

# Contents

## 4 Abstracts in Polish

### GENERAL PROBLEMS OF THE FIBRE AND TEXTILE INDUSTRIES

- 8 Current Trends on the World Textile Market and the Competitiveness of the Serbian Textile Industry  
*E. Corovic, P. Jovanovic, L. Ristic*

- 13 Assessing the Impact of the Current Financial and Economic Downturn on the Textile and Apparel Industry in Poland  
*P. Pomykalski*

### RESEARCH AND DEVELOPMENT

- 19 Mercerisation of Rapeseed Straw Investigated with the Use of WAXS Method  
*D. Paukszta*

- 24 Viscose Functionalisation with a Combination of Chitosan/BTCA Using Microwaves  
*O. Šauperl, J. Volmajer-Valh*

- 30 Comparative Analysis of Cotton Yarn Properties Spun on Pneumatic Compact Spinning Systems  
*M. F. Khurshid, K. Nadeem, M. Asad, M. A. Chaudhry, M. Amanullah*

- 35 Effect of Fibre Fineness and Spinning Speed on Polyester Vortex Spun Yarn Properties  
*E. Sankara Kuthalam, P. Senthilkumar*

- 40 Frictional Coefficient Change of Groove Surface in Compact Spinning with a Suction Groove  
*H. Ma, S. Lu, L. Cheng, Z. Hua*

- 43 Investigation of Initial Warp Tension and Weave Influence on Warp Yarn Diameter Projections  
*Ž. Rukuižienė, E. Kumpikaitė*

- 49 Effects of Vacuum Steaming Process on the Twist Liveliness of Staple Yarns  
*S. Şardağ, Ö. Özdemir*

- 54 Investigation of the Resistance to Pile Loop Extraction of Linen and Ramie Fabrics  
*S. Petrulyte, D. Dapsauskaite, A. Velickiene, D. Petrus*

- 59 Vibratory Thickening of Weft Threads in a Weaving Loom – Simulation Tests  
*M. Kuchar*

- 66 Properties of Yarns of Different Colours Sized by Standard and Pre-wetting Process  
*I. Gudlin Schwarz, S. Kovacevic, D. Katovic, K. Dimitrovski*

- 73 Assessment and Verification of the Functionality of New, Multi-Component, Camouflage Materials  
*K. Fortuniak, G. Redlich, E. Obersztyn, M. Olejnik, A. Bartczak, I. Król*

- 80 Change in Structural and Thermal Properties of Textile Fabric Packages Containing Basalt Fibres after Fatigue Bending Loading  
*P. Gilewicz, J. Dominik, A. Cichocka, I. Frydrych*

- 85 Modelling Heat-Moisture Transport through Firefighters' Protective Fabrics from an Impinging Flame Jet by Simulating the Drying Process  
*F. L. Zhu, Y. Zhou*

- 91 Antimicrobial Properties of Socks Protected with Silver Nanoparticles  
*Z. Foltynowicz, D. Gwiazdowska, D. Rodewald, A. Nowaczyk, M. Filipiak*

- 97 New Generation of Knitted Fabrics from Degradable Synthetic Yarns  
*A. Pinar, E. Mielicka, J. Janicka, A. Walak, W. Sikorska*

- 105 Bulletproof Vest Thermal Insulation Properties vs. User Thermal Comfort  
*M. Zwolińska, A. Bogdan, B. Delczyk-Olejniczak, D. Robak*

- 112 Textile Multilayered Systems with Magnetorheological Fluids for Potential Application in Multi-Threat Protections. Preliminary Stab - Resistance Studies  
*K. Olszewska, J. Polak, D. Zielińska, M. H. Struzicky, I. Kucińska, L. Wierzbicki, J. Kozłowska, M. Leonowicz, A. Wiśniewski*

- 117 Use of Artificial Neural Networks for Modelling of Seam Strength and Elongation at Break  
*Z. Yıldız, V. Dal, M. Ünal, K. Yıldız*

- 124 Case Study of the Impact of Motorcycle Clothing on the Human Body and its Thermal Insulation  
*M. Zwolińska*

- 131 Failure Simulation of Metal-Composite Joints  
*A. Derewońko*

- 135 Video Assisting System for Garment Manufacturing Technological Flow  
*C. Donciu*

- 141 Design of Radiofrequency Protective Clothing Containing Silver Nanoparticles  
*L. Vojtech, M. Neruda*

- 148 Information for Authors. Advertising and Subscription Information