



COST ACTION GREENERING – DATA COLLECTION

First name, Family Name: Darka Markovic
Type (Academic or Industrial): Academic
Country: Serbia
Leadership position in the COST: Participant
Working Group in which you are involved: WG3
E-mail: darka@tmf.bg.ac.rs

Laboratory/Company:

Innovation center of Faculty of Technology and Metallurgy, University of Belgrade, Serbia
Department of Textile Engineering

Laboratory/Company info:

The Faculty of Technology and Metallurgy of the University of Belgrade is the leading and the oldest accredited high education, scientific and research institution in our country and the region in the field of chemical technologies.

Thanks to a high level of theoretical, experimental and practical knowledge and skills acquired during the studies, graduate and master engineers from the Faculty are capable of performing in a wide range or creative jobs in various fields, such as: Development of technologies, materials and products, Designing of processes and facilities, Running the production process, Innovations and research, Transfer of technologies, Consulting, Educational activities, Quality standards, Marketing, Management and Trade.

Link to the home page of the Laboratory/Company:

<http://www.tmf.bg.ac.rs/en>

Fields of expertise:

- nano-finishing of textiles and polymers;
- plasma treatment of textiles
- finishing of textiles and polymers by supercritical CO₂
- textile sorbent materials
- nanocomposite materials for dye degradation.

5 Main publications or patents:

- S. Milovanovic, **D. Markovic**, A. Mrakovic, R. Kuska, I. Zizovic, S. Frerich, J. Ivanovic, Supercritical CO₂ - assisted production of PLA and PLGA foams for controlled thymol release, *Materials Science & Engineering C-Materials for Biological Applications*, 99 (2019) 394-404.
- **D. Marković**, C. Deeks, T. Nunney, Ž. Radovanović, M. Radoičić, Z. Šaponjić and M. Radetić, Antibacterial activity of Cu-based nanoparticles synthesized on cotton fabrics previously modified with polycarboxylic acids, *Carbohydrate Polymers*, 200 (2018) 173-182.
- **D. Marković**, S. Milovanović, Karen De Clerck, I. Zizovic, D. Stojanović, M. Radetić, Development of material with strong antimicrobial activity by high pressure CO₂



impregnation of polyamide nanofibers with thymol, Journal of CO2 Utilization, 26 (2018) 19-27.

- **D. Mihailović**, Z. Šaponjić, M. Radoičić, S. Lazović, C.J. Baily, P. Jovančić, J. Nedeljković, M. Radetić, Functionalization of cotton fabrics with corona/air RF plasma and colloidal TiO₂ nanoparticles, Cellulose, 18 (2011) 811-825.
- RS58867B1 FLOATING PHOTOCATALYST BASED ON POLYCAPROLACTONE FOAM AND TITANIUM DIOXIDE NANOPARTICLES

Collaborations:

Facilities: