4th EDITION VENICE SUSTAINABLE FASHION FORUM OCTOBER 23rd AND 24th, 2025 VENICE, FONDAZIONE GIORGIO CINI

PRESENTATION BY

STEFANO CAROSIO











































PARTNERS

















bria









Engineering services empowered by innovation



T&E

ENGINEERING, TECHNOLOGY & MANAGEMENT







115 PEOPLE

36 YEARS AVERAGE AGE



Space tech transfer at Stam, 28 years of hands-on experience



DAMAS - Digital Innovation Hub for AutoMotive and AeroSpace

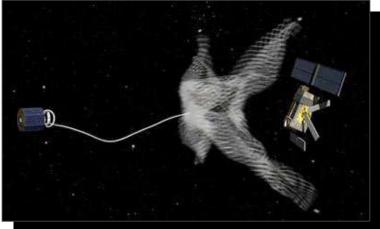


From circular economy on Earth to life support systems in space



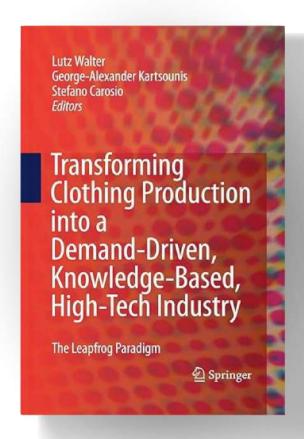


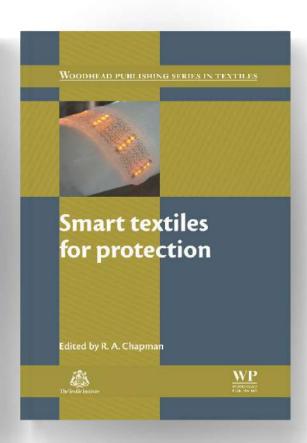
From space debris removal to the security of critical infrastructures



Down-to-earth in textile applications







Textile-reinforced materials with shape memory and superelatic fibres



Technologies and automation for textile and clothing processes



The ESA Tech Brokers Network



STAM is the **ESA Technology Broker** in Italy and is responsible for managing the ESA Spark Funding program in collaboration with the **Italian Space Agency**.

ESA TECHNOLOGY BROKER NETWORK

Participating States	
Austria	Luxembourg
Belgium	The Netherlands
Czech Republic	Poland
Denmark	Portugal
Germany	Spain
Hungary	United Kingdom
Italy	





- Creating Space Technology Spin-Offs
- Fostering Spin-In of Terrestrial Technologies
- Technology Scouting
- Solving Commercial R&D Challenges
- Providing Business Support to Develop Projects
- Technical Feasibility and Market Analysis
- ESA Spark Funding for Innovative Projects

Tech transfer cases (1/3)



Circular athletic tracks



Tech transfer cases (2/3)



EMSi Spacesuit



nage: courtesy of REA SPACE

Tech transfer cases (3/3)



Aerocellulose material





Aerocellulose: Lightweight Warmth, Inspired by Space

At the heart of the jacket is aerocellulose, a material reminiscent of aerogels long used in spacecraft for thermal insulation. By incorporating aerocellulose, TerraDown manages to deliver impressive warmth without bulk. Unlike conventional down or synthetic fills, TerraDown is petrochemical-free, antibacterial, and Vegan. Lightweight yet high performing, its monomaterial structure is designed for circularity and eco-friendly production. Applications go beyond jackets: from accessories to outdoor gear and even home textiles, TerraDown opens the door to a new era of sustainable insulation.



The sersochulose

Currently, the material is not yet commercially available, but FreyZein is actively seeking joint development agreements with partners to explore new applications and bring the innovation to market.

New opportunities for tech transfer





CONFINDUSTRIA MODA FEDERAZIONE MODA TESSILE E MODA



TECHNOLOGY BROKER

Italy



With a look at the past, back 18 years ago



Textile production monitored by a 'space eye'

24/09/2007 337 VIEWS 0 LIKES 204145 ID

DETAILS

RELATED

Until now all colour validation of textiles has been done manually. A camera developed under Europe's space programmes for Earth observation is now used to identify very accurately any colour faults in textile production. Using this space 'eye' for textile manufacture has improved the quality of textile production and lowered costs, by reducing significantly discarded material.

LICENCE

ESA Standard Licence

CREDIT Coltex

