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#### ABSTRACT (10 pt)

FIBRONIQ-UGhent Nanofiber Consortium is a consortium of research groups inside the Ghent University that performs research with the aim of valorization of the results obtained. The main but not exclusive focus in FIBRONIQ is on electrospinning and nanofibrous structures. The consortium is headed by Prof. Paul Kiekens and leaded by Dr. Philippe Westbroek.

Inside FIBRONIQ an inventive nanofibrous producing method, based on electrospinning principles, is developed and patented. FIBRONIQ aims at using this method to produce innovative structures and products containing such structures. On the one hand this will be achieved by the founding of a spin-off company, on the other hand by setting up cooperations with industrial companies.

FIBRONIQ focuses on different applications fields, such as filtration, wound dressings, dental, intelligent textiles and pharmaceutical applications.



## What is FIBRONIQ

**FIBRONIQ** is a consortium of Ghent University research teams performing research in the field of electrospinning and nanofibrous structure development.

FIBRONIQ covers a n electrospinning technology platform with large application possibilities Promotor-coordinator: Prof. Dr. Paul Kiekens,

Valorisatieon of the research results by "technology developer" Dr. Philippe Westbroek

## For who is FIBRONIQ

SMEs; large companies, multinationals, research centres, universities

## Members and applications of FIBRONIQ

# Electrospinning technology platform

- Department of Textiles: nanofiber development Prof. Dr. Ir. Karen De Clerck
- Department of Textiles: technology development Dr. Philippe Westbroek, technology developer of FIBRONIQ
- Department of organic chemistry: Polymer chemistry and synthesis Prof. Dr. Filip Duprez
- Department of Solid State Science : characterization of thin coatings Prof. Dr. Diederik Depla

#### Filtration

Hogeschool West-Vlaanderen Department PIH &rof. Dr. Stijn Van Hulle

Pharmaceutical applications
Department of pharmacie

Prof. Dr. Stefaan De Smedt

Dental care
applications
Department of Dentistry
Prof. Dr. Ronald Verbeeck

#### Wound dressings

University Hospital wound burn center

Prof. Dr. Stan Monstrey

#### Intelligent textiles

Department of Textiles Prof. Dr. Ir. Lieva Van Langenhove



## What has FIBRONIQ to offer

Fundamental research on nanofibrous structures



- ✓ study of fiber morphology
- ✓ study of structure/properties relationship

## > Technology driven research



- √ steady state electrospinning
- √ influence of processing parameters on nanofibrous structures
- ✓ Proof-of-principle

### > Application driven research



- ✓ study of scaling up of polymer system electrospinning
- ✓proof-of-concept

#### **Post R&D** offer

✓ pre-launch and/or full scale production via spin-off under development

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