



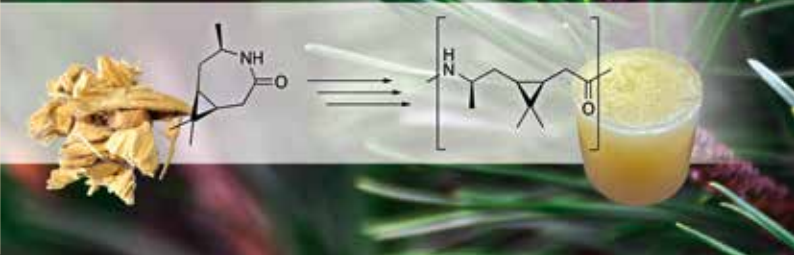
Fraunhofer

IGB

FRAUNHOFER INSTITUTE FOR INTERFACIAL
ENGINEERING AND BIOTECHNOLOGY IGB

LABORATORY FOR TECHNICAL BIOPOLYMERS

SUSTAINABLE PRODUCTS AND MATERIALS FROM BIOMASS





OFFER



We support you in ...

Research and development

- Identification of suitable raw materials
- Custom synthesis and screening
- Small scale polymerization
- Technology and feasibility studies

Characterization

- Analysis
- Substance and material testing
- Damage analysis and assessment
- Biocompatibility

End-of-life scenarios

- Recycling
- Circular economy
- Biodegradability
- Analysis of microplastics

Collaborative research

- Identification of suitable funding scenarios
- Support by project applications
- Communication with grant authorities and partners



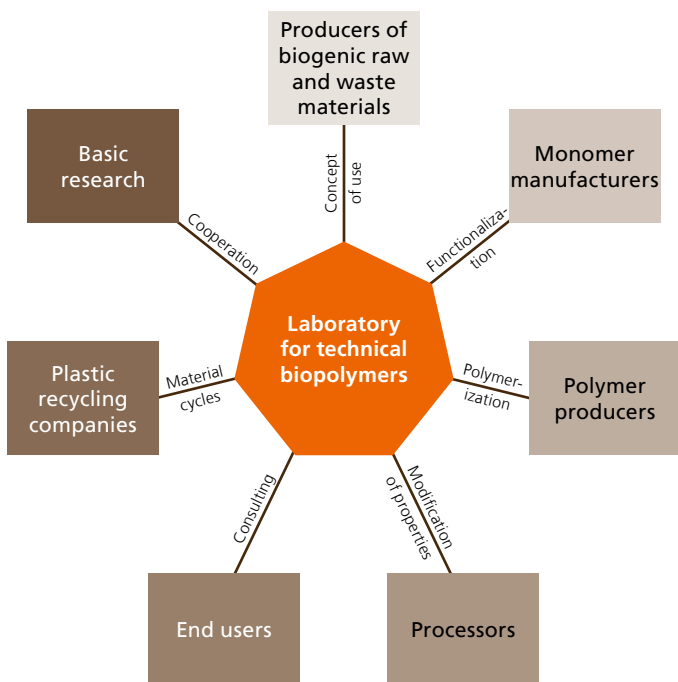
LABORATORY FOR TECHNICAL BIOPOLYMERS

DEVELOPMENT – MATERIAL CYCLES – TROUBLE SHOOTING

The Laboratory for Technical Biopolymers is a project funded by the State of Bavaria and serves to support companies, especially SMEs, on their way to innovative and sustainable substances and materials as well as to resource-efficient processes. At Fraunhofer IGB, specialists from chemistry, biology and process engineering are working together on the project.

Our goal is the development of new bioplastics. Research focuses on the production of monomer building blocks from biomass, polymerization, material development and end-of-life scenarios. In this way, a cycle can be established and realized from the natural substance via the use of the manufactured materials back to nature.

YOUR PARTNER ON ALL MATTERS RELATED TO BIOPOLYMERS



Laboratory for Technical Biopolymers:

hub for comprehensive innovations in the polymer world



EQUIPMENT AND SERVICES

- Synthesis (up to 100 L)
- Polymerization (laboratory scale)
- Chromatography (GC-MS/HPLC-MS/GPC)
- Structure determination (NMR/IR/XRD)
- X-ray fluorescence analysis
- Microscopy (REM/TEM)
- Thermal analysis (DSC/TGA with sorption)
- TOC analyzer
- Physisorption
- Solvent viscosimetry
- Density determination
- Extrusion (mini-compounding)
- Injection molding with piston and screw plastification
- Cutting mill
- Drying oven

We support you in the fields of

- Synthesis
- Polymer and process engineering
- Materials science
- Biochemistry and biotechnology
- Chemo, bio and electro catalysis

CONTACT

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