

# THE Congress – NATURAL**fiber**EXTRACTION

Industrial processing of renewable raw and residual materials  
Focus: Fiber extraction of natural fibers



**OCTOBER 26 2022**  
**LOOK 21 STUTTGART**  
**WITH PRE-EVENT**

Event organizers:



Gefördert  
durch



# Greetings to you all

We cordially invite you to the 1st NATURALfiberEXTRACTION Congress on October 26, 2022. Be our guest at Look 21, currently the most modern event location in the heart of Stuttgart. At the premiere event, we will focus on the topic of Industrial processing of renewable raw and residual materials.

To achieve the minimum climate targets, there is an urgent need to develop sustainable CO<sub>2</sub>-neutral materials and to reduce energy consumption at once. Especially for natural fibers, 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 CO<sub>2</sub> 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 fibres.

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 focus of the congress is on industrialized fiber extraction, as this is where fiber and textile technology know-how is most needed.

In an accompanying exhibition and in a start-up and material slam companies and institutes present their competencies and offer opportunity for dialog. Selected start-ups will also give you the opportunity to get to know young companies and their innovative ideas and products. We look forward to welcoming you to the congress in Stuttgart.

**Ulrike Möller**  
Managing Director AFBW e. V.

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

# Program

**08.30** Welcome coffee

## OPENING SESSION

*Chairman: PD Dr.-Ing. Thomas Stegmaier, DITF Denkendorf*

**09.00** Opening

*Ulrike Möller, Allianz Faserbasierte Werkstoffe e.V. (AFBW)  
PD Dr. Thomas Stegmaier, DITF Denkendorf*

**09.10** Greetings

*Alexander Mündel, head of unit 44 – Bioeconomy, Ministry of Food, Rural Affairs and Consumer Protection of Baden-Württemberg*

**09.30** The role of natural fibers in a circular sustainable bioeconomy

*Prof. Dr. Ralf Kindervater, BIOPRO Baden-Württemberg GmbH*

**09.50** Alpine hemp 360° – Model for the future or niche romance?

*Valentine Troi, Standortagentur Tirol, alpine Kreislaufwirtschaft/ArgeAlp, Austria*

**10.15** BREAK – Visit the exhibition

## INDUSTRIAL PROCESSING OF RENEWABLE RAW AND RESIDUAL MATERIALS

*Chairman: PD Dr.-Ing. Thomas Stegmaier, DITF Denkendorf*

**10.45** From Crop to Product – Processing and Applications of Natural Fibres. A review of passed up opportunities and chances for the future  
*Dipl. Ing. (FH) Kai Nebel, Reutlingen University*

**11.10** Mechanical decortication of natural fibers (from straw to fiber)

*Dr. Jörg Morgner, Temafa Maschinenfabrik GmbH*

**11.35** Fiber recovery with the sustainable biorefining process from the LaNDER<sup>3</sup> project at Zittau University of Applied Sciences

*Judit Harsányi, Dr. Marzena Poraj-Kobielska, Matthias Tirsch, Zittau University of Applied Sciences*

**11.50** Water retting process innovation for a circular and sustainable hemp-based bioeconomy

*Vita Maria Cristiana Moliterni, Council for Agricultural research and Economics – Research Centre for Genomics & Bioinformatics – Italy*

**12.05** New plant based fibers from the residues of agricultural plants using the example of lavender

*Dr.-Ing. Jamal Sarsour, DITF Denkendorf*

**12.20** LUNCH – Visit the exhibition

## NATURAL FIBER EXTRACTION – PRACTICAL TESTIMONIALS

*Chairman: Prof. Dr.-Ing. Markus Milwich, DITF Denkendorf*

Session I:

**13.30** HEMP-ACT, long hemp fibre cutting edge process  
*Pierre Amadiou, president, SAS Hemp-Act, France*

**13.45** Hemp fibre processing in Poland  
*Maciej Kowalski, Kombinat Konopny, Poland*

Session II:

**13.30** Empowering the farms in Europe with effective low-tech equipment for the harvesting and processing of industrial hemp as a multifunctional raw material for regional circular economy  
*Martin Klöti, Glaernisch Textile Cooperative, Switzerland; Tomáš Brabec, Apolo-Global, Czech Republic*

**13.45** 25 years of R&D for the initial preparation of native bast fiber plants  
*Dr. Hans-Jörg Gusovius, Natural fibre technologies, Leibniz-Institute for Agricultural Engineering and Bioeconomy (ATB); Robert Hertel, Bast und Faser GmbH*

# Program

## NATURAL FIBERS – IN PROGRESS

**14.00** Choose from:

### **Workshop 1:**

Cultivation and regional potentials

*Host: Prof. Simone Graeff-Hönninger, AG Anbausysteme und Modellierung Universität Hohenheim*

### **Workshop 2:**

Mini-Lab Mechanical, biotechnological and chemical extraction processes

*Host: Stefan Winklehner, Fortum Bio2X, Finland*

### **Workshop 3:**

Further processing of natural fibers into industrial raw material suitable for series production

*Host: Kay Kölzig, Sachsen-Leinen e.V.*

### **Workshop 4:**

Holistic utilization of biomass and integration into existing value chains

*Host: Dr. Manuel Clauss, Fibers365 GmbH*

**14.45** Presentation of the workshop results – Talk-O Mat panel discussion

*Host: Cord Grashorn, Linotech GmbH & Co.KG*

**15.15** Start-up and material slam:

- Cynthia® a new generation of natural fiber offering a wide range of applications

*Richard Thommeret, In-Between International, Belgium*

- Nettle fiber rethought

*PD Dr.-Ing. Thomas Stegmaier, DITF Denkendorf*

- Home compostable natural products – really?

*Egon Förster, Fiber Engineering GmbH*

- Novel waste fiber decortication by NatStruct

*Toni R. Frankenstein, NatStruct*

- Textile circular economy through chemical upcycling

*Reiner Mantsch, EEDEN GmbH*

**15.45** BREAK – Visit the exhibition

## QUO VADIS – WHAT DOES THE FUTURE HOLD?

**16.15** Fibers365 – CO<sub>2</sub>-neutral virgin non-wood fibers  
*Stefan Radlmayr, Fibers365 GmbH*

**16.35** Green rules – The use of natural fibre composites in motorsports

*Thomas von Löwis, Four Motors GmbH*

**17.00** Closing words

**17.10** APÉRO AND FINGER FOOD – Visit the exhibition

# Partners



Erstauslich,  
was Holz kann.



Please contact us if you would like to become a Congress Partner.

Contact: Julia Kottmann, [julia.kottmann@afbw.eu](mailto:julia.kottmann@afbw.eu)



# Exhibition

The event will be accompanied by an exhibition from the fields of technology, product, material and start-ups. Information on all exhibitors can be found here from September 15, 2022.

Please contact us if you are interested in an exhibition space. The exhibition spaces are limited. Places are allocated on a first-come, first-served basis.

Contact: Julia Kottmann, [julia.kottmann@afbw.eu](mailto:julia.kottmann@afbw.eu)

The exhibition will also present the results of the workshops.

**Welcome to the exhibition from fibers  
to biobased composites for motorsport**



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# Congress information - registration

## Location

Congress: Look 21, Heilbronner Str. 51-55, 70191 Stuttgart  
Pre-evening event to be announced

## Further information

[www.afbw.eu](http://www.afbw.eu)

## Contact

Julia Kottmann, AFBW  
Tel: + 49 (0)711 – 2 10 50 30  
[Julia.Kottmann@afbw.eu](mailto:Julia.Kottmann@afbw.eu)

## Registration

Registration until 19 October 2022  
<https://www.afbw.eu/aktuelles/veranstaltungen/details/the-congress-naturalfiberpulpung/>

## Participation fees

Congress, Daily price: 55 EUR (students: 25 EUR)  
Congress including pre-event: 85 EUR

(All speakers, partners with one person, presenters, slam participants have free entry for both days)

# 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 m<sup>2</sup>, 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.

# Sponsors of the AFBW



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AFBW project „Innovationsvorsprung für den Einsatz von nachwachsenden Rohstoffen durch die Etablierung eines Kongresses zum Thema Faseraufschluss von Naturfasern (THE Congress – NATURALfiberEXTRACTION)“ is funded by the Ministry of Food, Rural Affairs and Consumer Protection of BadenWürttemberg.