77. BHT - FREIBERGER UNIVERSITÄTSFORUM 2026
FREIBERG FORUM BIOBASED MATERIALS

Date:
08.06.2026

Location:
SPQ-1302, Prüferstraße 4, 1. Obergeschoss, 09599 Freiberg

Language:
English

Lead:
Jun.-Prof. Dr. rer. nat. Linus Stegbauer

Contact person:
Dr. Hendryk Würfel
Institut für Nanoskalige und Biobasierte Materialien
Zeunerstr. 3| 09599 Freiberg
+49 3731 39-3161
linus.stegbauer@esm.tu-freiberg.de

Montag, 8. Juni 2026	
8.30 - 9:00 Uhr	*ANKUNFT*
9.00 - 9.05 Uhr	**Welcome** J.-Prof. Linus Stegbauer, Biogenic Engineering Materials, TU Freiberg
9.05 - 9.30 Uhr	**Mycelium Engineering Materials as substrates for electronics.** J.-Prof. Linus Stegbauer, Biogenic Engineering Materials, TU Freiberg
9.30 - 10.00 Uhr	**Cellulose-containing materials as precursors for electrochemical energy storage / Influence of the structure of cellulose-containing precursors on the pore structures and properties of carbon materials for electrochemical energy storage** Dr. Johanna Fischer, Chair of Wood and Plant Chemistry, TU Dresden
10.00 - 10.30 Uhr	***PAUSE***
10.30 - 11.00 Uhr	**Polysaccharides – basis for green products** Prof. Thomas Heinze, Posanova GmbH Centre of Excellence for Polysaccharide Research at the Thuringian Institute for Textile and Plastics Research, Jena
11.00 - 11.30 Uhr	**Surface Functionalization of Soft Matter *via* Solid-State Adsorption: From Molecular Interactions to Functional Material Design** Dr. Wenyang Xu, Sustainable and Bio-inspired Materials Max Planck Institute of Colloids and Interfaces
11.30 - 12.00 Uhr	**Collagen – An Animal based Biomaterial with exceptional properties** Prof. Michael Meyer, FILK Freiberg Institute
12.00 - 13.00 Uhr	***LUNCH***
13.00 - 13.15 Uhr	**Recent developments pertaining to the structural characterization of cellulosic materials using x-rays** Dr. Daniel Van Opdenbosch, Lehrstuhl für Biogene Polymere, TU München
13.15 - 13.30 Uhr	**Recreating Spider Cuticle: Tailoring Protein and Chitin Co-Assembly into Sustainable Bio-Inspired Materials** Yohaan Kudtarkar, B CUBE - Center for Molecular Bioengineering, TU Dresden
13.30 - 13.45 Uhr	**Transparent veneers** Winfried Barth, Chair of Wood and Plant Chemistry, TU Dresden
13.45 - 14.00 Uhr	**Use of the whole hemp plant as a source of raw materials for regional and sustainable building materials** L. Leimbrock, Institute of Thermal, Environmental and Resources' Process Engineering ITUN, TU Bergakademie Freiberg,

Stand: 27. Mai 2026

14.00 - 15.00 Uhr	***POSTER SESSION IN FOYER/LOBBY***
15.00 - 15.30 Uhr	**Unlocking the Potential of Microalgae Derived Biosilica in Material Science** Dr. Cathleen Oschatz INNOVENT e.V. Technologieentwicklung
15.30 - 16.00 Uhr	**Lignin-Derived Carbon Nanofibres at Scale for Electrochemical Applications** Petr Mikeš, Ph.D., Department of Physics, Technical University of Liberec
16:00 - 16.15 Uhr	**Development and Characterisation of recyclable bonding processes for bioplastics** Dr. Christin Schlesier, Günter-Köhler-Institut für Fügetechnik und Werkstoffprüfung GmbH, Jena
16:15 - 16.30 Uhr	**Metal-Organic Framework (MIL-53 Al) Functionalized Bamboo-Derived Hydrochars for Fluoride Removal in Aqueous Media** Veronica A. Okello, Department of Physical Sciences, Machakos University, Kenya
16.30 - 17.00 Uhr	**From Emulsion Droplets to Green Functional Materials** Dr. Katja Heise, Green Functional Materials, TU Freiberg

Poster:

Goldee Thoidingjam: Long-term stability of natural fiber insulation material: Establishing aging protocols and open research questions

E. F. Loayza Mora: Long-Term High-Throughput Microalgal Cell Culture at a Scale-Down Level

Wenqian Dang: Casting of Ultra-Porous Alginate/Cellulose Nanocrystal Membranes: Fabrication and Characterization

Leon Nowack: Templating Reactive Materials with Heat, Water, Oil and Polysaccharides

Laura Hohlfeld: One Polymer, Various Architectures: Thermoresponsive Methylcellulose Across Soft and Structured Materials

Jialin Tian: Phase Separation and Directed Assembly of Chitin Nanocrystals into Liquid Crystalline Films

Matthias Pfaff: Natural Resins as Bio-based Binders for Lignocellulosic Composite Materials

Hans Lesny: Impact of cellulose nanocrystal surface charge on the formation and stabilization of metal nanoparticles

Dirk Damaschke: Fungal Mycelium from Aspergillus niger for Technical Materials: Production and Coating

Heidi Englberger: Cellulose Derivative-Based Optical Fibers Produced by Melt-Spinning

Anthony Gerhardt: Fabrication of films based on pectin derived from apple pomace for packaging applications

Aidin Nejadsalim: Electrospinning of Nanocellulose-stabilized Gelatin/Dextran Water-in-Water Emulsions: Toward Structured and Stabilized Biopolymer Nanofibers