

Contents

4 Letter from the Editor
B. Mac

5 Abstracts in Polish

GENERAL PROBLEMS OF THE FIBRE AND TEXTILE INDUSTRIES

10 Future of the Polish Textile Industrial Sector. An Overall Analysis of the Empirical Research Performed with the Delphi Method within the Project Foresight 'Modern Technologies for the Textile Industry. A Chance for Poland'
Z. Wysokińska, M. Koszewska, T. Czajkowski, M. Malinowska-Olszowy

16 Using Lean Manufacturing Techniques to Improve Production Efficiency in the Ready Wear Industry and a Case Study
V. Dal, E. Akçağın, A Yılmaz

RESEARCH AND DEVELOPMENT

23 Bending Behaviour of LLDPE Monofilaments Depending on Cold Drawing and Composition of the LLDPEs
B. Kolgjini, G. Schoukens, E. Shehi, P. Kiekens

31 Formation and Properties of Highly Porous Dibutylchitin Fibres Containing Nanoparticles
D. Wawro, W. Stepkowski, A. Komisarzyk, I. Krucińska

39 Influence of Triton X-100 on PVA Fibres Production by the Electrospinning Technique
E. S. Araújo, M. L. F. Nascimento, H. P. de Oliveira

44 Single Polymer Composite Yarns and Films Prepared from Heat Bondable Poly(lactic acid) Core-shell Fibres with Submicron Fibre Diameters
H. Kriel, R. D. Sanderson, E. Smit

48 Prediction and Quantitative Analysis of Yarn Properties from Fibre Properties Using Robust Regression and Extra Sum Squares
S. Fattahi, S. A. Hoseini Ravandi

55 Application of the MODAPTS Method with Inovative Solutions in the Warping Process
I. Šabarić, S. Brnada, S. Kovačević

60 Influence of the Backrest Roller Position on the Properties of Denim Fabrics
H. T. Shad, E. Haghghat, H. Nosraty

67 Mathematical Simulation of Elongation at Break after Fatigue Loading of Fabrics Containing Fancy Yarns
A. Ragaišienė, D. Milašienė

75 Probabilistic Model of the Fatigue Durability of Knitted Fabrics Produced from Standard Smooth and Fancy Flame Cotton Yarns
R. Drobina

86 Mechanical Properties of Polyurethane Coated Knitted Fabrics
V. M. Potočić Matković, Z. Skenderi,

92 Evaluation of the Residual Bagging Height using the Regression Technique and Fuzzy Theory
B. Jaouachi

99 Geometric and Structural Model of a Spatial Knitted Product
K. Piekłak, Z. Mikolajczyk

106 Modified Melt-Blown Nonwovens for Respiratory Protective Devices Against Nanoparticles
A. Brochocka, K. Majchrzycka, K. Makowski

112 Numerical Simulation of Dynamic Pressure and Displacement for the Top Part of Men's Socks Using the Finite Element Method
R. Dan, X-R. Fan, D-S. Chen, M-H. Dan, Z. Shi, L-B. Xu, M. Zhang

118 Modelling of the Temperature Field within Textile Inlayers of Clothing Laminates
R. Korycki, H. Szafranska

123 Influence of Natural Fibre Treatment on Interfacial Adhesion in Biocomposites
A. Širvaitienė, V. Jankauskaitė, P. Bekampienė, A. Kondratas

130 Modelling the Performance of Selected Textile Elements of Personal Protective Equipment Protecting Against Falls from a Height During Fall Arrest
K. Baszczyński

137 Development of a Three Dimensional Approach to Acquire a Drape Contour and Studies on Influential Factors
P. Gnanavel, T. Ananthkrishnan

144 Dyeing Properties and Colour Characteristics of a Novel Fluorescent Dye Applied to Acrylic Fabric
L. Liu, C. Qin, R-C. Tang, G. Chen

148 Information for Authors. Advertising and Subscription Information