

# Eurostars proposal from Greek SME seeking partners (university or company) for smart technical textiles project idea

## Summary

Profile type	Company's country	POD reference
<b>Research &amp; Development Request</b>	<b>Greece</b>	<b>RDRGR20220721014</b>
Profile status	Type of partnership	Targeted countries
<b>PUBLISHED</b>	<b>Research and development cooperation agreement</b>	<b>• World</b>
Contact Person	Term of validity	Last update
<a href="#">Monika Nagy</a>	<b>21/07/2022</b> <b>21/07/2023</b>	<b>21/07/2022</b>

## General Information

### Short summary

A Greek smart textiles and clothing design company is putting together a proposal for the Eurostars funding programme in order to develop hypoallergenic natural fabric for sleep and wellness wear. The Greek SME is looking for partners both from academia and the business arena to contribute their scientific and research expertise and/or production know-how and capacity to further develop and finalise this idea ready for commercialisation on global markets.

### Full description

This innovative Greek SME is active in the design / development of smart textiles and clothing and has identified the following problem:-

We are living in an age of anxiety, which frequently leads to sleeping problems. Excess worry and fear make it harder to fall asleep and then stay asleep. Sleep deprivation can worsen anxiety, creating a vicious cycle. Sleep is a vital body function that helps our bodies repair and our brains retain / process information. Nowadays, and especially during the Covid-19 pandemic, protecting our mental health is of utmost importance and the quality of our sleep is directly linked to this.

With global anxiety levels rising and pandemic fatigue setting in, stress is now the new health metric, and mental and emotional wellbeing are taking center stage, reflected in the \$4.5 trillion global health and wellness industry that is seeing a fresh wave of product and service innovations, particularly related to sleep, such as: calming heat pillows

and detox sleep masks.

The aim of the Greek SME's project proposal is to develop a smart, hypoallergic natural fabric for sleep and wellness wear, but also home interior textiles such as bed linen.

The particular characteristics of this fabric would help to balance melatonin and serotonin human body levels, allowing the wearer / user to relax and prepare her/him for more relaxing / repairing sleep.

The technology behind this idea is a highly intelligent fabric with the following features:-

1. skin sensors to detect serotonin and melatonin levels in the human body before sleep
2. temperature moderators to maintain homeostasis, and balance out the body warmth, serotonin and melatonin levels prior to the sleep process.

Call: EUREKA Eurostars joint transnational call for proposals SEP 2022

Eurostars supports innovative SMEs and project partners (large companies, universities, research organisations) by funding international collaborative R&D and innovation projects in all fields. The amount of funding is managed by the national funding body of the corresponding participating country, in this case Greece.

Official deadline: 15/9/2022

Deadline for Eols: 1/9/2022

Anticipated project duration: 36 months

#### Advantages and innovations

The technology behind this idea is a highly intelligent fabric with the following features:-

1. skin sensors to detect serotonin and melatonin levels in the human body before sleep
2. temperature moderators to maintain homeostasis, and balance out the body warmth, serotonin and melatonin levels prior to the sleep process.

#### Stage of development

**Under development**

#### IPR Status

**Secret know-how**

#### Sustainable Development goals

• **Goal 3: Good Health and Well-being**

## Partner Sought

#### Expected role of the partner

The ideal partner/s to participate in this project would be:-

- university of applied science, medical school, or R&D Institute that could share their scientific expertise and/or conduct research on all the technical aspects of the project in order to create a Minimum Viable Product (MVP) fabric sample, along with the relevant application for a patent (with joint Intellectual Property Rights).
- textile company or other relevant manufacturer (ideally from the health and wellness textile industry) to test the fabric (with spinning, weaving, and knitting procedures) at all the conversion, processing and finishing stages, in order to produce a high-quality and durable sample, ensuring strict management of the entire production cycle and quality control.

#### Type of partnership

#### Type and size of the partner

**Research and development cooperation agreement**

- **University**
- **R&D Institution**
- **SME 50 - 249**
- **SME 11-49**

## Dissemination

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Technology keywords

- **02007018 - Advanced Textile Materials**

Targeted countries

- **World**

Market keywords

- **07004003 - Home furnishing and housewares**
- **07004001 - Clothing, shoes and accessories (including jewellery)**

Sector groups involved

- **Textile and Fashion**