AND

UNION OF ENGINEERS AND TECHNICIANS OF SERBIA FACULTY OF TECHNOLOGY AND METALLURGY IN BELGRADE FACULTY OF TECHNOLOGY, SHTIP, NORTH MACEDONIA SOCIETY FOR ROBOTICS OF BOSNIA I HERZEGOVINA BASTE - BALKAN SOCIETY OF TEXTILE ENGINEERING, GREECE

V INTERNATIONAL SCIENTIFIC CONFERENCE CONTEMPORARY TRENDS INNOVATIONS IN THE TEXTILE INDUSTRY



FINAL PROGRAM

Belgrade, 15-16th September, 2022 Union of Engineers and Technicians of Serbia, Dom inženjera "Nikola Tesla", Kneza Miloša 9/III, Beograd



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FINAL PROGRAM

THURSDAY, 15.09.2022.

- **15⁰⁰ 17⁰⁰** Registration of participants
- FRIDAY, 16.09.2022.
- 9⁰⁰ 10⁰⁰ Reception of guests and registration of participants
- $10^{00} 10^{15}$ Opening ceremony
- **10¹⁵ 11³⁰** Plenary lectures
- 11³⁰⁻ 12⁰⁰ Professional presentations
- 12⁰⁰ 13⁰⁰ Cocktail
- 13⁰⁰-14⁴⁵ Session I
- 14⁴⁵- 15⁰⁰ Coffee break
- 15⁰⁰ 16³⁰ Session II-Online
- **16³⁰ 16⁴⁵** Coffee break
- 16⁴⁵ 17³⁰ Poster session III
- 17³⁰ Closing ceremony

Session III - Poster electronic session - published on the website of the Union of htmlEngineers and Technicians of Serbia

https://www.sits.org.rs/textview.php?file=813.html



LIST OF PRESENTATIONS

PLENARY LECTURES 10¹⁵- 11³⁰ h

Chair Person: Prof. dr Gordana Kokeza, Prof. dr Prof. dr Milovan Vuković, Prof. dr Nuno Belino, Prof. dr Damjana Celcar

1. HEMP FIBERS AGAIN IN SERBIA: OLD FIBERS – NEW APPLICATIONS

<u>Biljana Pejić</u>^{1,2}, Marija Vukčević², Ana Kalijadis³, Mirjana Kostić⁴

¹Academy of Technical and Art Applied Studies, Department of Design, Technology and Management in textile industry, Belgrade, Serbia

²University of Belgrade, Faculty of Technology and Metallurgy, Belgrade, Serbia

³University of Belgrade, Department of Materials "VINČA" Institute of Nuclear Sciences - National Institute of the Republic of Serbia

2. ANTIMICROBIAL ACTIVITY OF COTTON YARNS TREATED WITH DIFFERENT CONCENTRATION OF CHITOSAN

Emilija Toshiki¹, Ognen Petrovski², Milena Petrovska³, Igor Jordanov¹

¹University "Ss. Cyril and Methodius", Faculty of Technology and Metallurgy, Department of Textile, Skopje, North Macedonia

²University "Ss. Cyril and Methodius", Faculty of Medicine, Department of Preclinical and Clinical Pharmacology, Skopje, Republic of North Macedonia

³University "Ss. Cyril and Methodius", Faculty of Medicine, Department of Microbiology with Parasitology, Skopje, Republic of North Macedonia

3. TEXTILE WASTEWATER REUSE WITH MEMBRANE SEPARATION PROCESSES

Davor Dolar¹, Iva Ćurić¹

¹University of Zagreb, Faculty of Chemical Engineering and Technology, Croatia

4. REPRESENTATION OF TEXTILE DRAPES OF SQUARE SAMPLES FROM DIGITAL IMAGES

Zlatin Zlatev¹, Liliana Indrie², Julieta Ilieva¹

¹*Trakia University-Stara Zagora, Faculty of Technics and Technologies, Yambol, Bulgaria,* ²*University of Oradea, Faculty of Energy Engineering and Industrial Management, Department of Textiles, Leather and Industrial Management Oradea, Romania*

5. COSTUME AT THE PORTRAIT PRESENTATIONS OF NOBLEWOMEN IN THE CHURCH IN DONJA KAMENICA

Dragana Frfulanović¹

¹Academy of Vocational Studies South Serbia, Department of Technological and Artistic Studies, Leskovac



SESSION I 13^{00-14⁴⁵} h Chair Person: Prof. dr Koviljka Asanović, Prof. dr Davor Dolar, Prof. dr Emilija Toshikj, Dr Danijela Paunović

6. UPCYCLING – REUSE AND REDESIGNING OF DISCARDED CLOTHES <u>Damjana Celcar¹</u>

¹Faculty of Design, Ljubljana, Slovenia

7. DEVELOPMENT OF VEGETABLE DYES FOR NATURAL DYEING OF WOOL

<u>Nuno Belino¹</u>, Carmo Serrano ^{3,4}, Maria Pinto¹, Jesus Rodilla², Margarida Sapata³, M. Conceição Oliveira⁵

¹University of Beira Interior, Faculty of Engineering, Departement of Textile Science and Technology, Covilhã. Portugal

² University of Beira Interior, Faculty of Exact Science, Department of Chemistry, Covilhã. Portugal.

³Instituto Nacional de Investigação Agrária e Veterinária (INIAV, I.P.), Oeiras, Portugal ⁴LEAF – Linking Landscape, Environment, Agriculture and Food – Research Center, Instituto Superior de Agronomia, University of Lisbon, Lisboa, Portugal

⁵University of Lisbon Centro de Química Estrutural, Departamento de Engenharia Química (DEQ), Instituto Superior Técnico (IST), University of Lisbon, Lisboa, Portugal

8. RECOVERY AND STRATEGIC DIRECTIONS FOR THE DEVELOPMENT OF THE TEXTILE INDUSTRY IN THE POST-COVID PERIOD

Gordana Kokeza¹, Sonja Josipović¹, Snežana Urošević²

¹University of Belgrade, Faculty of Technology and Metallurgy, Belgrade, Serbia ²University of Belgrade, Technical Faculty in Bor, Bor, Serbia

9. SMART TEXTILES AND PRINTING

Katarina Maričić¹, Nemanja Kašiković¹, Gojko Vladić¹, Teodora Gvoka¹

¹University of Novi Sad, Faculty of Technical Sciences, Department of Graphic Engineering and Design, Novi Sad, Serbia

10. APPLICATION OF CONDUCTIVE MATERIALS ON TEXTILE SUBSTRATES

Dušan Nešić¹, Dragan Tanasković¹, Miloš Vorkapić¹

¹University of Belgrade, Institute of Chemistry, Technology and Metallurgy, Centre of Microelectronic Technologies, Belgrade, Serbia

11. 3D PRINTING IN THE COMPONENTS REALIZATION FOR THE TEXTILE INDUSTRY

<u>Miloš Vorkapić¹</u>, Teodora Vićentić¹, Dušan Nešić¹, Dragan Tanasković¹, Ivana Mladenović¹

¹University of Belgrade, Institute of Chemistry, Technology and Metallurgy, Belgrade, Serbia



12. EVALUATION OF FINANCIAL PERFORMANCE OF ENTERPRISES IN THE FASHION INDUSTRY USING NON-STANDARDIZED FINANCIAL METRICS

Snežana Knežević¹, Stefan Milojević², Marko Milašinović³, Aleksandra Mitrović³

¹University of Belgrade, Faculty of Organizational Sciences, Belgrade, Serbia ²National Centref for Corporate Education, Belgrade, Serbia

³University of Kragujevac, Faculty of Hotel Management and Tourism, Vrnjačka Banja, Serbia

13. TEXTILE INDUSTRY IN THE LIGHT OF SUSTAINABLE DEVELOPMENT <u>Adela Medović Baralić</u>¹, Biljana Popović¹, Ljiljana Sretković¹

¹Academy of Technical and Art Applied Studies, Department of Design, Technology and Management in textile industry, Belgrade, Serbia

SESSION II Online session 15⁰⁰-16³⁰ h

Chair Person: Prof. dr Ivana Mladenović Ranisavljević, Doc. dr Dragan Dimitrijević, Doc. dr Violeta Stefanović, Katarina Maričić

14. DIGITAL FASHION & DIGITAL SKILLS

Tadeja Penko¹, Zoran Stjepanović¹, Andreja Rudolf¹

¹University of Maribor, Faculty of Mechanical Engineering, Institute of Engineering Materials and Design, Maribor, Slovenia

15. DRAPABILITY PERFORMANCE OF LYOCELL BLENDED DRAPERY FABRICS MADE OF DIFFERENT FIBRE TYPES

Erhan Kenan Çeven¹, <u>Gizem Karakan Günaydin</u>², Nejla Çeven³, Gülşah Karakaya³ ¹Bursa Uludağ University, Textile Engineering Department, Nilüfer, Bursa, Turkey ²Pamukkale University, Buldan Vocational School, Fashion & Design Programme, Buldan Denizli, Turkey

³Vanelli Tekstil San. ve Tic.A.Ş., Organize Sanayi Bölgesi, Nilüfer, Bursa, Türkiye

16. COMPUTATIONAL CUSTOMISED SHOE-SOLE DESIGN: A BRANDING-BASED APPROACH

<u>Athanasios Manavis</u>¹, Prodormos Minaoglou¹, Lazaros Firtikiadis¹, Nikolaos Efkolidis¹, Panagiotis Kyratsis¹

¹University of Western Macedonia, Kila Kozani, Greece

17. MODERN ART TEXTILES IN THE SPATIAL ENVIRONMENT OF THE XX-XXI CENTURIES

Mokina Anna Y¹, Ulme Andra²

¹The Southern Federal University, Rostov-on-Don, Russia ²The Riga technical University, Riga, Latvia

18. DEEP LEARNING NEURAL NETWORKS FOR KNITTED FABRIC DEFECT IDENTIFICATION AND CLASSIFICATION

Subrata Das¹, Keerthana Shanmugaraja¹

¹Bannari Amman Institute of Technology, Department of Fashion Technology, Tamil Nadu, India



19. 3D PRINTING ON TEXTILES USING THE FUSED FILAMENT FABRICATION: A KEY STUDY

Dimitrios Chaidas¹, <u>Tatjana Spahiu</u>², John Kechagias¹

¹Forestry, Wood Science and Design Department, University of Thessaly, Karditsa, Greece ²Polytechnic University of Tirana, Faculty of Mechanical Engineering, Textile and Fashion Department, Tirana, Albania

SESSION III Poster 1645-1730

Chair Person: Doc. dr Ineta Nemeša, Dr Gordana Ćolović, Mr Dragana Frfulanović, MSc Mina Paunović

20. IMPACT OF INK LIMITING LEVEL FOR PRINTING SUBLIMATION PAPER ON QUALITY OF SUBLIMATION PRINT

<u>Emilija Toshikj¹</u>

¹University "Ss. Cyril and Methodius", Faculty of Technology and Metallurgy, Department of Textile, Skopje, North Macedonia

21. COLOR CHANGING SMART TEXTILES: PHOTOCHROMIC AND THERMOCHROMIC MATERIALS

<u>Nebojša Ristić¹, Ivanka Ristić¹, Suzana Đorđević¹, Aleksandra Mičić¹</u>

¹Academy of Vocational Studies South Serbia, Department of Technological and Artistic Studies, Leskovac

22. INFLUENCE OF TEXTURING PROCESS PARAMETERS ON THE DEGREE OF CRYSTALLINITY AND BIREFRINGENCE PA6.6 TEXTURED YARN

<u>Olga Stojanović¹</u>, Marija Savić Pojužina¹, Kristina Savić¹, Jelica Simeunović²

¹Academy of Technical and Art Applied Studies, Department of Design, Technology and Management in textile industry, Belgrade, Serbia

²*KTR Jee seetex, Beograd, Serbia*

23. OPTIMIZATION OF REMOVAL PROCESS OF CATIONIC DYE FROM WATER USING NATURAL SORBENTS

Aleksandar Zdravković¹, Ivanka Ristić¹, Aleksandra Mičić¹,

Dragana Marković Nikolić¹, Danijela Stojadinović¹, Tanja Nikolić¹, Nebojša Ristić¹

¹Academy of Vocational Studies South Serbia, Department of Technological and Artistic Studies, Leskovac

24. ON THE MARGINS OF THE AVANT-GARDE AND TRADITION-CONSTRUKTIVISM IN SOCIALIST FASHION DESIGN

Dragana Frfulanović¹, Milena Savić¹, Aleksandra Perić-Nikolić¹

¹Academy of Vocational Studies South Serbia, Department of Technological and Artistic Studies, Leskovac



25. FASHION IN THE PERIOD OF THE 19TH AND 20TH CENTURY IN THE EASTERN REGION OF THE REPUBLIC OF NORTH MACEDONIA AS AN INSPIRATION FOR MODERN FASHION SOLUTIONS

Sanja Risteski¹, Vineta Srebrenkoska¹

¹University "Goce Delčev", Štip, Faculty of Technology, North Macedonia

- 26. IDENTIFYING OF POTENTIAL CHALLENGES OF CSR AND SDG IN THE TEXTILE INDUSTRY
- Kosana Vićentijević¹, Snežana Rakić¹, Nikola Stojanović¹

^{$\overline{I}}Western Serbia academy of applied studies – Valjevo Department, Valjevo, Republic of Serbia$ </sup>

27. IMPACT OF HARMFULNESS OF CHEMICAL SUBSTANCES IN THE WORK PROCESS IN TEXTILE INDUSTRY ORGANIZATIONS

<u>Violeta Stefanović</u>¹, Snežana Urošević², Ivana Mladenović-Ranisavljević³, Dragan Igić⁴

¹City Administration of Leskovac, Leskovac, Serbia,

²University of Belgrade, Technical faculty Bor, Bor, Serbia,

³University of Niš, Faculty of Technology Leskovac, Leskovac, Serbia

⁴Ministry of Defense, Belgrade, Serbia

28. HIMALAYAN NETTLE:FROM PLANT TO YARN

Ana Santiago¹, Cláudia Pinheiro¹, Nuno Belino¹

¹University of Beira Interior, Faculty of Engineering, Department of Science and Textile Technology, Covilhã, Portugal

29. INVESTIGATION OF THE QUALITY OF FLAX PLAIN SINGLE JERSEY WEFT-KNITTED FABRICS

<u>Koviljka A. Asanovic¹, Mirjana M. Kostic¹, Tatjana V. Mihailovic¹, Nadiia Bukhonka², Slavica B. Maletic³</u>

¹University of Belgrade, Faculty of Technology and Metallurgy, Belgrade, Serbia

²University of Novi Sad, Technical faculty "Mihajlo Pupin" Zrenjanin, Serbia

³Faculty of Physics, University of Belgrade, Belgrade, Serbia

30. PROGRAMMING AND PRODUCTION OF KNITTED FABRIC WOMEN'S BLOUSE ON A COMPUTERIZED KNITTING MACHINE

Ruzica Stevkovska-Stojanovska¹, Maja Jankoska¹, Goran Demboski¹

¹University "Ss. Cyril and Methodius", Faculty of Technology and Metallurgy, Department of Textile Engineering, Skopje, North of Macedonia

31. ANALYSIS OF THE SITUATION WITH TEXTILE WASTE

Silvana Zhezhova¹, <u>Sonja Jordeva</u>¹, Sashka Golomeova Longurova¹, Vineta Srebrenkoska¹, Vanga Dimitrijeva Kuzmanoska¹

¹University "Goce Delchev", Shtip, North Macedonia

32. EFFECT OF YARN TWIST ON THEIR ELASTIC PERFORMANCE <u>Snežana Stanković¹</u>, Milada Novaković²

¹University of Belgrade, Faculty of Technology and Metallurgy, Belgrade, Serbia ²High Technical College of Professional Studies, Zrenjanin, Serbia



33. ADVANCED FEED SYSTEMS FRO LOCKSTITCH SEWING MACHINES Ineta Nemeša¹

¹University of Novi Sad, Technical Faculty "Mihajlo Pupin", Zrenjanin, Serbia

34. DETERMINING THE EFFICIENCY OF TREATED TEXTILE WASTEWATER ON THE COLOR OF THE COTTON KNITTED FABRIC WITH THE DETERMINATION OF ZETA POTENTIAL

Iva Ćurić¹, Davor Dolar¹, Šejla Sarunović¹

¹University of Zagreb, Faculty of Chemical Engineering and Technology, Croatia

35. COMPUTER AIDED PATTERN MAKING OF LADY'S SWIMSUIT FROM IDEA TO REALIZATION

Maja Jankoska¹

¹University "Ss. Cyril and Methodius", Faculty of Technology and Metallurgy, Department of Textile, Skopje, North Macedonia

36. APPLICATION OF CAST CARDBOARD PACKAGING IN THE TEXTILE INDUSTRY

<u>Teodora Gvoka</u>¹, Gojko Vladić¹, Nemanja Kašiković¹, Katarina Maričić¹, Gordana Bošnjaković¹

¹University of Novi Sad, Faculty of Technical Sciences, Department of Graphic Engineering and Design, Novi Sad, Serbia

37. AUTOMATED FIBER PLACEMENT TECHNOLOGY OVERVIEW <u>Sara Srebrenkoska¹</u>, Marija Cekerovska¹

¹University "Goce Delčev", Shtip, Faculty of Mechanical Engineering, North Macedonia

- 38. INTEGRAL INFORMATION SYSTEMS IN SMALL AND MEDIUM ENTERPRISES OF TEXTILE AND CLOTHING INDUSTRY
- Dragan Dimitrijević¹, Snežana Urošević², Živoslav Adamović³
- ¹Union University Nikola Tesla in Belgrade, Faculty of Applied Sciences in Nis, Serbia

²University in Belgrade, Technical Faculty in Bor, Bor, Serbia

³University of Belgrade, Faculty of Mechanical Engineering, Belgrade

- **39.** ANALYSIS OF WORKPLACES IN THE FASHION INDUSTRY BY RULA TOOL
- Gordana Čolović^{1,2}, Nikola Maksimović¹, Danijela Paunović¹, Mina Paunović¹

¹Academy of Technical and Art Applied Studies, Department of Design, Technology and Management in textile industry, Belgrade, Serbia

²SE-ERGO, Belgrade, Serbia

40. THE IMPACT OF THE COVID-19 PANDEMIC ON CLOTHES ONLINE SHOPPING

Bruno Završnik¹

¹University of Maribor, Faculty of Economics and Business, Maribor, Slovenia

41. ADVERTISING FASHION CLOTHES ON SOCIAL MEDIA Bruno Završnik¹

¹University of Maribor, Faculty of Economics and Business, Maribor, Slovenia



42. APPLICATION OF HEIJUNKA TECHNIQUE IN THE GARMENT INDUSTRY

<u>Olga Stojanović</u>¹, Marija Savić Pojužina¹, Kristina Savić¹, Jelica Simeunović²

¹Academy of Technical and Art Applied Studies Department of Design, Technology and Management in textile industry, Belgrade, Serbia

²*KTR Jee seetex, Beograd, Serbia*

43. APPLICATION OF THE LEAN CONCEPT IN THE PROCESS OF MAKING A TEXTILE PRODUCTS

Mina Paunović¹, Miroljub Nikolić¹, Gordana Čolović¹

¹Academy of Technical and Art Applied Studies Department of Design, Technology and Management in textile industry, Belgrade, Serbia

44. CORPORATE SOCIAL RESPONSIBILITY IN THE TEXTILE INDUSTRY Marina Jovanović¹, Snežana Urošević², Milovan Vuković²

¹,,PPT-TMO" AD Trstenik, Trstenik, Serbia

²University of Belgrade, Technical Faculty in Bor, Serbia

45. DEFECT CHARACTERISTICS USING AUTOMATED FIBER PLASEMENT Sara Srebrenkoska¹, Marija Cekerovska²

¹University "Goce Delčev", Shtip, Faculty of Mechanical Engineering, North Macedonia 46. FUNDAMENTALS OF CONVEYOR BELTS

Nikola Ilanković¹, Dragan Živanić¹

¹University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia

47. INCREASING ENERGY EFFICIENCY OF TEXTILE INDUSTRY <u>Njegoš Dragović¹</u>, Snežana Urošević², Milovan Vuković²

¹*Phd student, University of Belgrade, Technical Faculty in Bor, Serbia* ²*University of Belgrade, Technical Faculty in Bor, Serbia*