Plastics for a Circular  
Economy

### Dr. Manuel Häußler

Center for the Transformation of Chemistry (CTC)

Sustainable conversion of CO<sub>2</sub> into valuable  
products by algal biofilm reactors

### Benjamin Herzog

Solaga GmbH

Enzymatic Plastic Recycling: Bridging the Path  
Towards a Closed-Loop Economy

### Dr. Christian Sonnendecker

Leipzig University, b-ACT<sup>matter</sup> / ESTER Biotech

## 3:25 pm BREAK

## 3:55 pm SENSORS FOR MEDICINE AND THE ENVIRONMENT

Sensing of Lipid Membranes using  
DNA Origami Nanotechnology

### Dr. Henri Franquelim

Leipzig University, b-ACT<sup>matter</sup>

Biomolecular Interaction Analysis –  
From Small Molecules to Cells

### Prof. Dr. Ulrich Rant

Kurt Schwabe Institute for Measurement and  
Sensor Technology Meinsberg e.V.

Start-up Project SCPsense –  
Hydrogel Microparticle Biosensor for  
Environmental Monitoring

### Veronika Riedl

Leipzig University, b-ACT<sup>matter</sup>

## 4:45 pm CLOSING WORDS

### Prof. Dr. Tilo Pompe

Leipzig University, b-ACT<sup>matter</sup>

## 4:50 pm GET TOGETHER

## 6:00 pm FAREWELL

Register until 1 March 2025:

