

TABLE OF CONTENTS

SYSTEM ANALYSIS, CONTROL AND INFORMATION PROCESSING

A. G. Makarov, A. V. Demidov, N. V. Pereborova Increasing reliability of modeling and prediction of deformation processes of polymer textile materials.	5
M. A. Egorova, S. V. Kiselev System analysis of the performance properties of aramid textile materials	10
A. A. Kozlov, S. V. Kiselev Digitalization of prediction of relaxation and deformation processes of textile materials	15
A. V. Demidov, A. G. Makarov, N. V. Pereborova Increasing the accuracy of digital prediction of deformation processes of textile materials.	20

MACHINES, AGGREGATES AND TECHNOLOGICAL PROCESSES

A. A. Kozlov Research of deformation processes of textile elastomers for implantology	25
A. Yu. Ataeva, G. I. Sverdik Method of calculation of a gas-purification line with a property sample of a jet bubbler	30

PRODUCT QUALITY CONTROL. STANDARDIZATION. ORGANIZATION OF PRODUCTION

N. V. Pereborova, N. S. Klimova, D. A. Ermin, Ya. S. Tomashevich Recommendations for the development of textile materials for medical purpose	35
N. V. Pereborova Qualitative assessment of relaxation and restoration properties of textile materials	41
D. E. Platonov Evaluation of process network performance in single product flow processing using computer simulations.	46
E. A. Ageeva, L. V. Makhova, A. S. Gorshkov Simple payback period of investments in energy saving in an industrial enterprise	51
R. A. Gorshkov, A. S. Stepashkina Energy saving potential and return on investment for the enterprise with a hybrid heat pump system	57
V. A. Chetvergov Iterative modeling as a tool for managing the production process at the defense industry enterprise, taking into account the development of manufacturing new products.	61
A. D. Kilimova Prospects for using the GPT-3 and Midjourney neural network model to organize production in the sewing industry	65
E. V. Kislyakova, M. A. Kislyakov W. Shewhart's control charts as a tool for assessing the quality of insulating gaps of high-voltage equipment	69

TECHNOLOGY AND PROCESSING OF SYNTHETIC AND NATURAL POLYMERS AND COMPOSITES

N. P. Midukov, T. I. Efremov, N. V. Evdokimov
 A 3D printing technology in the production of decorative products for furniture from sawdust 75

M. B. Kirillova, I. V. Porotikova
 Comparative evaluation of a 3D-model made by modeling in a graphical program vs using 3D scan 79

M. V. Kolosova, N. P. Midukov, V. S. Kurov
 The modern level of foreign research on the structure and properties of corrugated cardboard 85

TECHNOLOGY OF PRODUCTION OF TEXTILE AND LIGHT INDUSTRY PRODUCTS

S. V. Kiselev
 Experimental and theoretical investigations of deformation properties
 of textile elastomers for implantology 93

I. M. Egorov, A. A. Kozlov
 Simulation of relaxation of textile elastomers for implantology. 98

V. I. Wagner, N. V. Pereborova, D. A. Ermin, Ya. S. Tomashevich
 Methods for investigation of viscoelastic properties of aramid textile materials 103

A. M. Korinteli, I. V. Cherunova, A. V. Merkulova
 Investigation of the thermal effects of the underwater welding process on protective hydraulic clothing. 109

Authors list 118

Information for authors 120