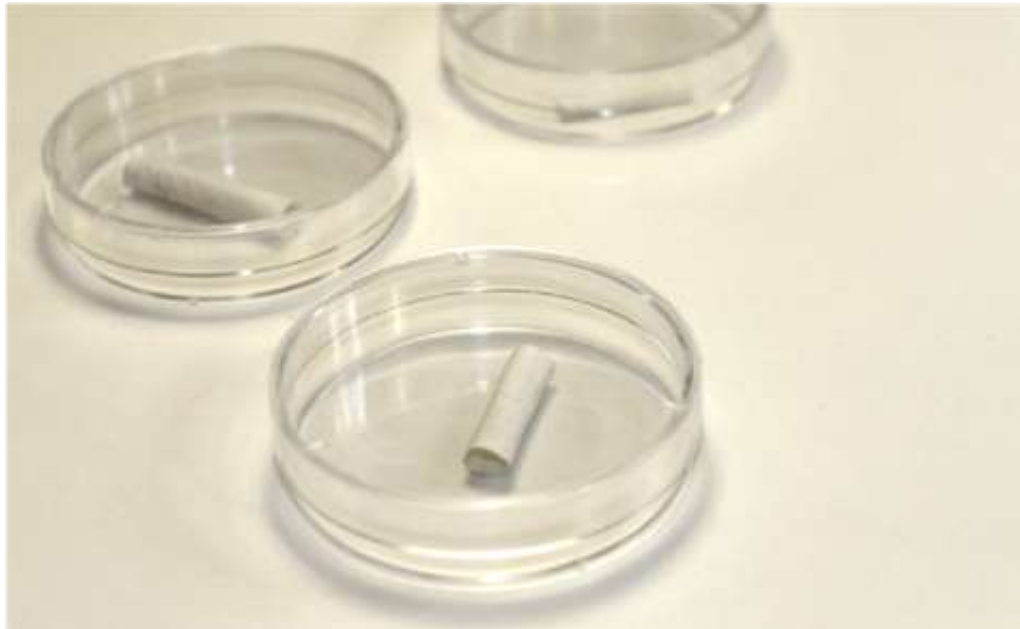


Electrospun scaffolds

Round or tubular shape



Electrospun scaffolds for cell culture applications CCSC

In tissue engineering applications cells are often implanted or seeded on an **artificial structure capable of supporting three-dimensional tissue formation**. These structures, typically called **scaffolds**, are often critical for recapitulating the in-vivo environment and influence the cell's own microenvironment.

SKE Research Equipment ® scaffolds range is the answer to this need as it represents the connection point between our two main expertises: dynamic cell culture (bioreactor) and electrospinning technologies.

Scaffolds usually serve at least one of the following purposes:

- Allow cell attachment, migration and mechanical support
- Deliver and retain cells and biochemical factors
- Enable diffusion of vital cell nutrients and expressed products
- Exert certain mechanical and biological influences to modify cell behavior.

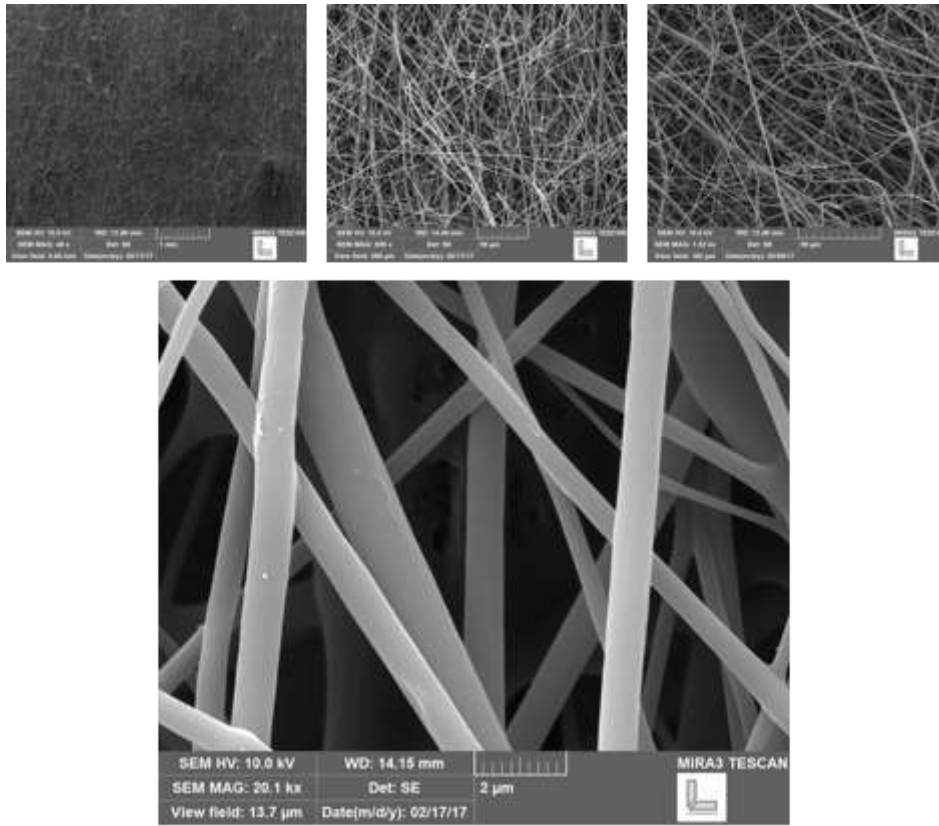
Over the course of the years, SKE Research Equipment® developed specific know-how in the fields of dynamic culture systems (bioreactors) and electrospinning technologies, and therefore decided to extend its expertise and offer to match these two core business lines with a conjunction product: electrospun nanofiber and lyophilized scaffolds for tissue engineering.

These scaffolds are made of electrospun silk fibroin or polycaprolactone and can be used in bioreactor systems as well as in Petri dishes or flasks.



Cell culture chambers main features are:

- Biocompatible and biodegradable
- Round and tubular structures or **custom made shapes and sizes**
- Ready-to-use single sterile package (EtO sterilization)
- Tailored to fit our bioreactors, perfect for the use in multiwell or any other culture environment
- **100% customizable** on specific needs and applications
- Random or aligned fiber morphology



TECHNICAL DETAILS

Material	Silk Fibroin
Technique	Electrospinning
Range fiber diameter	400 – 800 nm
Average wall thickness	100 – 150 µm

Material	Polycaprolactone
Technique	Electrospinning
Range fiber diameter	500 – 1500 nm
Average wall thickness	100 – 150 µm

Round scaffold dimension $\varnothing = 6, 14, 21, 33 \text{ mm}$

Tubular scaffold dimension $\varnothing = 2 - 10 \text{ mm}, L = 50 - 100 \text{ mm}$

ORDERING DETAILS

Product code	CCSC
Standard options	CCSC-SF Silk fibroin scaffolds
	CCSC-PCL PCL scaffolds

SKE Research Equipment®

C/O Leonardino Srl
via Ghisalba 13
20021 Bollate (MI) - Italy

tel: +39 02 4953 1694

www.ske.it

Sales and information request: sales@ske.it