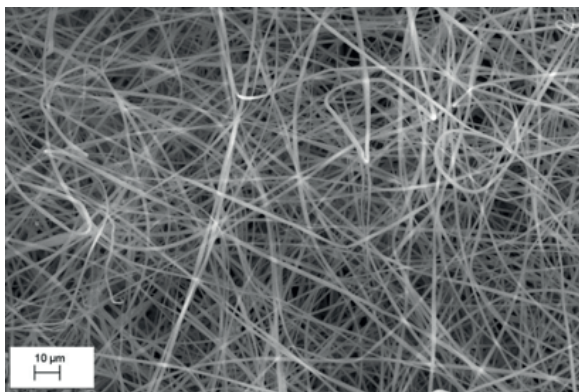


# FUNCTIONAL FABRICS BASED ON NANOFIBERS PRODUCED FOR ELECTROSPINNING

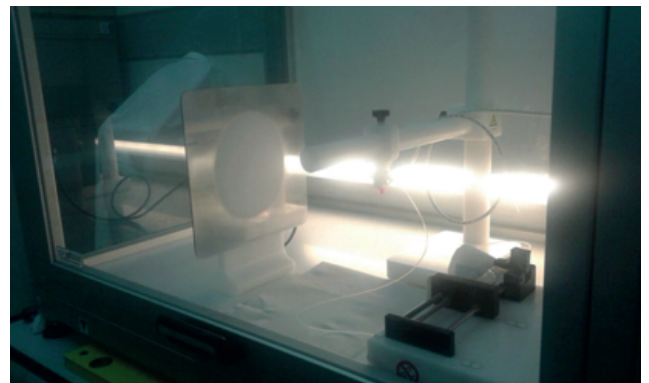
**Innovations and Benefits** - Production of fabrics made up of eco- and bio-sustainable nanoscale fibers based on bio-based polymers; transfer of functional properties to fabrics by the insertion of nanocharges that can make them antibacterial, hydro / oil repellent, soundproofing, thermally insulating, electrically conductive; use of low-cost and easily scalable technology.

**Use** - Functionalized fabrics for vehicles interiors, materials with specific functional properties for the textile and furniture sectors, nanocontacts, membranes for air filtration, reinforcing material for composites and laminates.

**Applications and ongoing Activities** - Creation of prototypes as components of technical clothing (MAIND Project); realization of proton conduction membranes for PEMFC (Fuel cells with proton exchange membrane, SEB Project).



1) SEM image of nanofibers obtained for electrospinning



2) Elettrospinning Plant

