



FUNDING PROGRAMME: PNCDI III - Programme 3 - Subprogramme 3.5. - EUREKA Network / EUREKA Clusters 2017

PROJECT TITLE: Development of novel textile materials with micro-encapsulated bio-active compounds-NOVAHEAL

CONTRACT No.: 133/2020

PROJECT STARTING DATE: 01.01.2020 PROJECT ENDING DATE: 31.12.2022

**PROJECT PARTNERS:** 



HOFIGAL EXPORT IMPORT SA-COORDINATOR (RO)



The National Research-Development Institute for Textiles and Leather (RO)

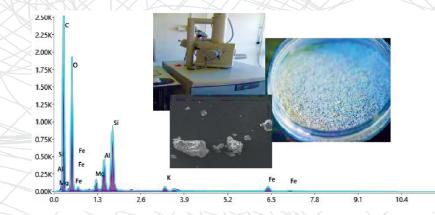
KIVANÇ TEKSTİL San. ve Tic. A.S. (TR)

PROJECT SCOPE: The main objective of the project is to develop multi-functional antimicrobial textile materials to prevent bacteria spreading and to create an antimicrobial shield for the human body.

ABSTRACT: The innovations will be consisting of using natural bio-active compound in different incorporated forms: in blue clay or micro-encapsulated. By using these processes will be able to avoid the side effects of the usual antibiotics and also to develop properties such as: reducing the risk for bacteria to develop, disinfection of the skin and even the possibility to tissue regeneration. Another innovative thing will be the use of blue clay, which is recognized as a leader regarding the oligo-elements concentration. And last but not least one of the main innovations is the engineered antimicrobial nanofibers with active compound that can be controlled released.

## MAIN ESTIMATED RESULTS:

- 1. Novel types of plant extracts and their combinations having the potential to promote antimicrobial, antibacterial, anti-inflammatory and tissue regeneration due to additive and synergistic effects of bioactive compounds.
- 2. Novel types of microcapsules with controlled release of active ingredients: the materials used as a shell for plant extract encapsulation will be biocompatible, biodegradable, permitting a slow-release of the active compounds, and respond to stimuli (pH).
- 3. Textiles with enhanced efficiency in wound healing, improved antimicrobial activity, minimized exudate levels, promoting debridement, enhancing granulation and re-epithelialization.



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## **TECHNOLOGY BUSINESS INCUBATOR** < ITA TEXCONF >

TA TEXCONF is an entity belonging to the TT infrastructure, founded on the basis of HG 406/2003 and accredited with the certificate no. 80/07.05.2015, for the textile-clothing domain, of which activity is mainly directed towards:

- facilitating the initiating and developing of new innovation private enterprises based on advanced technology;
- stimulating the innovation and technology transfer for the purpose of introducing into the economic circuit the research results that are transformed into new or improved products, processes and services.





## Main objectives:

- > Incubating of textile-clothing SMEs, ensuring of logistics services;
- Creating of partnerships, developing of interest groups having in view the innovation product/technology transfer towards the industry, specially towards SMEs;
- > Know-how transfer between INCDTP and SMEs.

## Services:

- > Services of sustaining textile-clothing SME competitiveness within the competitive background of the market economy;
- > Services aiming at creating partnerships and financing drawing in within the projects
- > Services aiming at product, equipment, innovation technology promoting in the field of textile-clothing, as part of scientific events (fairs, symposiums, conferences etc.);
- > Mediating of contracts of technology transfer/manufacturing of products, experimental models, prototypes, invasive and non-invasive medical devices, textile articles meant for consumables, special destination articles etc.
- > Mediating of contracts in the field of investigating the textile material and product properties, within the RENAR accredited INCDTP laboratories.

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