

## CONTENTS

<b>L. Sokolova, V. Ovcharov, O. Panfilova, K. Sukhyi, V. Stopicheva</b> Bioingredients of elastomeric compositions: production, characteristics, functionality, usage.....	7
<b>B. Kulish-Pelenska, K. Kysil, V. Levytskyi, A. Masyuk</b> Chemical stability and biodegradability of polylactide materials.....	13
<b>T. Shantalii, N. Kozak</b> Dependence of dynamic behavior and permeability on chemical structure of host polymer of polyimide based hybrid organic-inorganic nanocomposite.....	29
<b>O. Pomirko, A. Kucherenko, L. Dulebova, V. Moravskiy</b> Development of an automated laboratory complex for studying the process of metallization of polymeric raw materials.....	35
<b>D. Kechur, D. Kysil, B. Levytskyi, A. Masyuk, A. Davydovych</b> Elastic-plastic properties modified oligomer binding i 3D printed polylactide products.....	44
<b>P. Humenetskyi, V. Levytskyi, N. Chopyk, T. Humenetskyi</b> Electrophysical properties of polyvinylchloride plastics for cable products.....	54
<b>T. Samoilenko, L. Yashchenko, N. Yarova, O. Brovko</b> Formation of silicon-containing epoxy adhesives by using hardeners of different chemical nature.....	60
<b>O. Kabat, K. Heti, O. Voronyi</b> Heat-resistant polymer composites with silica gel for heavily loaded units of machines and mechanisms.....	66
<b>V. Skorokhoda, T. Behey, V. Malynovskiy, Y. Melnyk</b> Hydrogels for long-lasting contact lenses.....	71
<b>A. Kucherenko, I. Gajdos, M. Kuznetsova, V. Moravskiy</b> Kinetic studies of metalization of polyamide granules.....	79
<b>G. Dudok, N. Semenyuk, V. Skorokhoda, N. Lylo</b> Magneto-sensitive current-conductive hydrogels based on hydroxyethyl methacrylate copolymers with polyvinylpyrrolidone.....	86
<b>N. Baran, T. Hrytsenko, L. Dulebova, O. Grytsenko</b> Modified membranes based on polyvinylpyrrolidone-containing hydrogels with increased strength.....	92
<b>Y. Laruk, M. Sozanskyi, V. Levytskyi, Y. Tsyupka</b> Morphology and properties of polyvinyl chloride-polystyrene plastics.....	101
<b>M. Zhyhailo, O. Demchyna, I. Yevchuk</b> Novel proton conductive polymer and organic/inorganic materials for fuel cell application.....	107
<b>O. Ivanukh, I. Semeniuk, Y. Melnyk, V. Skorokhoda</b> Obtaining and properties of films based on polyhydroxybutyrate and its blends with biodegradable polymers.....	113

<b>V. Krasinskyi, K. Bajer, O. Krasinska, L. Dulebova, I. Sarris</b> Obtaining bio(nano)composite based on PBS and MWCNTs.....	123
<b>I. Liashok, M. Polushkin, O. Kryukova, D. Fedorchuk, I. Motsok</b> Polymer materials based on aqueous extracts of chamomile.....	131
<b>A. Masyuk, B. Levytskyi, A. Davydovych, V. Levytskyi</b> Polymer-silicate composites as modifiers of thermoplastic and thermoreactive materials.....	136
<b>D. Kichura, R. Subtelnyi</b> Prospects for the use of biopolymers .....	157
<b>I. Liashok, M. Kychuzhynets, O. Kryukova, O. Butenko, V. Shvets</b> Prospects of the use of polymer materials based on natural extracts of nettle.....	165
<b>Y. Laruk, D. Kysil, V. Levytskyi</b> Regularities of modification of polyvinyl chloride materials in the swollen state.....	171
<b>D. Katruk, P. Humenetskyi, V. Levytskyi, A. Masyuk</b> Regulations of obtaining and properties of highly filled modified polyester composites .....	178
<b>N. Semenyuk, Y. Melnyk, G. Dudok, N. Shalata</b> Regulations of obtaining polyvinylpyrrolidone copolymers and their composites under the action of ultrasound.....	187
<b>O. Grytsenko, V. Moravskyi, V. Krasinskyi, I. Gajdos</b> Research of filler orientation effect the hydrogel films properties .....	196
<b>M. Bratychak, N. Chopyk, V. Zemke, V. Malynovskyi</b> Study of the formation process of epoxy-oligoester compositions by IR spectroscopy.....	203
<b>O. Slisenko, T. Andrushchenko, V. Budzinska</b> Synthesis and swelling kinetics of hydrogels based on poly(sodium acrylate) and polysiloxane .....	209
<b>T. Hrytsenko, M. Yevtushenko, V. Levytskyi</b> The regularities of complex formation in the 2-hydroxyethyl methacrylate/combined polymer matrix system.....	217
<b>T. Humenetskyi, L. Bilyi, N. Chopyk</b> The regularities of modified epoxy compositions structuring .....	227
<b>O. Grytsenko, Y. Tsiupka, O. Smirnova, P. Voloshkevych</b> Using the scheffe's method in the study of mathematical model of optimization the polymeric composition structures.....	232
<b>V. Zemke, N. Chopyk, M. Bratychak</b> Influence of physical, chemical and technological factors on the recyclability of polyolefin blends.....	240
<b>The authors index.....</b>	250