



**FREY
ZEIN**

**THE LEADING INGREDIENT BRAND FOR HIGH-PERFORMING
NATURAL MONO-MATERIALS**

... from premium to workwear & beyond.



Today, if you want performance in textiles, you wear petrochemicals.

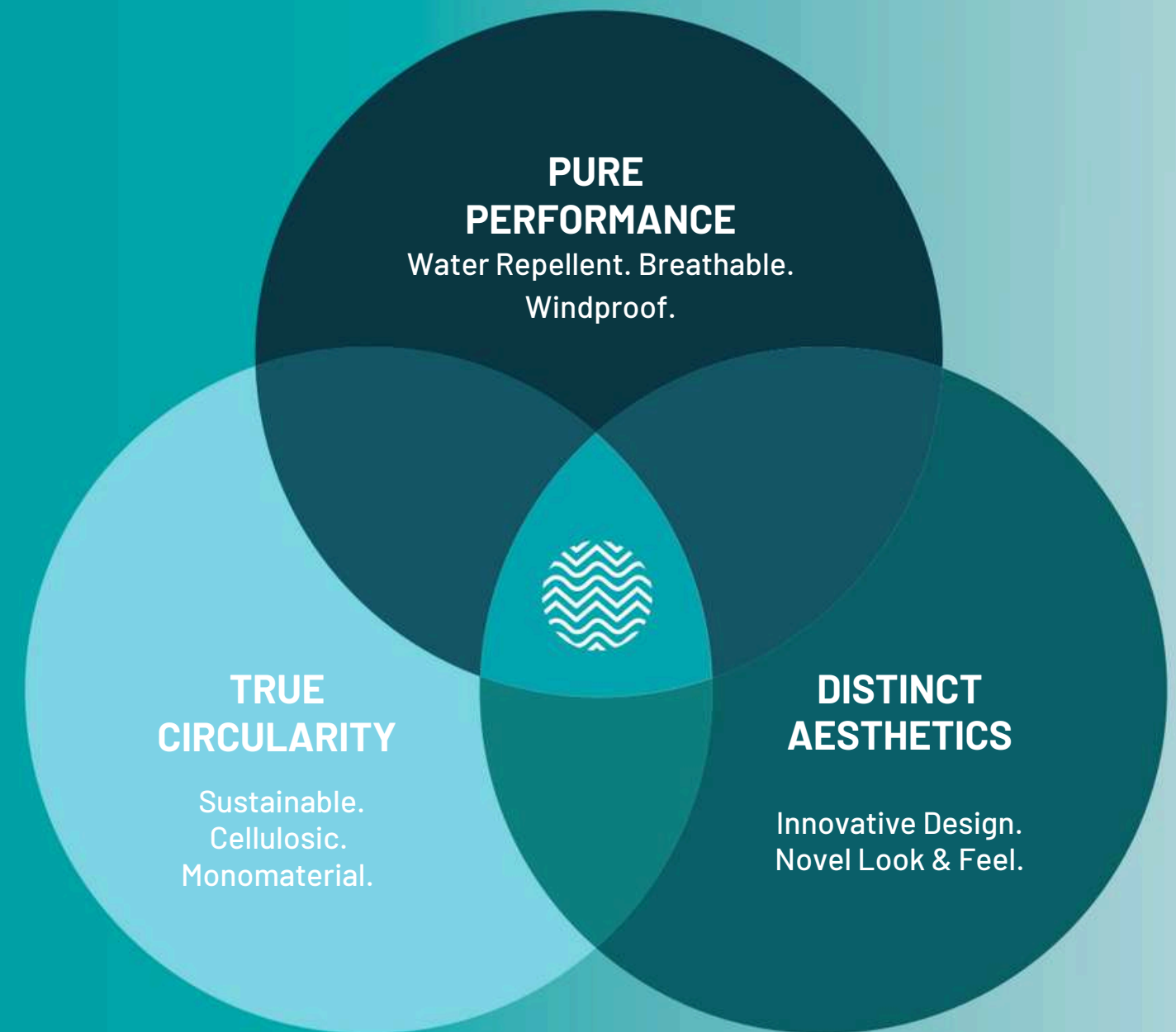
Over 60% of fabrics are fossil-based
— and in performance wear, it's nearly 100%.

This paradox is where FreyZein was born. Our name comes from the German expression Frei Sein: To Be Free.



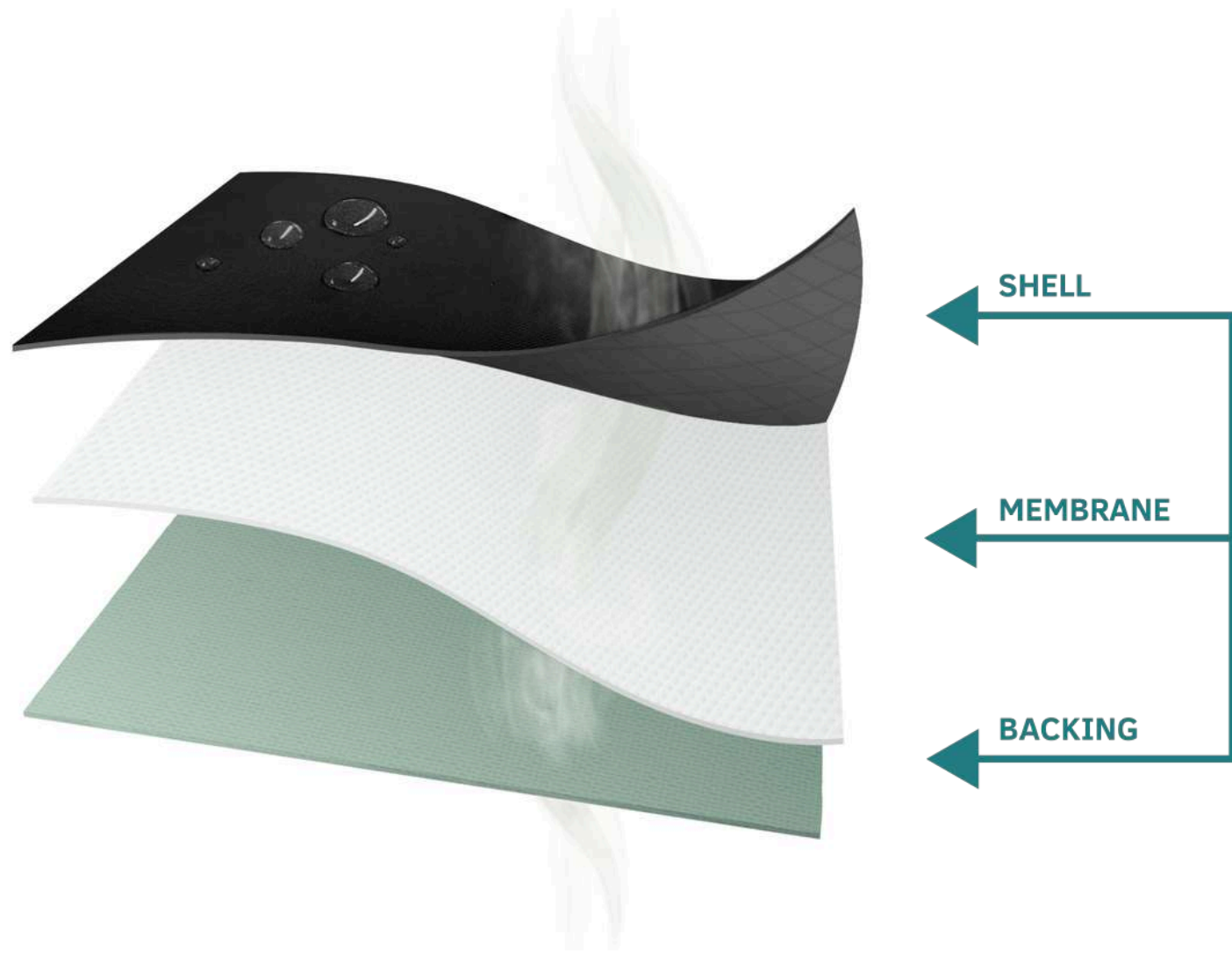
FreyZein is defining the next category of performance textiles: Fossil-free, monomaterial all engineered by nature.

Free to redefine performance. Free to choose a new path.



NATURAL FABRICS. REAL PERFORMANCE. ZERO FOSSIL PLASTICS.

FREYZEIN® TURNS NATURAL TEXTILES INTO WINDPROOF, BREATHABLE, WATER-REPELLENT PERFORMANCE FABRICS.



Performance Focus	Light Weight, Windproof & Water-repellent
Spray Testing	80
Air permeability	7.5 -10 mm/sec
Aesthetic Priority	Soft / Natural / Premium

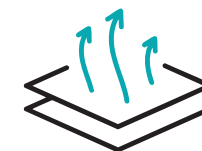
KEY FEATURES:



Monomaterial



Wind Proof



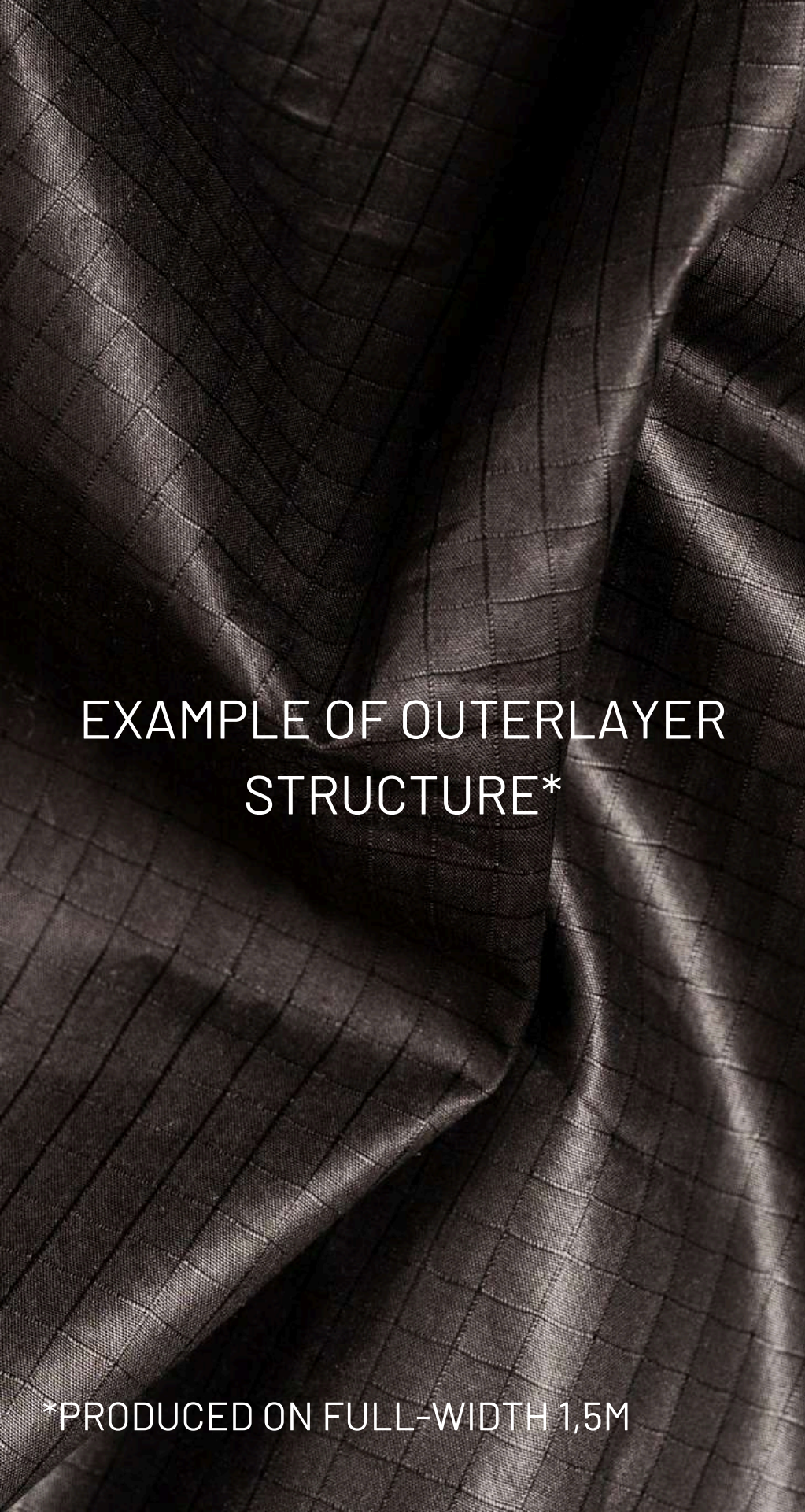
Breathable



Water-Repellent



PFAS-Free



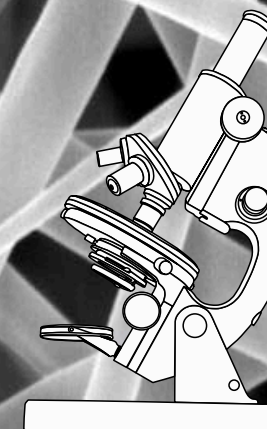
EXAMPLE OF OUTERLAYER
STRUCTURE*

*PRODUCED ON FULL-WIDTH 1,5M



BONDED WITH NANO-MEMBRANE*

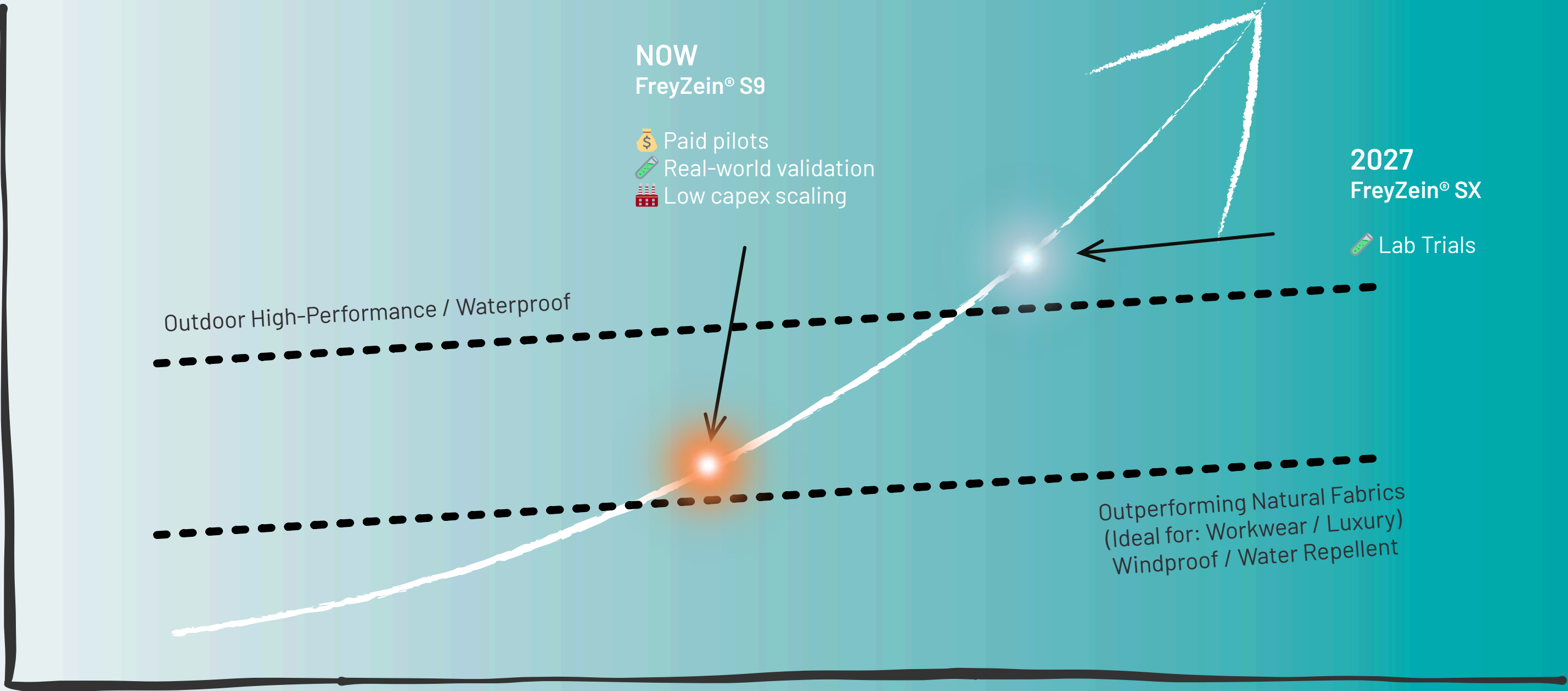
*TRADE SECRET: BONDING PROCESS
WITHOUT ADHESIVE → MONOMATERIAL



FIRST NATURAL NANO MEMBRANE SYSTEM TO CROSS PERFORMANCE LINE

ENABLING BRANDS TO ENTER INTO PERFORMANCE WEAR WITHOUT THE USE OF PETROCHEMICALS

Performance



NOW
FreyZein® S9

- 💰 Paid pilots
- 🧪 Real-world validation
- 🏭 Low capex scaling

2027
FreyZein® SX

🧪 Lab Trials

Outdoor High-Performance / Waterproof

Outperforming Natural Fabrics
(Ideal for: Workwear / Luxury)
Windproof / Water Repellent

Time



INTELLECTUAL PROPERTY



Successfully patented Technology:

Patent-ID:EP25173044



Patent pending:

Aerocellulose Technology.



Other patentable Technologies:

- 1 x Process Patent
- 1 x Material Patent



1 x Trade Secret

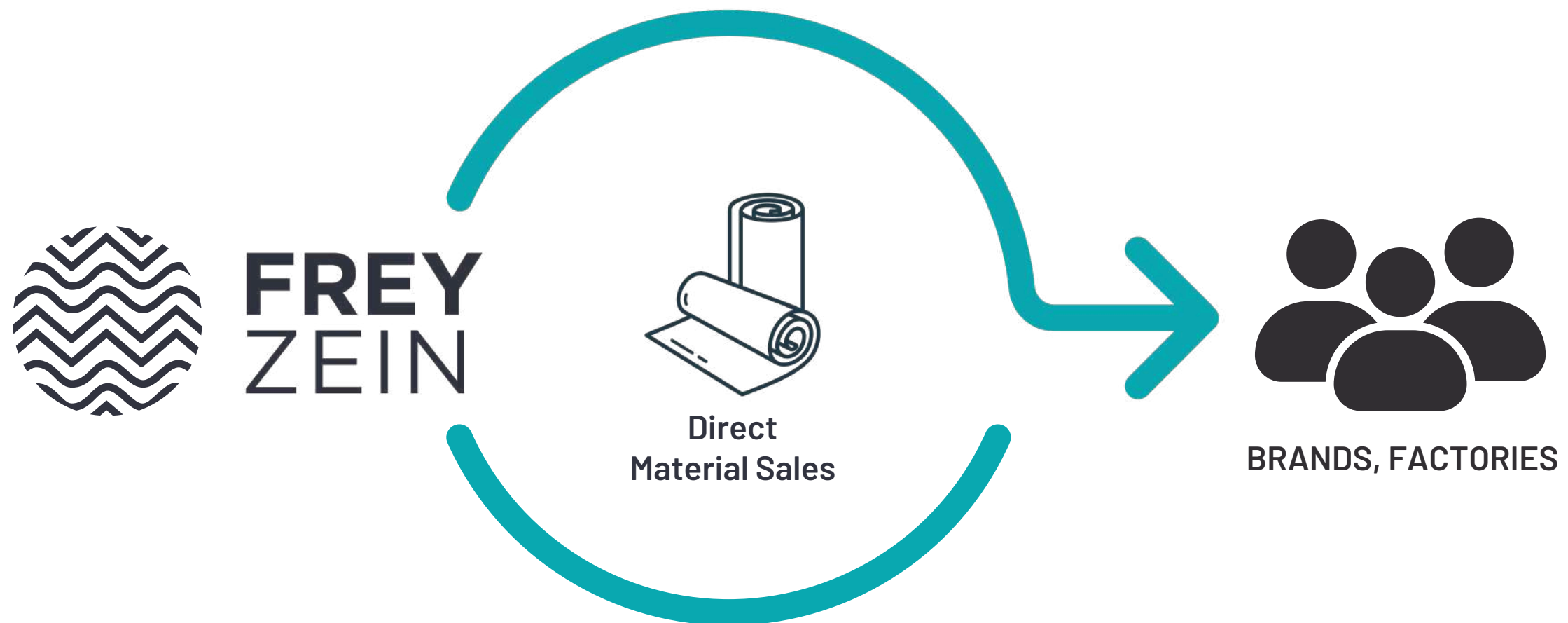


4 x registered Trademarks



The goal is to establish FreyZein® as a leading

B2B INGREDIENT BRAND.



OUR JOURNEY

FREYZEIN® MANAGED TO SECURE A TOTAL OF €4M IN SOFT FUNDING.

2021-2022
FreyZein joins several
European Business
Development Programs

2023
Austrian Government:
€ 1.1m in Funding.

2024
Horizon Europe: € 7m in
consortia project

2024
Grant: Austrian Research (FFG)
€ 2.3m in Funding.

2025
Product Market Fit
Recurring Customer Revenues

2026
Commercialization
Investment Round



COMMERCIAL VALDATION FROM GLOBAL BRANDS

PAID PILOTS, ACTIVE DEVELOPMENT PROGRAMS & STRATEGIC PARTNERSHIPS



STRATEGIC PARTNERSHIPS & ADVANCED DISCUSSIONS

+30 WORLDWIDE BRANDS / LEADING CELLULOSIC FABRIC PRODUCERS
+5 SUPPLY CHAIN PARTNERS

HUGO BOSS

patagonia



WHY NOW?

THE FIRST INDUSTRIAL MONO-MATERIAL CELLULOSIC MEMBRANE PLATFORM WITH A CLEAR UNIQUE SELLING PROPOSITION AND CUSTOMER ENGAGEMENT

65.000,- EUR

OUR SALES LAST HALF YEAR

- PFAS regulation tightening
- Luxury and premium brands actively seeking alternatives
- Industrial electrospinning scale ready
- Leading cellulose fabric producers want to widen their customer base into performance areas
- Early paid pilots active with international brands
- Patents / Trade Secret / Brands in place



A WINNING TEAM

FREYZEIN'S GLOBAL TEAM OF INNOVATORS SPANS FOUR NATIONALITIES WITH OVER 15 YEARS OF CUMULATIVE INDUSTRY EXPERIENCE IN ENTREPRENEURSHIP, TEXTILE ENGINEERING AND MATERIAL SCIENCE.



Jan Anders Karlsson
CEO & Founder

Serial Entrepreneur



Sabrina Stacherl
CFO & Co-Founder

HR & Finance Expert



Dr. Barnaby Caven
CTO & Co-Founder

Textile Expert &
Material Scientist



Dr. Solmaz Ghanbarnezhad
Senior Scientist



Dr. Wolfgang Zitz
Strategic Advisor



Johannes Ebert
Product Management
Key Accounting





THANK YOU

**TAKE A LOOK AT OUR BACKUP SLIDES ABOUT
MARKET FIT, MACHINERY AND SOME MAGIC
HYDROPHOBIC MEMBRANE PICTURES**

Invest@FreyZein.com
www.FreyZein.com



**Funded by
the European Union**



FIT TO MARKET

WE ENTER WITH MVP → GENERATE REVENUE → CO-DEVELOP PERFORMANCE → SCALE WITH INDUSTRIAL PARTNER.



LIGHT-WEIGHT
WINDPROOF. WATER-REPELLENT. BREATHABLE.
CELLULOSIC MONO-MATERIAL. PETROCHEMICAL-FREE. PFAS FREE.



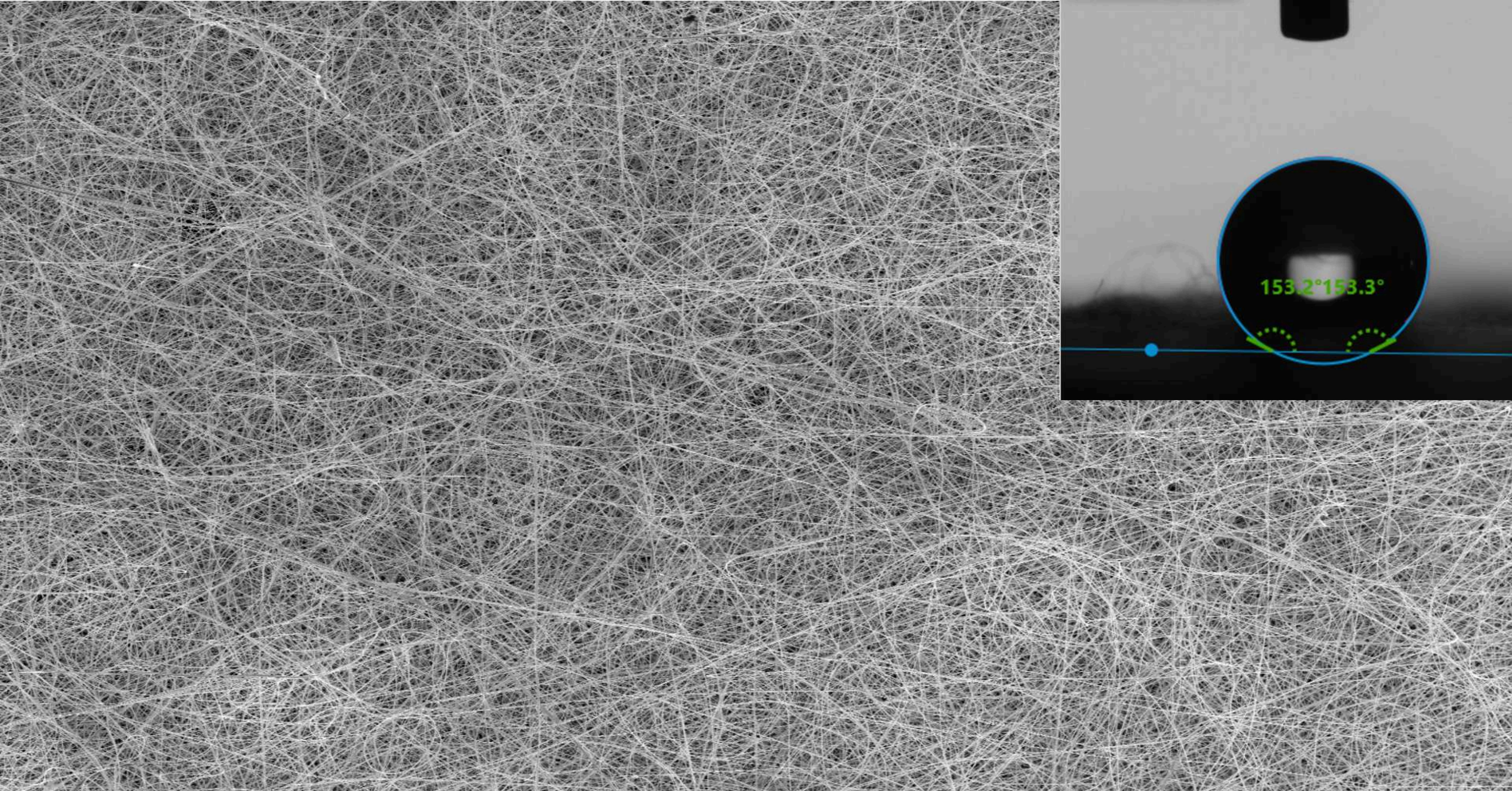
COTTON FEEL
WINDPROOF. WATER-REPELLENT. BREATHABLE.
CELLULOSIC MONO-MATERIAL. PETROCHEMICAL-FREE. PFAS FREE.



NEEDLELESS ELECTROSPINNING OF NANO-MEMBRANES

UNIQUE BONDING OF 3 LAYERS THROUGH TRADE SECRET PROCESS





9/22/2025
12:49:52 PM

use case
OptiPlan


det
T2

HV
10.00 kV

mag 
150 x

WD
9.8 mm

HFW
1.38 mm

 300 μm
Apreo 2