JOURNAL OF THE MYANMAR ACADEMY OF ARTS AND SCIENCE



Chemistry

Vol. XVIII, No.1B, July, 2020

Myanmar Academy of Arts and Science

Journal of the Myanmar Academy of Arts and Science

Vol. XVIII, No.1B

Contents

Chemistry

Sr. No.	<u>Title</u>	Page
1	Khin Cho Lin, Extraction of Gold from Iron Pyrite Ore by Acid	1
2	Leaching and Bioleaching	1.1
2	Yin Yin Tun, Phytochemical Constituents and Some Biological Activities of the Stems of Allamanda Cathartica L. (Shwewa-Pan)	11
3	Khaing Khaing Myint, Purification, Immobilization and Biochemical	27
	Characterization of Fungal Laccase from Mushroom, Trametes Versicolor	
4	Hnin Wuit Yee, Study on Qualitative and Quantitative Phytochemical	43
	Constituents and Some Biological Activities of <i>Clitoria Ternatea</i> L.(Aung	
	– Mae –Nyo) Flowers	
5	Nway Shwan Oo, Sorption of Vanadium(V) from Mineralized Chloride-	57
	Sulfate Solution by Fibrous Ionites Materials	
6	Ohnmar Aye, Biosorption of Copper and Nickel Ions by Non-Living	69
7	Biomass of Aspergillus Species	0.1
7	Aye Myat Maw, Polypyrrole-Sodium Bentonite Composites and its	81
0	Electrical and Optical Properties Norw More Than On Properties And Characterization of Livin Co. O.	02
8	Naw Mon Thae Oo, Preparation And Characterization of LiNi _{1-X} Co _X O ₂ $(0.2 \le X \le 0.5)$ Nanocrystalline Powder	93
9	Chan Myae Kyaw, Investigation of Phytochemical Constituents and	103
	Some Biological Activities of the Spine of Zanthoxylum Rhetsa (Roxb.)	
	DC. (Ka-Thit-Phu)	
10	Saw Win, Study on the Fabrication, Evaluation of Mechanical and	117
	Physical Properties of Particle Board Made from Giant Reed (Arundo	
	Donax L.) and Application	
11	Htwe Htwe Mar, Utilization of Activated Durian Peel as a Sorbent for	127
	Removal of Direct Blue Dye from Aqueous Solution	
12	Swe Swe Mon, Investigation of Antidiabetic Activity and Structural	139
	Elucidation of Dihydrochalcone Compound Isolated from Myanmar	
10	Traditional Medicinal Plant, Grewia nervosa (Lour.) Panigrahi	1.47
13	Toe Toe Lwin, A Study on Effects of Gamma Irradiation on Fresh	147
	Cucumber Fruit (Cucumis sativus L.)	
14	Ko Ko Aung, Study on the Preparation of Rubber Composite from Waste	155
	Tyre, Rubber and Neutralized Waste Leather Particles	1.0
15	Aye Aye Mon, Ultrathin Irco Nanodendritic Electrocatalysts for the	163
	Oxygen Evolution Reaction	
16	Moe Tin Khaing, Characterization of Soil Used in Pottery Making of	171
	Nwe-Nyein Quarter, Kyauk-Myaung, Shwebo District, Sagaing Region	
17	Shwe Sin, Study On Traditional Medicine (Setkupala No.2) For Eye	181
	Diseases	
18	Hta Hta Win, Study on Comparative Adsorption Efficiencies of Rice	191
	Straw and Coconut Husk (Fibre) by Using Congo Red Dye	

Sr. No.	<u>Title</u>	Page
19	Kyu Kyu Maw, Structure Elucidation of a Pure Organic Compound Isolated from the Bark of Adina Cordifolia Hook. F (Hnaw)	199
20	Sandar Moe, Fatty Acids in Avocado Oil and Nutritional, Antioxidant and Antimicrobial Assessment of the Pulp	211
21	Tha Zin Win, Refining of Waste Fried Palm Oil by Modified Bentonite Clays	225
22	Khine Khine Lin, Tudy on Nutritional Value and Antidiabetic Activity of Swietenia Macrophylla King Seed (Mahogany)	235
23	Toe Toe Khaing, Preparation of Organic Fertilizers from Kitchen Wastes and Meal Cakes	243
24	Thwe War Aung, Assessment of Tube-Well Water Quality from Kyauktan Village, Minbu Township, Magway Region	251
25	Su Lay Yee, Study on Preliminary Phytochemical Screening, Antibacterial and Antioxidant Activities of <i>Piper Betle L.</i> (Betel Vine)	261
26	Myint Myint Khaing, Focusing on the Elemental Contents, Antioxidant Activity and Cytotoxicity of <i>Rhododendron Arboretum</i> W.W.Sm (Tawng Za Lat Ni) Flower	269
27	Aye Mon Thida Nyo, Study on Nutritional Values, Total Phenolic and Flavonoid Contents and Evaluation of Antimicrobial and Antioxidant Activities of Ethanolic Extract of Fruits of <i>Trapa natans</i> L. (Kywegaung-thee)	277
28	Khin Maw Maw, Phenolic Content, Antioxidant and Antitumour Activities and Isolation of a Phenolic Compound from the Bark of <i>Alstonia Scholaris</i> L. (Taung-Ma-Yo)	287
29	San San Aye, Antimicrobial Activity and Phytochemical Constituents of <i>Emblica Officinalis</i> Gaertn. (Zi-Byu) and <i>Terminalia Chebula</i> Retz. (Phan-Kha)	297
30	Thuzar Nyein, Preparation and Characterization of Bismuth Ferrite (BiFeO ₃) Nanoparticles by Sol-Gel Method	305
31	Zin Thu Khaing, Investigation on Some Bioactivities and the Nutrients of <i>Nephelium Lappaceum</i> L. (Kyet-Mauk) Seeds	313
32	Nan Yu Nwe, Characterization of Modified Chitosan-Alginate-Starch-Glycerol/Sorbitol Composite Membranes and their Antimicrobial Activities	327
33	Phyu Phyu Lwin, Preparation, Characterization and Application of Nanosilica and Nanosilica Xerogel from Bamboo Leaves	339
34	Htet Htet Than Sein, Preparation and Characterization of Cellulose Nanofibres from Pineapple Leaf Fibres and Sugarcane Bagasse	353
35	Aye Khaing Soe, Fermentation Process, Antimicrobial Activity and Physicochemical Analysis of Kefir Grains Fermented Milk, Grape (<i>Vitis Vinifera</i> L.) and Apple (<i>Malus Pumila</i>) Juices	363
36	Khin Sandar Linn, Isolation and Characterization of α-Amylase During Germination of Maize Grains (<i>Zea Mays</i> L.)	375
37	Mi Myat Su Mon, Mechanical Properties and Characterization of Natural Rubber Chitosan Composites	389

Sr. No.	<u>Title</u>	Page
38	Nyein Chan Aye, Effect of Alkali Treatment on Mechanical Properties of	397
	Banana Stem Fiber Reinforced Natural Rubber Composites	
39	Aye Aye Mar, Study on Nutritional Values, Physicochemical Properties,	405
	Antimicrobial Activity and Cytotoxicity of Prepared Nutraceutical Tablet	
	from Selected Fruits	
40	Thandar Aung, Phytochemical Investigation and Antimicrobial Activity	419
	from Fruit Extract of Haplophragma Adenophyllum (Wall.) DOP. (Phet-	
	Tham)	

Edition

2020, July, 1000 Copies

Copyright

Ministry of Education

Published by

Dr Aung Min (00322) Chairman, Journal Publication Committee, Myanmar Academy of Arts and Science

ISSN 2520-0186 LCCN 2003-323143

Printed by

U Win Aung (00171), Manager, Universities Press, Yangon, Myanmar