

## UNIVERSITY OF BORÅS



# The Swedish School of *textiles The home of scandinavian textiles*

The Swedish School of Textiles dates back to 1866 when the Technical School of Weaving was founded. Today, the Swedish School of Textiles offers some of the world's most prominent educational programmes in the fields of *design*, *technology*, and *management*.

Students have the opportunity to combine creativity, practice, and theory. In the modern machine halls, there are knitting machines, advanced 3D technology, textile printing facilities, and dyeing laboratories.

#### THE SWEDISH SCHOOL OF TEXTILES UNIVERSITY OF BORÅS

Design (TD)

Textile and fashion design Fashion design Textile Design Textile Interaction design

# Textile & Fashion

Textile management (TM) Marketing, fashion and sustainable consumption

Management of B2B relations

Textile Value Chain Management (TVCM)

Textile technology (TT)

Advanced textile structures

Polymeric E-textiles

Textile Material Technology

Textile and wearable sensing for P-health

# Advanced textile structures



	Sustainable textile fibre	Anders Person Behnaz Baghaei Felicia Syrén	May Kahoush Lena-Marie Jensen Linda Nydén
L.	Yarn structure	Lena-Marie Jenser Pontus Blomberg	n
1	Textile structure	Lena Berglin Joel Peterson Max Anderhell	Behnaz Baghaei Ida Ljungberg Anna Björkquist
0	Functionalisation	May Kahoush	Milad Assi
	Modelling	Vijay Kumar	Zheng Peixiao
2	Recycling	Anders Person May Kahoush	Katarina Lindström
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Textile Assembling

Anders Person



Spinning, non-woven, recycling lab Weaving lab Knitting lab Dyeing and Printing lab Finishing lab Sewing lab Sewing lab Digital media lab









## SMART TEXTILES



THE SWEDISH SCHOOL OF TEXTILES UNIVERSITY OF BORÅS

## **Science Park Borås**



THE NATIONAL PLATFORM

l just want to Wednesday 16



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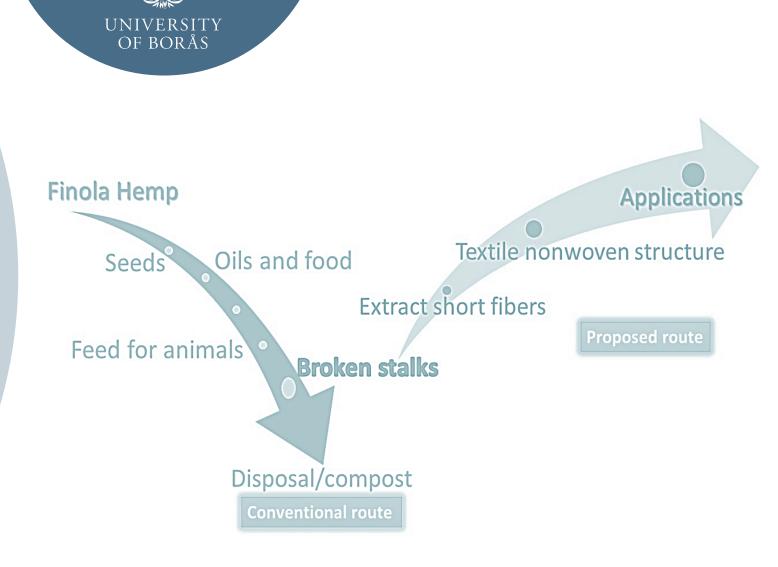
CIRCULARHUB





## Bio-based residual streams with potential in the technical textile industry

## Proof of concept

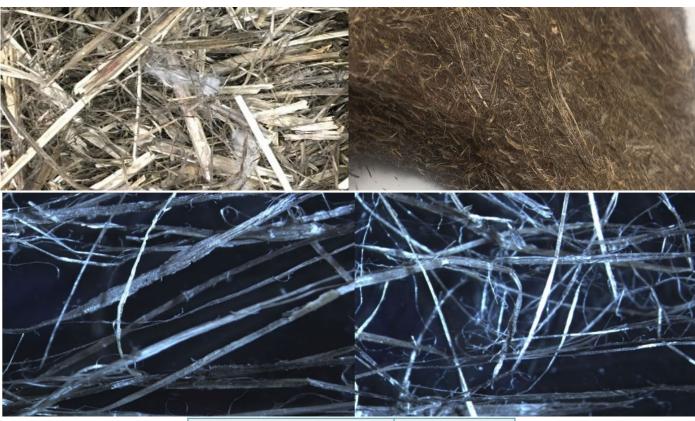






### Simon Kronberg, Ella Kärkkäinen, Åsa Älgbrant





Strength	77 N
Elongation	15 %
Length	<b>50 mm</b>
Diameter	33 µm



#### Sweden's Innovation Agency

#### Monika Nordling











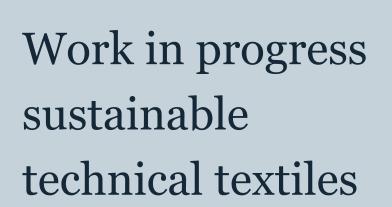


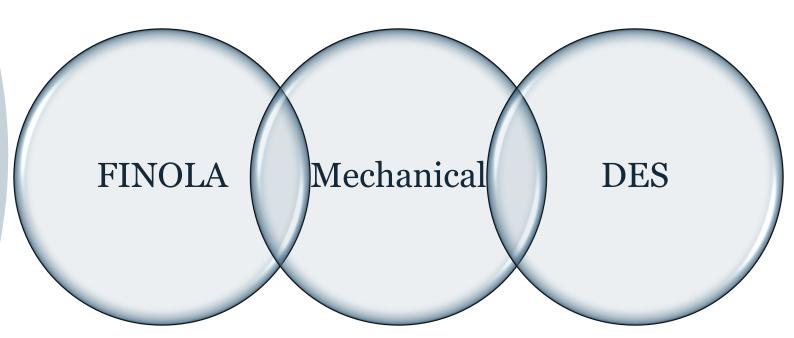


## May Kahoush







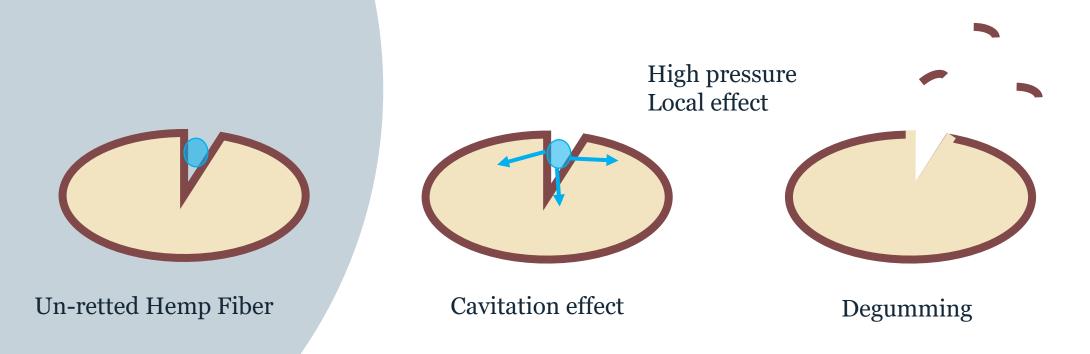


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#### Schematic representation of Ultrasonic treatment for fiber degumming

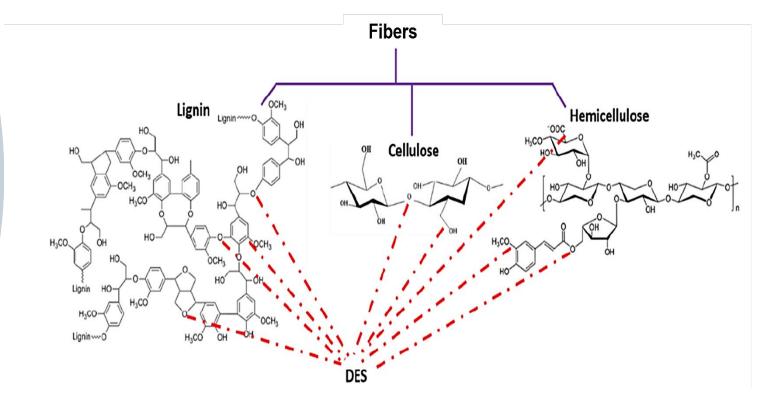


Similar effect will occur between fibers, which lead to their separation





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Break the ether bonds mainly Contribute to H-Bond breakage





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## Finola + PLA Needle punched Thermal bonding



