

CONTENTS

Chemistry

Maralla Yadagiri, Singuru Ramakrishna, Gundeboina Ravi, Palla Suresh, Kurra Sreenu, Doddle Jaya-Prakash and Muga Vithal

Preparation, Characterization and Photocatalytic Studies of $\text{Cr}_2(\text{MoO}_4)_3$ and Nitrogen-Doped $\text{Cr}_2(\text{MoO}_4)_3$

391

Maria Smolinska, Olga Korkuna, Teodozia Vrublevska and Grigory Teslyar

Eriochrome Black T - a New Analytical Reagent for Spectrophotometric Determination of Sulphanilamides

401

Ostap Ivashkiv, Piotr Bruzdziaik, Olena Shyshchak, Jacek Namiesnik and Michael Bratychak

Determination of Hydroxy Groups in the Modified Epoxy Oligomers Using IR-Spectroscopy

411

Rohan Ravindranath, Soon Mog So and Jik Chin

Evaluating Binol- Aldehyde as a Chiral Derivatizing Agent for Diamines

417

Luiz F. Rocha, Leonardo C. Ferreira and Maria F. Marques

Synthesis and Evaluation of Arylimino Pyridine Nickel(II) Catalysts: Influence of Substituents on Polyethylene Structure

421

Oleh Suberlyak, Oleksandr Grytsenko and Victoria Kochubei

The Role of FeSO_4 in the Obtaining of Polyvinylpirrolidone Copolymers

429

Halyna Zubyk, Marta Plonska-Brzezinska, Olena Shyshchak, Olena Astakhova and Michael Bratychak

Study of Phenol-Formaldehyde Oligomers Derivatives Structure by IR- and NMR-Spectroscopy

435

Der Liaw, Ying Huang, Cheng Chang, Boris Rumyantsev, Tat'yana Lozinova, Vitaly Zubov,

Anatoly Olkhov, Victor Bagratashvili, Gennady Zaikov and Anatoly Ischenko

Photoelectron Properties and Paramagnetism of Polyimides Based on N,N,N',N' -substituted p -Phenilediamine and Dianhydrides

445

Olga Shevchenko, Anastasiia Schastlyvets, Kateryna Burenkova, Igor Voloshanovsky

Synthesis and Initiating Activity of Co(II)-Mn(II) Bimetallic Macroinitiators of β -Diketonate Type

453

Talkybek Jumadilov, Zharylkasyn Abilov, Ruslan Kondaurov, Huangul Himersen,

Gaukhar Yeskalieva, Moldir Akylbekova and Auez Akimov

Influence of Hydrogels Initial State on their Electrochemical and Volume-Gravimetric Properties in Intergel System Polyacrylic Acid Hydrogel and Poly-4-vinylpyridine Hydrogel

459

Chemical Technology

Galina Fomenko, Alexander Nosenko, Viktor Goleus, Nataliia Ilchenko and Alexandra Amelina

Glass Formation and Properties of Glasses in $\text{MgO}-\text{BaO}-\text{B}_2\text{O}_3$ System

463

Lyudmila Melnyk, Oleksandr Bessarab, Svitlana Matko and Myroslav Malovanyy

Adsorption of Heavy Metals Ions from Liquid Media by Palygorskite

467

Victor Yavorskiy and Andriy Helesh

Theoretical Analysis of Efficiency of Horizontal Apparatus with Bucket-like Dispersers in the Dust Trapping System

471

Abdulhakim Alamaria and Ghazali Nawawi

Dehydration Pervaporation of Ethyl Acetate-Water Mixture via Sago/PVA Composite Membranes Using Surface Methodology

479

Iryna Kolesnyk, Victoria Konovalova and Anatoliy Burban

Alginate/ κ -Carrageenan Microspheres and their Application for Protein Drugs Controlled Release

485

Dmytro Symak, Volodymyr Atamanyuk and Jaroslaw Gumnitsky

Analysis of Dissolution Kinetics Based on the Local Isotropic Turbulence Theory

493

Oleg Nagursky, Jaroslaw Gumnitsky and Victoria Vaschuk

Unsteady Heat Transfer during Encapsulation of Dispersed Materials in Quasi-liquefied State

497

Victor Yavorskiy, Jaroslaw Kalymon and Olga Rubai

Kinetics of Ferrum(II) Ions Oxidation by Air Oxygen in Water in Horizontal Absorber with Bucket-like Dispersers

503