

Fraunhofer Institute for Interfacial Engineering and Biotechnology IGB

Laboratory for Technical Biopolymers

# We develop materials for a sustainable future

www.igb.fraunhofer.de/en/ltbp

# Are you looking for a partner to develop more sustainable products?

We would be delighted to support you in analyzing your biogenic raw and residual materials and developing new materials for your applications.

### The Laboratory for Technical Biopolymers

The Laboratory for Technical Biopolymers (LTBP) is a project funded by the Free State of Bavaria, which supports companies, especially SMEs, on their way to biobased and biodegradable plastic products. The aim is to establish innovative and sustainable materials as well as resource-saving processes in order to reduce the emission of carbon dioxide and the pollution of our environment by plastic waste.

### Creating value in a circular economy

When developing new materials and products, researchers at the Laboratory for Technical Biopolymers take a close look at the whole product life cycle including not only the technical performance of the products but also their biodegradability or recyclability. Thereby, a path from natural materials to sophisticated technical applications and back to nature is targeted.

Sponsored by

Bavarian Ministry of Economic Affairs, Regional Development and Energy



# LTBP – your partner for biopolymers

#### **Research and development**

- Selection of suitable biogenic raw and residual materials
- Development of biobased monomers and additives
- Screening of polymerization methods, small-scale polymerization
- Functionalization of natural biopolymers
- Compounding in gram scale and material processing
- Development of composites with biobased materials
- Custom synthesis
- Consideration of end-of-life scenarios in product development

#### Characterization

- Chemical analysis and structure elucidation
- Polymer analysis
- Material testing
- Contract analysis

#### Cooperation for research projects

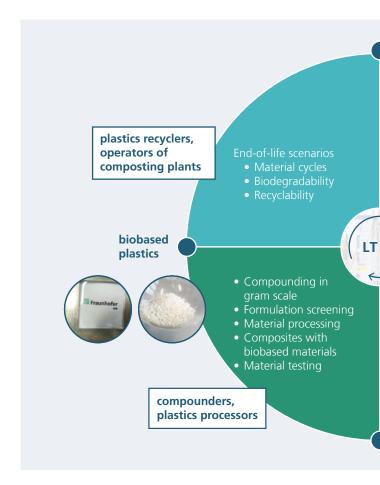
- Identification of suitable funding programs (national and European)
- Support by the formation of a project consortium and by communication with possible partners
- Support with project applications
- Communications with funding authorities

#### Equipment

We have extensive equipment for organic synthesis, polymer synthesis, plastics processing, analytics and materials testing.

Detailed information about our technical equipment can be found on our website.

# A holistic view on bioplastics







### biomass

BP



- Identification and chemical modification of suitable biogenic raw and residual materials
- Chemical analysis
- Structure elucidation

producers of raw and residual materials

> biobased monomers and additives

chemical industry

- Screening of polymerization method
- Small-scale polymerization
- Functionalization of natural biopolymers (chitin etc.)
- Polymer analysis

#### biobased polymers





## Contact

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#### **Further information**



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