

## Work packages

Research within TEMPO project is divided into seven scientific work packages (WPs) and one dissemination work package, i.e.:

- WP1: Material selection
- WP2: Mechanical functionalization
- WP3: Physical-mechanical properties
- WP4: Fabric aging
- WP5: Fabric comfort
- WP6: Models, algorithms and computer data processing
- WP7: Sportswear comfort
- WP8: Dissemination and knowledge transfer.

## Contact

### Project leader

Assoc. Prof. Ivana Salopek Čubrić, PhD  
University of Zagreb Faculty of Textile Technology  
Prilaz baruna Filipovica 28a  
10000 Zagreb  
Croatia

e-mail: [ivana.salopek@ttf.unizg.hr](mailto:ivana.salopek@ttf.unizg.hr)  
phone: +385 1 37 12 573

### Project website

[www.ttf.unizg.hr/tempo/972](http://www.ttf.unizg.hr/tempo/972)

### FACEBOOK

[@tempo.ttf2021](https://www.facebook.com/tempo.ttf2021)

### INSTAGRAM

[@tempo.ttf2021](https://www.instagram.com/tempo.ttf2021)



Print of flyer has been fully supported by Croatian Science Foundation under the project IP-2020-02-5041 Textile Materials for Enhanced Comfort in Sports – TEMPO



The content of the material is the sole responsibility of the University of Zagreb Faculty of Textile Technology



## Research projekt

# Textile Materials for Enhanced Comfort in Sports

# TEMPO

IP-2020-02-5041

1. 01. 2021. – 31. 12. 2024.



# IP-2020-02-5041

## Textile Materials for Enhanced Comfort in Sports

### Acronym

TEMPO

### Project number

IP-2020-02-5041

### Type of project

Scientific research project

### Funding

Croatian science foundation

### Project leader

Assoc. Prof. Ivana Salopek Čubrić, PhD

### Project duration

01. 01. 2021. – 31. 12. 2024.

### Project funding

689.000,00 kn

### Institution of applicant

University of Zagreb Faculty of Textile Technology

### Project partner

University of Ljubljana Faculty of Natural Sciences and Engineering

### Project members

Prof. Alenka Pavko Čuden, PhD

Prof. Tomislav Rolich, PhD

Assoc. Prof. Vesna Marija Potočić Matković, PhD

Assoc. Prof. Goran Čubrić, PhD

Daniel Domović, PhD

Željka Pavlović, mag. ing. tech. text.

Ines Katić Križmančić, mag. ing. des. text.

Katarina Krstović, mag.ing. tech. text.

### Project overview

The demands of end users for the production of sportswear with improved performance are growing and thus the mission of scientists to design innovative materials is becoming imperative. Within the TEMPO project, scientists of various expertise (material design and evaluation of properties, clothing engineering, human factors and computer modeling) are gathered.

Their intention is to connect with each other and use different competencies to conduct research aimed at:

- design of innovative textile materials
- establishment of optimal properties
- long-lasting functionality
- design of personalized clothing
- all supported by adequate computer models.

For the purpose of mechanical functionalization of knitted structures, various patterns will be designed and manufactured.

Based on the evaluation of structural parameters, physical-mechanical and comfort properties, the optimization of structures will be carried out and models of machine learning algorithms will be developed.

Further emphasis will be on the development and validation of material aging protocols in different environments, research of material properties and definition of algorithms for predicting product functionality due to aging.

Thermography will be used to measure sportswear in a variety of environments and will serve as the basis for the design of personalized sportswear that will enhance the performance of athletes.