

THE Congress – NATURAL**fiber**EXTRACTION

Industrial processing of renewable raw and residual materials
Focus: Natural fiber extraction and biopolymers

OCTOBER 09 2024
LOOK 21 STUTTGART

Event organizers:



Funded by



Greetings to you all

We cordially invite you to the 2nd NATURALfiberEXTRACTION Congress on October 09, 2024. Be our guest at Look 21, currently the most modern event location in the heart of Stuttgart. After a brilliant start to the conference 2 years ago, we would like to meet with you again this year on the topic of natural fibers and biopolymers.

In order to achieve the minimum climate targets, there is an urgent need to develop sustainable CO₂-neutral materials while reducing energy consumption. Especially for natural fibers and biopolymers, the corresponding economic industrial processing methods in regional cycles must be developed, to reduce both costs and the environmental impact of transportation.

Finally, environmental pollution, e. g. caused by microplastics, has to be avoided. Increasing deforestation worldwide contributes to about 12 - 15 % of greenhouse gas emissions. In addition to reforestation, the cultivation of fast-growing annual plants can contribute significantly to reduce CO₂-concentrations.

Currently, there are many different machinery technologies on the market worldwide to process natural fibers. The NATURALfiberEXTRACTION Congress aims to create a platform for all stakeholders involved in the supply chain – from farmers to users – to get an overview of the different technologies, to share experiences and to provide a decision support for building an effective, economic, and reliable supply chain for natural fibers and biopolymers.

The NATURALfiberEXTRACTION Congress intends to promote sustainable business, showing solutions to effectively process plant-based raw materials and residues into fibers for clothing, home textiles and technical applications. The two focuses of the congress are on industrialized fiber extraction, as this is where fiber and textile technology know-how is most needed and on the industrial use of biopolymers to create a real alternative to fossil polymers.

Companies and institutes will present their expertise in an accompanying exhibition which offers the opportunity for dialog. We look forward to welcoming you to the congress in Stuttgart.

Sadijah Steibli
AFBW e. V.

Prof. Dr.-Ing. Götz T. Gresser
Board of Directors DITF Denkendorf

Program

OPENING SESSION

Host: Prof. Dr.-Ing. Markus Milwich, DITF Denkendorf

- 08.30** Check-In, Welcome Coffee
- 09.00** Opening
*Sadijah Steibli, Allianz Faserbasierte Werkstoffe e.V. (AFBW)
PD Dr. Thomas Stegmaier, DITF Denkendorf
Prof. Dr.-Ing. Markus Milwich, DITF Denkendorf*
- 09.05** Welcome and Introduction
Minister Peter Hauk MdL, Ministry of Food, Rural Areas and Consumer Protection of Baden-Württemberg
- 09.15** Introduction to the project NaturalFIBER and Biopolymer BW
*Sadijah Steibli, Allianz Faserbasierte Werkstoffe e.V. (AFBW)
PD Dr. Thomas Stegmaier, DITF Denkendorf
Prof. Dr.-Ing. Markus Milwich, DITF Denkendorf*
- 09.20** Circular Bioeconomy in Baden-Württemberg: A perspective on natural fibers
Ref. 44 Bioeconomy, Ministry of Food, Rural Areas and Consumer Protection, Baden-Württemberg
- 09.30** Biobased Performance – Products based on unidirectional tapes from hemp fibers
Lovis Kneisel, FUSE GmbH
- 09.55** Requirements for high-quality hemp textiles
Robert Hertel, HempAge AG
- 10.20** BREAK – Visit the exhibition

SESSION 1

Host: PD Dr.-Ing. Thomas Stegmaier, DITF Denkendorf

- 10.50** HEMP FIBRE: from field to yarn
Maciej Kowalski, Kombinat Konopny
- 11.15** A sneak peek to industrial hemp processing
Alex Teodorescu, Cretes
- 11.40** Industrial Hemp Decortication for Nonwovens, geotextiles, bio plastics, insulation products, and the shive products for building, animal bedding
*Dan Matthews, Macart Textiles (Machinery) Ltd
Caroline Matthews, Tatham Ltd*
- 12.05** HD1300TEXTILE: the new generation of hemp decorticator designed for competitive and profitable local hemp value chains. update and perspectives
Pierre Amadiou, Hemp-Act SAS
- 12.30** LUNCH – Visit the exhibition

MATERIAL SLAM

Host: Prof. Dr.-Ing. Markus Milwich, DITF Denkendorf

- 13.30** Hemp Based Sandwich-Panels
*Valentine Troi, Grownlab – Universität Innsbruck
Klaus Dippon, Bio-Composites And More GmbH*
- 13.38** Development and construction of a process chain from the extraction of hemp fibres to the natural fibre-reinforced component – A project summary
Claudia Möhl, DITF Denkendorf
- 13.46** N.N.
N.N.
- 13.54** WDBSD TX® Technikum Laubholz
Dr. Anjum Saleem, WDBSD TX® Technikum Laubholz

Visit our exciting natural fiber and biopolymers table fair.

Program

SESSION 2A – ECOLOGY

Host: Prof. Dr.-Ing. Markus Milwich, DITF Denkendorf

- 14.15** Hemp textiles as sustainable alternative for Hotel industry
Gordana Stevancevic, Steva Hemp Srls
- 14.40** Potential use of agricultural residues using the Lycocell process
Heinrich Menning, Thüringisches Institut für Textil- und Kunststoff-Forschung (TITK) e.V.
- 15.05** Circular Economy (due to a versatile crop) with decentral solutions
Matthias Schwarz, Rottal Hanf GmbH
- 15.30** BREAK – Visit the exhibition

SESSION 3

Host: PD Dr.-Ing. Thomas Stegmaier, DITF Denkendorf

- 15.55** Perpetually Renewable
*Michael Marchuk, Ukrainian Hemp®
First Hemp Corporation LLC*
- 16.20** Presentation of Groz-Beckert's staple fiber needling line and the possibility of processing natural fibers
Lisa Seifriz, Bruno Kuhl, Groz-Beckert KG
- 16.45**

SESSION 2B – FIBER EXTRACTION AND PROCESSING

Host: Valentine Troi, Grownlab – Universität Innsbruck

- 14.15** Towards the industrial development of the water retting technology: the WATER RETTING 4.0 project
Cristiana Moliterni, Council for Agricultural research and Economics – Research Centre for Genomics & Bioinformatics – Italy
- 14.40** BIO-RETTIN an efficient enzymatic processing of natural renewable bast fibre resources – tool of complex utilization of crop
Jan Marek, Martin Kyselka, INOTEX spol. s r.o.
- 15.05** Valorization of natural fibre extraction by-products
*Francesco Faralli, CORMATEX S.R.L.
Fatih Bağkesen, FBK Technologies GmbH & Co. KG*
- 15.30** BREAK – Visit the exhibition

- 16.45** Hemp for high-value textile applications: progress on upscaling cultivation, harvesting and processing on the flax scutching line
Hanne Pappaert, Research center AgroFoodNature, University of Applied Sciences and Arts Ghent
- 17.10** Robotic Flax Construction – Digital enabling technology for the use of rapidly renewable building materials in architecture
Moritz Dörstelmann, Karlsruhe Institute of Technology (KIT) – Department of Architecture Institute of Design and Building Technology (IEB)

SESSION 2C – BIOPOLYMERS

Host: PD Dr.-Ing. Thomas Stegmaier, DITF Denkendorf

- 14.15** The Potentials of Biopolymers: State of the Art and Future Perspectives
PD Dr. rer. nat. Malte Winnacker, DITF Denkendorf
- 14.40** Use of bio-based raw materials in epoxy resins
Helge von der Linden, M.u.H. von der Linden GmbH
- 15.05** Accelerate change with biophilic design
Patrik Sauter, spek DESIGN
- 15.30** BREAK – Visit the exhibition

CLOSING SESSION

- 17.35** Closing Words
*Sadijah Steibli, Allianz Faserbasierte Werkstoffe e.V. (AFBW)
PD Dr. Thomas Stegmaier, DITF Denkendorf
Prof. Dr.-Ing. Markus Milwich, DITF Denkendorf*
- 17.45** Get together, Networking, Finger-Food, Visit the exhibition

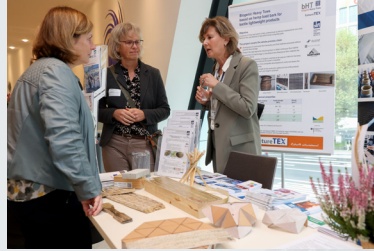
Partners



Exhibition

The event will be accompanied by an exhibition from the fields of technology, product and material.

We look forward to great networking breaks with you!



Congress information - registration

Location

Congress: Look 21, Heilbronner Str. 51-55, 70191 Stuttgart

Further information

<https://www.afbw.eu/projekte/natural-fiber-extraction/>

Contact

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Registration

Registration until 30 September 2024

<https://www.afbw.eu/projekte/natural-fiber-extraction/>

Participation fees

Congress, Daily regular price: 170 EUR (students: 70 EUR)

Congress, Daily price for AFBW-members: 140 EUR

All speakers (one person) and partners (one person) have free entry.

Organizers



When it comes to fibers, the Allianz Faserbasierte Werkstoffe Baden-Württemberg e. V. is the first point of contact in Baden-Württemberg. The cross-industry technology network promotes cooperation between companies, universities and research institutes along the entire value chain of fiber-based materials, from traditional textiles to functional fibers. The cross-sectoral network includes projects from the fields of architecture & construction, fiber composites, medicine & life science, mobility, protective clothing, environment & energy.



The DITF form the largest textile research center in Europe with more than 250 scientific and technical staff. As the world's only textile research facility and covering an area of more than 25,000 m², the DITF work right across the textile production and value chains. Since 1921, they have been across all the major fields within textiles. They are among the leading research institutions worldwide.

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