

# CONTENTS

## Chemistry

---

<i>Elena Khomenko</i> Spin- Orbit Coupling Effects in BrO <sup>-</sup> and HOBr Photodissociation Reactions	117
<i>Ljudmila Roman and Stepan Chundak</i> Synthesis, Structure, Characteristics of Zn(II) and Cd(II) Coordination Compounds with 3-Methoxybenzene Acid Hybrazid and their Biological Activity	123
<i>Anatoliy Drozd and Natalia Leonova</i> Spectrophotometric Determination of Ni <sup>2+</sup> , Co <sup>3+</sup> , Fe <sup>2+</sup> , Cu <sup>2+</sup> Concentrations with 1-(2-Pyridylazo)-2-Naphthol in Aqueous-Micellar Medium Based on Two Intensive Parameters	129
<i>Maryna Stasevych, Viktor Zvarych, Rostyslav Musyanovych, Volodymyr Novikov and Mykhailo Vovk</i> Synthesis of N-Benzoyl-N'-(9,10-Dioxo-9,10-Dihydroanthracen-1-yl) Thioureas and Quantum-Chemical Analysis of the Reaction Passing	135
<i>Mykola Borzenkov and Orest Hevus</i> Synthesis of Novel Surface Active Methacrylate Monomers Based on ε-Caprolactone	141
<i>Iryna Yevchuk, Oksana Demchyna, Volodymyr Kopylets, Zenoviya Koval and Hanna Romaniuk</i> Kinetic Regularities of the Early Stages of Sol-Gel Process in Tetraethoxysilane-Based Systems	147
<i>Michael Bratychak, Galyna Strap, Olena Shyshchak and Olena Astakhova</i> Chemical Modification of Polyglycidyl Phenol-Formaldehyde Oligomers by Methacrylic Acid	157
<i>Zoriana Gnativ, Irena Nylukyshyn, Zorian Pikh, Taras Voronchak and Anna Rypka</i> Catalytic Cooligomerization of Styrene and Dicyclopentadiene: Yield and Properties Dependence on Reaction Mixture Composition	165
<i>Nadiya Popadyuk, Oksana Zholobko, Volodymyr Donchak, Khrystyna Harhay, Olha Budishevska, Andriy Voronov, Ananiy Kohut and Stanislav Voronov</i> Ionically and Covalently Crosslinked Hydrogel Particles Based on Chitosan and Poly(ethylene glycol)	171

## Chemical Technology

---

<i>Yuriy Melnyk, Viktor Reutsky, Volodymyr Reutsky and Volodymyr Starchevskyy</i> Influence of Complex-Creative Additives on Oxidation of Hydrocarbons	177
<i>Bohdan Dzinyak</i> Cooligomerization of C <sub>9</sub> Fraction Unsaturated Hydrocarbons Initiated by Organic Peroxides	183
<i>Viktor Shevchenko and Galyna Kotsay</i> Influence of Fine- Grinded Glass Additives on the Induction and Post-induction Periods of Portland Cement Hardening	189
<i>Orest Kuntiy, Oksana Dobrovetska, Serhiy Korniy, Galyna Zozulya and Galyna Mykhalyna</i> Palladium Deposition on Magnesium in PdCl <sub>2</sub> Solutions in DMF	193
<i>Mykola Gomelya, Inna Trus and Tetyana Shabliy</i> Application of Aluminium Coagulants for the Removal of Sulphate from Mine Water	197
<i>Ivanna Saban, Oleg Grynyshyn and Victoria Kochubei</i> Physico-Chemical Characteristics and Thermal Stability of Oil Based Lubricating Fluids for Glassware Production	205
<i>Petro Topilnytsky, Viktoria Romanchuk, Sergiy Boichenko and Yuri Golych</i> Physico-Chemical Properties and Efficiency of Demulsifiers Based on Block Copolymers of Ethylene and Propylene Oxides	211
<i>Asaad Ibraheem, Sergii Boichenko, Viktoria Romanchuk, Mariia Boichenko and Olexander Lazorko</i> Innovative Technological Scheme of Iraq Oils Refining	219
<i>Serhiy Pyshyev, Yuri Prysiaznyi, Denis Miroshnichenko, Halyna Bilushchak and Roksolana Pyshyeva</i> Desulphurization and Usage of Medium-Metamorphized Black Coal. 1. Determination of the Optimal Conditions for Oxidative Desulphurization	225
<i>Elena Chygyrynets' and Victoria Vorobyova</i> A Study of Rape-Cake Extract as Eco-Friendly Vapor Phase Corrosion Inhibitor	235