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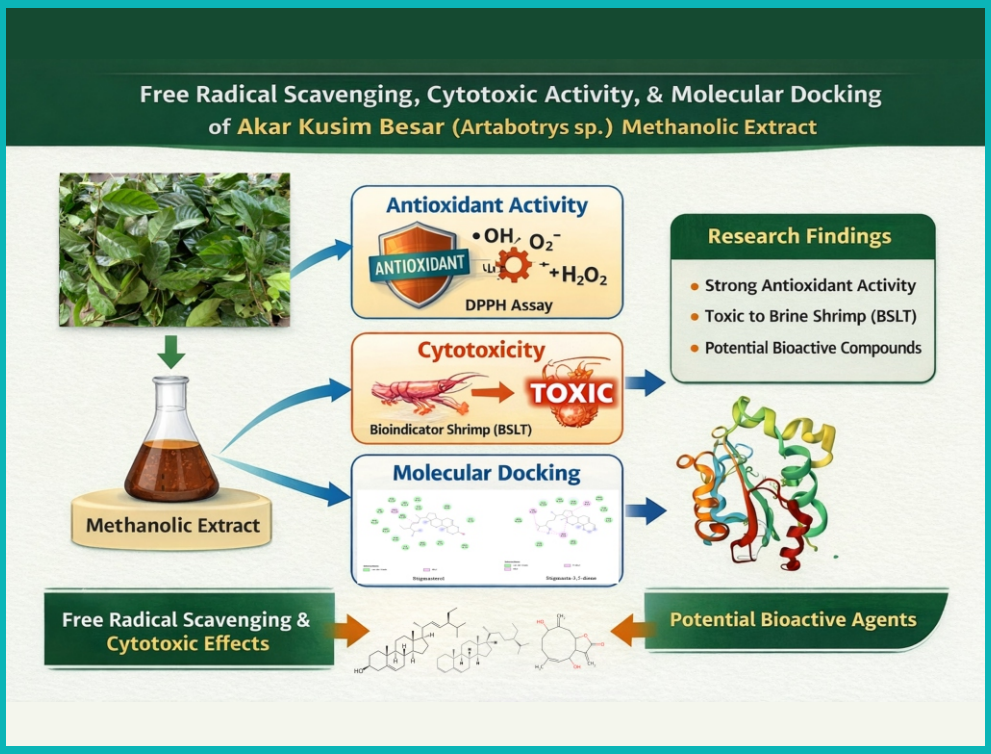

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PREFACE

The March issue of ALCHEMY Jurnal Penelitian Kimia 22 (1) 2026 presents twenty-two original contributions that collectively illustrate the evolving landscape of chemical sciences and their allied fields. This edition underscores the journal's dedication to disseminating high-quality, peer-reviewed research while fostering interdisciplinary perspectives that connect fundamental inquiry with practical application.

The articles featured span diverse domains. Several works emphasize the potential of natural compounds, including studies on phloroglucinol derivatives, Indonesian herbal essential oils, Moringa leaf bioactives, and *Artabotrys sp.* extracts, underscoring the continued relevance of phytochemistry in antibacterial, antioxidant, and anticancer research. Complementary research on chroman derivatives, silver nanoparticles synthesized with Kitolod extract, and Dadap leaf phytochemistry further demonstrates the promise of plant-based resources in pharmaceutical innovation.

Advances in materials science and sustainability are equally prominent. Contributions on biopolymer composite membranes for lithium-ion batteries, hydrogels derived from carrageenan-chitosan, and bioplastics from sago liquid waste showcase chemistry's role in enabling eco-friendly technologies. Studies on coal fly ash-based geopolymers, zeolite-supported syntheses, and cellulose biocoagulants from jengkol peel exemplify the transformative potential of applied chemistry in environmental remediation and resource recovery.

Methodological rigor is reflected in works that employ FTIR, NMR, and HPLC analyses, as well as in optimization frameworks such as central composite design. Computational approaches, including DFT studies of Cu(II) complexes and molecular docking analyses of antioxidant compounds, illustrate the integration of theoretical and experimental paradigms that characterize contemporary chemical research. Collectively, these contributions articulate a coherent narrative of scientific progress, one that enriches disciplinary knowledge, advances sustainable development, and supports innovations in public health and technology.

On behalf of the editorial board, we extend our sincere gratitude to all authors for their commitment to advancing scientific inquiry and to the reviewers whose critical assessments and constructive feedback have ensured the scholarly integrity of this issue. Their collective efforts exemplify the collaborative ethos that sustains the advancement of science and strengthens the global research community.

Best regards,
Editorial Team
ALCHEMY: Jurnal Penelitian Kimia

TABLE OF CONTENTS

ALCHEMY Jurnal Penelitian Kimia Vol. 22 No. 1 March 2026

Review Articles

Phloroglucinol Compounds and Their Derivatives: Comparison of FTIR, NMR, and Bioactivity Characterization as Antibacterial, Antioxidant, and Anticancer Agents 1–39

Sevi Dwi Cahyani, Triana Kusumaningsih, Maulidan Firdaus, Wahyu Eko Prasetyo

https://dx.doi.org/10.20961/alchemy.22.1.109425.1-39

Recent Developments of Biopolymer-Based Composite Membranes as Sustainable Separators for Lithium-Ion Batteries 40–59

Tian Puspita Sari, Fitri Khoerunnisa, Asep Kadarohman

https://dx.doi.org/10.20961/alchemy.22.1.114118.40-59.

Chemical Composition and Aromatherapy-Based Relaxation Potential of Selected Indonesian Herbal Essential Oils 60–73

Nurina Rizka Ramadhania

https://dx.doi.org/10.20961/alchemy.22.1.114348.60-73.

Research Articles

In Silico Study of Moringa Leaf (*Moringa oleifera* L.) Compounds as an Antiproliferative in Hepatocellular Carcinoma against TGF-β Receptor 74-87

Arnees Angzora, Athena Lilavya Putri, Johanna Felicia Susanto, Kathlia Putri Alyanisa, Debian Mydea Erliputeri, Nawadhir Fauzan, Shela Salsabila, Muchtaridi Muchtaridi

https://dx.doi.org/10.20961/alchemy.22.1.105514.74-87

Organic Waste Management Innovation through Composting Technology with Local Bio-Activators 88–94

Eka Putra Ramdhani, Hilfi Pardi, Nola Ritha

https://dx.doi.org/10.20961/alchemy.22.1.112491.88-94

Optimization Depolymerization of Tilapia Fish Scale Chitosan by Oxidative Degradation with H_2O_2 using Central Composite Design (CCD) 95–105

Dhian Eka Wijaya, Afra Raeviana Putri, Intan Lestari, Edwin Permana, Munifilia Ekasari, Nur Ahniyanti Rasyid

https://dx.doi.org/10.20961/alchemy.22.1.95765. 95–105

Synthesis, Characterization, and DFT Computational Study of Cu(II) Complex with 3-Hydroxybenzoate 106-116

Fastabiqul Khoirot, Muhammad David Julian Syach, Sentot Budi Rahardjo, Triana Kusumaningsih

https://dx.doi.org/10.20961/alchemy.22.1.114305.106-116

Modification of Chroman Derivative Compounds and Their *In Silico* Antibacterial Activities

Jufrizal Syahri, Rahmiwati Hilma, Nurlaili Nurlaili

https://dx.doi.org/10.20961/alchemy.22.1.101625.117-126 117–126

Kitolod (*Isotoma longiflora* Presi) Leaf Extract as a Bioreductor in Silver Nanoparticle Synthesis

Alifiani Maulida, Gusrizal Gusrizal, Anis Shofiyani

https://dx.doi.org/10.20961/alchemy.22.1.109231.127-137 127–137

Determination of Tetracycline Antibiotic Residue Levels in Goldfish (*Cyprinus carpio*) using High Performance Liquid Chromatography (HPLC)

Agung Abadi Kiswandono, Anisa Rahmawati, Yanesta Oxvyena, Purna Pirdaus, Sonny Widiarto, Sutopo Hadi, Rinawati Rinawati

https://dx.doi.org/10.20961/alchemy.22.1.90319.138-147 138–147

The Effect of Co-Processed Excipient and Mannitol on Physical Properties and Release Test of Flavonoid Total of Bajakah Root (*Spatholobus littoralis* Hassk.) Water Extract in Effervescent Granule

Dian Eka Ermawati, Nur Cahyo Fajar Trihantono, Ulfa Afrinurfadhilah Darojati, Nindita Claurisa Amaris Susanto, Sholichah Rohmani, M. Fiqri Zulpadly, Annisa Diyan Meitasari, Diyah Tri Utami, Anif Nur Artanti, Heru Sasongko, Meta Kartika Untari

https://dx.doi.org/10.20961/alchemy.22.1.94157.148-156 148–156

Synthesis and Characterization of Carrageenan-Chitosan Milkfish Scales-Based Hydrogel for Slow-Release Fertilizer

Asri Azizah, Diana Triyanti, Putri Sahira, Anisa Putri, Retno Sulistyo Dhamar Lestari, Jayanudin Jayanudin

https://dx.doi.org/10.20961/alchemy.22.1.102933.157-169 157–169

Synthesis and Characterization of an Adsorbent from Chicken Egg Shell and Its Application for Methyl Orange

Eka Sri Yusmartini, Mardwita Mardwita, Eko Ariyanto, Wahyu Triaji Rahadianto, Ikbal Oktaviansyah, Muhammad Dzaky Muzhaffar

https://dx.doi.org/10.20961/alchemy.22.1.96880.170-178 170–178

Formulation and Stability of Miana Leaf Extract Spray Gel with Antioxidant

Nelly Suryani, Rosa Adelina, Vivi Anggia, Tania Sabarini, Sabrina Dahlizar, Ofa Suzanti Betha, Estu Mahanani Dhilasari

https://dx.doi.org/10.20961/alchemy.22.1.100561.179-190 179–190

Physical and Chemical Properties of Bacterial Cellulose-based Bioplastic Innovation from Sago Liquid Waste for Eco-Friendly Secondary Food Packaging

Aminah Maryani, Nur Arfa Yanti, La Ode Ahmad Nur Ramadhan, Reza Kurniawan

https://dx.doi.org/10.20961/alchemy.22.1.109471.191-199 191–199

Free Radical Scavenging, Cytotoxic Activity, and Antioxidant-Targeted Molecular Docking Analysis of Akar Kusim Besar (*Artabotrys sp.*) Methanolic Extract from Ketambe, Indonesia Halimatussakdiah Halimatussakdiah, Ulil Amna, Vivi Mardina, Misdi Misdi https://dx.doi.org/10.20961/alchemy.22.1.108079.200-216	200–216
Identification of Antioxidant Compounds using the DPPH Radical Scavenging Method from Ethanol and Methanol Extracts of the Leaves and Fruits of the Renggak Plant (*Ammomum dealbatum* R.) Rahmawati Rahmawati, Meliana Meliana, Lestia Furnapasta, Syarifa Wahidah Al Idrus, Baiq Fara Dwirani Sofia, Sya'ban Putra Adiguna, Jono Irawan https://dx.doi.org/10.20961/alchemy.22.1.108082.217-227	217–227
The Influence of Solvent and Heating Time Toward the Percent Yield of Sumbermanjing Pyrophyllite-Polyethylene Glycol (PEG) 6000 Composites Siti Mutrofin, Ekantoro Ekantoro, Rurini Retnowati, Hanisah Kamilah https://dx.doi.org/10.20961/alchemy.22.1.104024.228-240	228–240
Synthesis of Ni^{2+}/Natural Zeolite by Electro-Ion Exchange I F Nurcahyo, Fitria Rahmawati, Lisa Agustina Nurlaila, Yuniawan Hidayat, Eddy Heraldy, Khoirina Dwi Nugrahaningtyas, Yun Hin Taufiiq-Yap https://dx.doi.org/10.20961/alchemy.22.1.80180.241-245	241–245
Synthesis of Carbamate-Modified Cellulose Biocoagulant from Jengkol (*Archidendron pauciflorum*) Peel via Crosslinking Method for Lead Removal from Wastewater Alpan Sofyan Tanjung, Rifda Adillah, Muhammad Fajrul Rahman, Yulia Eka Putri https://dx.doi.org/10.20961/alchemy.22.1.102384.246-253	246–253
Preparation and Optimization of Coal Fly Ash-Based Geopolymer and Its Application as an Adsorbent for Basic Yellow 2 and Methylene Blue Dyes Eddy Heraldy, Edi Pramono, Yuniawan Hidayat, Khoirina Dwi Nugrahaningtyas, Angel Maydeleine, Intan Dwi Rahmadani https://dx.doi.org/10.20961/alchemy.22.1.98784.254-263	254–263
Phytochemical Examination, GC-MS Analysis, and Antibacterial Activity of Methanol Extract of Dadap Leaves (*Erythrina variegata* L.) Against Staphylococcus aureus and Escherichia coli Bacteria using Disc Diffusion Method Yulia Theodora Situmorang, Halimatussakdiah Halimatussakdiah, Ulil Amna, Vivi Mardina https://dx.doi.org/10.20961/alchemy.22.1.99255.264-273	264–273

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