MALAYSIAN JOURNAL OF CHEMISTRY (MJChem)

Published by Institut Kimia Malaysia (Malaysian Institute of Chemistry): e-ISSN 2550-16580

Contents

Malaysian Journal of Chemistry Volume 23(2), 2021

<i>In Vitro</i> Evaluation of Crosslinked Polyvinyl Alcohol/Chitosan – Gentamicin Sulfate Electrospun Nanofibers Nazirah Hamdan, Deny Susanti Darnis and Wan Khartini Wan Abdul Khodir	1
Calcium Oxide Derived from Egg Shells: A Low Cost Catalyst for Biodiesel Production Noraini Hamzah, Izyan Yusof, Wan Zurina Samad, Hairul Amani Abdul Hamid, Nazrizawati Ahmad Tajuddin and Mohd Lokman Ibrahim	11
Synthesis and Characterization of Amino Acid-Derived Hydantoins Ee-Zhen Chin, Siow-Ping Tan, Sook-Yee Liew and Thomas Kurz	19
Synthesis and Characterization of Polyaniline/Chitin (Squid Pens) for the Removal of Chromium (VI) from Aqueous Solution Siti Nor Atika Baharin, Hafiz Istamam, Nur Farahin Suhaimi, Nurul' Ain Jamion, Muggundha Raaov and Kavirajaa Pandian Sambasevam	26
Development of a HPLC Method for Quantification of Amentoflavone in Leaf Extracts of Three <i>Calophyllum</i> Species Nurul Iman Aminudin, Nadia Aziba Norazhar and Farediah Ahmad	33
A Review on Synthesis of Plant-Mediated Metal Nanoparticles for Fabric Coating Hartina Mohd Yusop and Wan Norfazilah Wan Ismail	40
DNA-Assisted Stabilization of Graphene Sheets and Its Application as Supercapacitors Electrode Yasin M. Y. Albarqouni, Gomaa A. M. Ali, Soon Poh Lee, Rahim Mohd-Hairul and Kwok Feng Chong	55

Molecular Docking Analysis of Designed Ligands on VP40 of Ebola Virus Nur Fadhilah Rahim, Mohamad Ariff Mohamad Yussoff, Khairul Bariyyah binti Abd Halim, Azzmer Azzar Abdul Hamid and Shafida Abd Hamid	63
Transesterification of Waste Cooking Oil Utilizing Heterogeneous K₂CO₃/Al₂O₃ and KOH/Al₂O₃ Catalysts Muhammad Amirrul Hakim Lokman Nolhakim, Norshahidatul Akmar Mohd Shohaimi, Mohd Lokman Ibrahim, Wan Nur Aini Wan Mokhtar and Ahmad Zamani Ab Halim	74
The Application of K/Al ₂ O ₃ with Ethanolic 2-Metylimidazole for the Extraction of Naphthenic Acid from Crude Oil Noraini Safar Che Harun, Norshahidatul Akmar Mohd Shohaimi, Ahmad Zamani Ab Halim, Nor Hakimin Abdullah and Nurasmat Mohd Shukri	84
Schiff Bases and Their La(III) Complexes: Conventional and Microwave- Assisted Synthesis, Physicochemical and Spectroscopic Analysis Nur Husnina Nasaruddin, Shahrul Nizam Ahmad, Hadariah Bahron, Nor Mas Mira Abd Rahman and Nor Saadah Mohd Yusof	91
Isolation of a Morphinan Alkaloid and a Methoxybenzoic Acid with The Investigation on The Antibacterial Effect of <i>Alphonsea cylindrica</i> King Leaves Kin-Hau Cho, Hui-Yin Tan, Mohd Azlan Nafiah and Siow-Ping Tan	102
Isolation and Cloning of Sesquiterpene Synthases (<i>AmGS3</i> and <i>AmGS4</i>) and Chalcone Synthase (<i>AmCHS</i>) from <i>Aquilaria malaccensis</i> Responsible for Agarwood Formation Aimi Wahidah Aminan, Siti Zulaiha Zailani, Saiful Nizam Tajuddin, Aizi Nor Mazila Ramli	110
Transformation of Kaolin to Kalsilite: Effect of KOH Concentration and Reaction Temperature Eddy F. Yusslee, Nur Hazwani Dahon, Mohd Azrul Abd Rajak and Sazmal E. Arshad	115
Physiochemical Analysis of Cocoa Powder-Like from Roasted Seeds of Fermented <i>Nephelium lappaceum</i> L. (Rambutan) and <i>Nephelium mutabile</i> Bl. (Pulasan) Fruits Hazrulrizawati Abd Hamid, Izzah Hayati Yahya and Aizi Nor Mazila Ramli	121
Facile One-Step Preparation and Characterization of Graphene Quantum Dots Suspension via Electrochemical Exfoliation Wan Hazman Danial, Bashariah Farouzy, Mundzir Abdullah and Zaiton Abdul Majid	127

Plant Extracts: A Promising Source for the Green Synthesis of Copper Nanoparticles Towards Agriculture and Environmental Applications Wan Hazman Danial, Nurul Iman Aminudin, Hanna Khaleeda Mohd Shukri and Nur Aqilah Sarip	136
A Preliminary Study of Potential Aquatic Macrophytes in Phytoremediation of Lead in The Muar River Nurul' Ain Jamion, Faiz Idden Shah Ismail, Nur Salwani Ab Wahid and Nur Sofiah Abu Kassim	152
Antibacterial and Antiplasmodial Properties of Chemical Compounds Isolated from Bark of <i>Phyllanthus acidus</i> (L.) Skeels Qian-Yu Lim, Siow-Ping Tan, Hui-Yin Tan, Wee-Kent Liew, Yee-Ling Lau and Mohd Azlan Nafiah	165
Structural Characterization and Visible Light-Induced Photoelectrochemical Performance of Fe-Sensitized TiO ₂ Nanotube Arrays Prepared via Electrodeposition Lim Ying Chin, Najaa Mustaffa, Asmaa Kadim Ayal, Devagi Kanakaraju and Lim Ying Pei	173
Combining Chemometrics, Sensory Analysis and Chromatographic Fingerprint of Volatile, and Phenolic Compositions for Systematic Classification of Pineapple (<i>Ananas comosus</i> L.) Syaidatul Faraha Zainuddin, Rozita Osman, Hafizan Juahir and Siti Raihan Zakaria	183
Chemical Composition of Agarwood Essential Oil (<i>Aquilaria malaccensis</i>) Upon Exposure Towards Heat Condition Hezelin Elayana Shaian, Che Mohd Aizal and Saiful Nizam Tajuddin	199
Discrimination of Herbal Products from Zingiberaceae Family Using Electric Nose Combined with Chemometric Techniques Pauzi A. N., Muhammad N., Abdullah N. and Kamal N	205
Synthesis, Structural Elucidation and Mesophase Behaviour of Hexasubstituted Cyclotriphosphazene Molecules with Amide Linking Unit Zuhair Jamain, Melati Khairuddean, Nur Kamarina Kamaruddin, Yeoh Zhi Rui	213
Synthesis, Characterization and Antimicrobial Studies of Metal Complexes Derived from Gentamicin Sulfate Fiona N. F. How, Mohammad Faiz Hizzuan Bin Hanapi and Dayang Fatin Nadhirah Binti Abang Sapani	226