

20 March 2024

STFI Media Service

Techtextil 2024

STFI presents fascinating highlights of textile research from 23 to 26 April 2024 at Techtextil in Frankfurt am Main.

STFI will be presenting fascinating, high-end textile products and solutions of tomorrow at Techtextil 2024. The highlights from current research results and innovations provide an insight into the digitalisation of textile production, show applications for 3D printing and smart technical textiles and provide examples of particularly sustainably designed products as well as innovative approaches for protective and medical textiles.

The central highlight of STFI's presence at Techtextil is a robot system that demonstrates the automated processing of a bobbin frame on a small scale. The pick-and-place application now demonstrates camera-supported gripping of the bobbins. The robot is part of the STFI's "Textile Factory of the Future" which demonstrates automation solutions for the textile industry in a laboratory environment.

From the field of sustainable products and solutions, a sleeping bag with bio-based and therefore vegan filling material and a natural fibre-based composite element for furniture construction, in which LEDs and capacitive proximity sensors for contactless function control have been applied using embroidery technology, will be on show. Printed heating conductor structures demonstrate current research work for the e-mobility of the future, as the individually controllable seat and interior heating should ultimately reduce weight and save energy compared to conventional heating systems.

While a protective suit for special task forces protects against the dangers of a Molotov cocktail attack, a shin guard and a knee brace with patellar ring illustrate the process combination of 3D printing and UV LED cross-linking. Other highlights from lightweight textile construction include the rib of a vertical rudder of an Airbus A320 and a green snowboard made from recycled carbon fibres. In addition, a wetlaid system is currently being installed at the STFI. We will be providing information on the latest status at the trade fair. Are you interested in a co-operation? Please do not hesitate to contact us.

Visit us from 23-26 April 2024 in Frankfurt am Main in Hall 11.1, Stand E40.

STFI Media Contact

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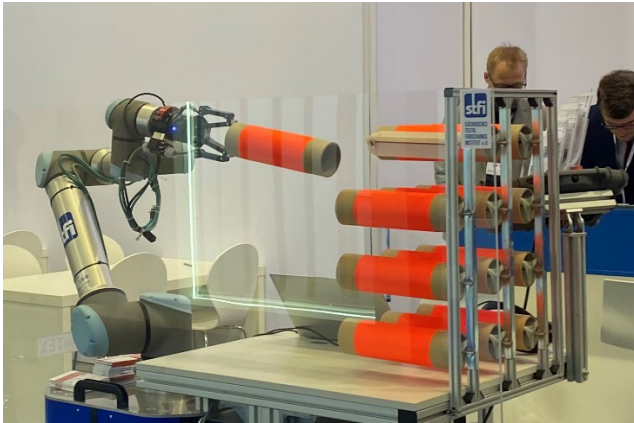
Sächsisches Textilforschungsinstitut e.V. (STFI)

Annaberger Str. 240

09125 Chemnitz | Germany

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*The robot system that demonstrates the automated processing of a bobbin frame on a small scale is part of the STFI's "Textile Factory of the Future".
Copyright: STFI*



*Innovative heat-resistant fabric offers emergency services protection against Molotov cocktail attacks.
Copyright: STFI*



*Green snowboard from silbaerg GmbH based on hemp fibres and recycled carbon fibres
Copyright: silbaerg GmbH*

About STFI

The STFI in Chemnitz has been an outstanding innovation partner and service provider for its customers since it was founded in 1992. Textile materials have shaped our activity profile ever since. The non-profit institute addresses technical and social issues through an open, interdisciplinary and reliable approach. At STFI, the main topics of research and development are technical textiles, nonwovens, lightweight textile engineering, functionalisation, recycling, digitalisation and Industry 4.0. Additionally, STFI gathered many years of experience and expertise in textile testing as well as certifying Personal Protective Equipment (PPE) and geosynthetics. In the future, the STFI will continue along this path and establish the Center for Sustainability in the next step. Under the name "STFI Academy", the STFI regularly offers modules and courses for specialist qualification and further training, designed to support employers in the textile industry. The STFI has been an affiliated institute of the Chemnitz University of Technology since 2006. Furthermore, it is actively involved as a member of the Zuse Association and the Saxon Industrial Research Association (SIG).

Further information: www.stfi.de

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