

POSTDOCTORAL POSITION (FTMC)

Topic: Development of Multilayer Composites
with Infrared Radiation-Masking Coatings

Institution: Center for Physical Sciences and
Technology, Department of Textile testing

Location: Kaunas, Lithuania

Duration: 2 years

Start date: no later than 31 January 2026

Interested? Please contact julija.baltusnikaite@ftmc.lt



Position Overview

We are seeking a motivated and skilled researcher to contribute to the development of advanced multilayer composite materials designed for infrared (IR) radiation masking and thermocamouflage applications. The work will focus on functional polymer composites, technical textiles, and hybrid materials featuring IR-absorbing or reflective coatings.

Required Qualifications

1. PhD degree in materials science, polymer chemistry, textile engineering, applied physics, or a closely related field.
 2. Proven research experience in one or more of the following areas:
 - Functional polymer composites and technical textiles
 - Infrared masking or thermocamouflage materials
 - Hybrid composites with IR-absorbing or reflective coatings
 3. Proficiency in materials characterization within the SWIR–MWIR range (2–8 μm), including thermal imaging, IR spectroscopy, and reflectivity measurements.
 4. Familiarity with advanced textile processing methods, such as:
 - Low-temperature lamination
 - Surface activation
 - Thin-film deposition
 5. Knowledge of conductive polymers (e.g., PEDOT), graphene-based materials, or nanostructured coatings will be considered an advantage.
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Preferred Experience and Skills

- Strong experimental and analytical skills in polymer analysis, composite engineering, and textile finishing.
- Experience with mechanical and thermal testing as well as infrared thermography.
- Familiarity with scalable textile engineering techniques, such as spraying, coating, lamination, or printing.
- Ability to design, plan, and conduct independent research, while working effectively in a collaborative and interdisciplinary environment.
- A proven publication record in peer-reviewed journals relevant to the field will be highly valued.
- Interest in defence-related applications and/or sustainable materials will be considered an asset.

We Offer

- The opportunity to participate in cutting-edge research at the intersection of materials science and textile technology.
 - Access to modern laboratory facilities and advanced characterization equipment.
 - Collaboration with experienced researchers and industrial partners.
 - A stimulating research environment supporting innovation, creativity, and practical impact in defence and sustainable materials development.
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You will find more information about FTMC here:

