

## SERVICE

### Textile testing services

- > Chemical and physico-chemical tests on degradable and non-degradable polymers and medical products manufactured from them
- > Biological tests: Cell culture and tissue culture technology of animal and human cells, tissue engineering, microbiology and hygiene
- > Determination of material properties of fibers, yarns and textile fabrics and composites
- > Simulation
- > Computer tomography for problem analysis
- > Testing of textiles with regard to skin tolerance for textiles worn close to the skin

The labs have been accredited for numerous test methods according to DIN EN ISO/IEC 17025:2005 (DAkkS).

### Manufacturing of prototypes in the mechanical workshops of the DITF

Experienced qualified personnel create tangible models with modern technology and efficient software from research ideas.

### Pilot plant for the manufacture of prototypes and small-scale production

A professional machine park combined with well-equipped technical installations guarantee ideal conditions for custom-made orders. Scientists at the DITF implement and evaluate theoretical concepts in the pilot plant.



### ITV Denkendorf Produktservice GmbH

Focus lies on the manufacturing of medical precursors for industrial partners in cleanrooms. Development of new products for medical textiles and technical textiles within the scope of contract research.

## NETWORK AND PARTNERS

An important factor of success for the DITF is the application of a close cooperative structure of regional, national, and international networks.

Due to three chairs and two professorships, the DITF are closely connected to the University of Stuttgart and Reutlingen University.

In addition, many cooperations with nationally and internationally renowned institutions of higher education and industrial and non-university related R&D institutions.



The German Institutes of Textile and Fiber Research (DITF) Denkendorf are a foundation under public law supervised by the Ministry of Economic Affairs, Labour and Housing Baden-Württemberg.

### Managing Board:

Prof. Dr. rer. nat. Michael R. Buchmeiser  
Prof. Dr.-Ing. Götz T. Gresser  
Peter Steiger

Deutsche Institute für Textil- und Faserforschung Denkendorf (DITF)  
Koerschtalstraße 26 | D-73770 Denkendorf  
T +49(0)711 93 40-0 | F +49(0)711 93 40-297  
info@ditf.de | www.ditf.de

# DITF

DEUTSCHE INSTITUTE FÜR  
TEXTIL+FASERFORSCHUNG

RESEARCH FROM MOLECULE TO PRODUCT

# EUROPE'S LARGEST TEXTILE RESEARCH CENTER

## TEXTILE INNOVATIONS FOR PRACTICE



The German Institutes of Textile and Fiber Research Denkendorf (DITF) represent Europe's largest textile research center.

With their institutes and research areas,

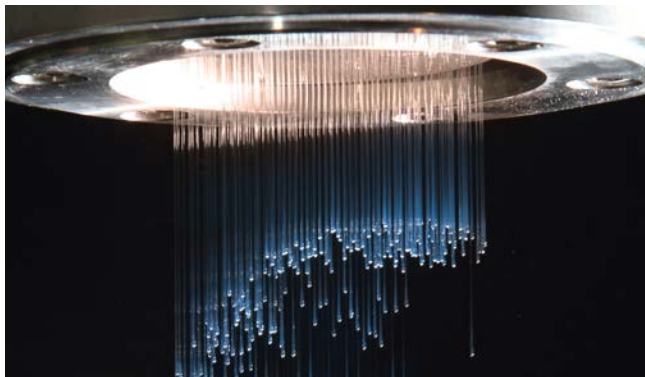
the DITF are the only textile research institution worldwide that span the entire textiles production and value-added chain:

- > from molecule to product
- > from idea to market-friendly solution
- > as a reliable commercial partner

### Facts and Figures:

- > founded in 1921
- > approx. 300 employees
- > 30 million turnover
- > 25,000 m<sup>2</sup> research and production area

The DITF conduct interdisciplinary research and development projects involving chemistry, material sciences, process technology, material technology, mechanical engineering and plant design and management.



## FIELDS OF APPLICATION

### Construction and architecture

Building materials with textile components, fiber-based materials

### Health and Care

Textile implants and regenerative medicine, wound treatment products, diagnostic and monitoring systems, smart textiles, drug delivery and therapeutic systems

### Energy, environment and resource efficiency

Energy and environmental technology e.g. water treatment, aquatic and landscape conservation, recycling of high-performance fibers, smart energy management

### Mobility

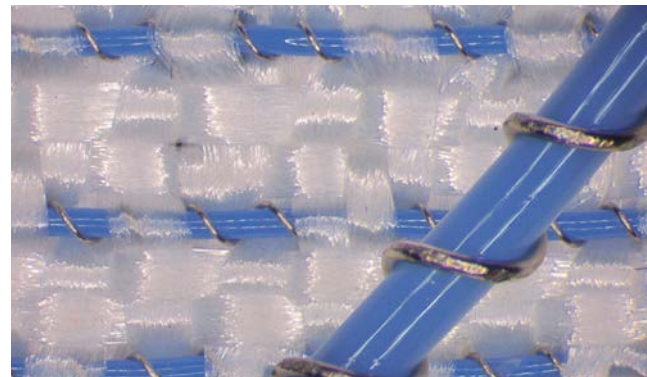
Fiber reinforced structures and products e.g. for the automotive industry, aerospace technology, architecture

### Production and Process Engineering

Process engineering and process technology for higher productivity, quality and energy saving

### Clothing and home textiles

Functional clothing, climate-controlled textiles, illuminated textiles, acoustic textiles, smart textiles



## COMPETENCES

### Polymer Synthesis

Polymers for fibers and matrices, precursors for carbon fibers, ceramic fibers, cellulose and biopolymers

### Fibers and Yarns

Wet spinning technologies, dry spinning technologies, melt spinning technologies, bicomponent spinning technology, texturizing and drawing, nonwoven technologies, staple fiber technologies, winding technologies

### Fabrics and Structures

Spacer technologies, weaving, braiding, knitting, joining technologies, tissue engineering, membranes, braiding pultrusion, structure winding

### Functionalization

Sol-Gel Technology, dyeing and finishing, printing technologies, nanotechnologies, physical and chemical methods, coating, minimal application technologies, integration of electronic components, development of sensory and actuator properties

### Industry 4.0

Modeling, virtualization, value-added systems, business models, digital engineering, intelligent and sustainable production, e-learning, blended learning

