Chemistry Study Program

STAFF HANDBOOK





Faculty of Mathematics and Natural Sciences UNIVERSITAS ISLAM INDONESIA YOGYAKARTA



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Chemistry Study Program Faculty of Mathematics and Natural Sciences UNIVERSITAS ISLAM INDONESIA YOGYAKARTA







Name: Prof. Dr. Is Fatimah, S.Si., M.Si.Date of Birth: 29 Maret 1975Email: isfatimah@uii.ac.idEducational Background:B.Sc. in Chemistry, Gadjah Mada University – 1998M.Sc. in Chemistry, Gadjah Mada University-2001Dr. in Chemistry, Gadjah Mada University-2010

Experties :

Material chemistry, Green Chemistry, catalysis, adsorption

Research roadmap:



No	Year	Title of paper	Volume/No.	Journal
1.	2020	One-pot biosynthesis of SnO2 quantum dots mediated by Clitoria ternatea flower extract for photocatalytic degradation of rhodamine B	8(4), 103879	Journal of Environmental Chemical Engineering
2.	2020	ZnO-Porous clay heterostructure from saponite as green catalyst for citronellal cyclization, ,	15(1), pp. 137- 145	Bulletin of Chemical Reaction Engineering & Catalysis



No	Year	Title of paper	Volume/No.	Journal
3.	2020	Physicochemical and photocatalytic activity of hematite/biochar nanocomposite prepared from Salacca skin waste	June 2020	Sustainable Chemistry and Pharmacy
4.	2020	Hydrothermal synthesized zinc oxide/kaolinite for photo-decolorization of methyl violet	June 2020	Desalination and Water Treatment
5.	2020	Physicochemical characteristics and photocatalytic performance of Tin oxide/montmorillonite nanocomposites at various Sn/montmorillonite molar to mass ratios	August 2020	Applied Clay Science 193,105671
6.	2020	Sonocatalytic degradation of rhodamine B using tin oxide/ montmorillonite	August 2020	Journal of Water Process Engineering
7.	2020	Green synthesis of hematite/TUD-1 nanocomposite as efficient photocatalyst for bromophenol blue and methyl violet degradation	June 2020	Arabian Journal of Chemical Engineering
8.	2020	Physicochemical and photocatalytic activity of hematite/biochar nanocomposite prepared from Salacca skin waste	May 2020	Sustainable Chemistry and Pharmacy 16,100261
9.	2019	Green conversion of citral and citronellal using tris(bipyridine)ruthenium(II)-supported saponite catalyst under microwave irradiation,	Volume 11, Pages 61-70.	Sustainable Chemistry and Pharmacy
10.	2019	Physicochemical characteristics and photocatalytic performance of TiO2/SiO2 catalyst synthesized using biogenic silica from bamboo leaves	June 2019	Heliyon
11.	2019	Use of ZrO 2 supported on bamboo leaf ash as a heterogeneous catalyst in microwave-assisted biodiesel conversion,	Volume 12, 100129	Sustainable Chemistry and Pharmacy
12.	2019	Synthesis, Characterisation And Application Of Gelatin-Chitosan Blend Films For Fruit Preservation,	Volume 28 — No. 1/2019 pages 30-43	Fresenius Environmental Bulletin
13.	2019	Hidrolisat Kolagen Dari Limbah Padat Kulit Samak Sebagai Coating Superabsorbent Pada Pupuk Lambaturai: Sebuah Literatur Review,	28(1): 82-93	Jurnal Teknologi Industri Pertanian
14.	2019	Characteristics and antibacterial activity of green synthesized silver nanoparticles using red spinach (Amaranthus Tricolor L.) leaf extract.	12:1, 25-30,	Green Chemistry Letters and Reviews



No	Year	Title of paper	Volume/No.	Journal
15.	2018	Low Cost CaTiO ₃ Perovskite Synthesized from	299	IOP Conference
		Scallop (Anadara granosa) Shell as Antibacterial		Proceeding
		Ceramic Material		
16.	2018	Biosynthesis and characterization of ZnO	13(2), pp. 409-	Journal of Engineering
		nanoparticles using rice bran extract as low-cost	420	Science and
		templating agent		Technology
	2010			
17.	2018	Effect of KF Modification to Kaolinite Catalytic	61(1)	Egyptian Journal of
		Activity in Microwave-Assisted Biodiesel		Chemistry
		Conversion		
18.	2018	Chitosan-smectite composite on the urea	Article in press	World Journal of
		adsorption-desorption study for slow release		Engineering
		fertilizer application		
19.	2018	Immobilized γ -Fe 2 0 3 Nanoparticles Into SiO ₂	11(2)	Rasayan Journal of
		Aerogel Synthesized From Rice Husk Ash For Photo-		Chemistry
		Fenton Like Degradation Of Rhodamine B		
20	2018	Physicochemical Character and Photocatalytic	34(2)	Oriental Journal of
20.	2010	Study of Silver Nanonarticles-Decorated Natural	51(2)	Chemistry
		Hallovsite		
21.	2018	Study on The Intercalation of Butyl Pyridinium in	13(2)	Journal of Engineering
		Smectite Clay and Application for Chromate		ana Appliea Sciences
		Adsorption		
22.	2018	Preparation, Characterization, and Modelling	6:63-70	Sustainable Chemistry
		Activity of Potassium Flouride Modified		and Pharmacy
		Hydrotalcite for Microwave Assisted Biodiesel		
		Conversion		
23.	2018	Chitosan-smectite composite on the urea	15(2):292-297	World Journal of
		adsorption-desorption study for slow-release		Engineering
		fertilizer application		
24.	2018	TiO2 Supported on Brick Waste as Low Cost	63: 733-738	Chemical Engineering
		Photocatalyst for Dye Photodegradation		Transaction
25	2010	EDADTMC Functionalized Cilica Davised from Disc	ual 12 no 2	Dullatin of Chamical
25.	2018	EDAPT MS-FUNCTIONALIZED SILICA DERIVED FROM KICE	VOI. 13, NO. 2,	Bulletin of Chemical
		And Ph/II) Adcorption	μμ. 551-540,	Reaction engineering
			Juli. 2018	
26.	2018	Physicochemical characteistics and photocatalytic	2018;34(2).	Oriental Journal of
		activity of silver nanoparticles-decorated on		Chemistry
		natural halloysite (an aluminosilicate clay		



No	Year	Title of paper	Volume/No.	Journal
27.	2018	Silver nanoparticles synthesized using Lantana	2018, 13(1),	
		Camara flower extract by Reflux, microwave and	95-102	
		ultrasound methods,		
28	2018	Biosynthesis and characterization of 7nO	Vol 13 No 2	lournal of
20.	2010	nanonarticles using rice bran extract as low-cost	(2018) 409-420	Engineering Science
				and Technology
				und recimology
29.	2018	γ-Fe2 03 Nanoparticles immobilized in SiO2	Vol. 11, No. 2	Rasayan J Chem,
		aerogel synthesized from rice husk ash for	544 - 553	
		photofenton like degradation of rhodamine B,		
30.	2018	Preparation, characterization and physicochemical	Volume 30,	Journal of King Saud
		study of 3-amino propyl trimethoxy silane-	Issue 2, Pages	University - Science
		modified kaolinite for Pb(II) adsorption	250-257	
21	2018	ZrO2 /hamboo loavos ash (BLA) Catalyst in	240 (2018)	IND Conforance Series
51.	2010	Biodiesel Conversion of Rice Bran Oil	012027	Materials Science and
			012027	Fnaineerina Volume
				349. conference IOP
				Conf. Series: Materials
				Science and
				Engineering
	2010		2 (2 (2 2 1 2)	
32.	2018	Photocatalyst of Perovskite CaliO3 Nanopowder	349 (2018)	IOP Conf. Series:
		Synthesized from CaU derived from Shall Shell In	012026	Materials Science and
				Engineering
33.	2018	Preparation, characterization, and modelling	Volume 8,,	Sustainable Chemistry
		activity of potassium flouride modified hydrotalcite	Pages 63-70	and Pharmacy
		for microwave assisted biodiesel conversion		
34.	2018	Enhanced adsorption capacity of peanut shell	Vol. 11, 3, 1166	Rasayan Journal of
		toward rhodamine b via sodium dodecyl sulfate	- 1176	Chemistry
		modification,		
35.	2018	Hydroxyapatite prepared from snail (Pilla	2026, 020072	AIP Conference
		ampulacea) and scallop (Anadara granosa) shells as	(2018)	Proceedings
		low cost-renewable catalyst in biodiesel		
		conversion,		
36	2018	Enhanced photocatalytic activity of WO3	2026,0200073	AIP Conference
		nanoparticles loaded with carbon,	(2018)	Proceedings
27	2010			
37.	2018	Advance oxidation treatment of dye waste using	2026, 20004	AIP Conterence
		2nu/activated carbon under UV illumination		Proceedings 2026,
				20004



No	Year	Title of paper	Volume/No.	Journal
38.	2018	Microwave-synthesized hydroxyapatite from paddy field snail (Pila ampullacea) shell for adsorption of bichromate ion	Volume 28, Issue 6, Pages 462-471	Sustainable Environment Research
39.	2017	Preparation, Characterization and Catalytic Activity of Sn/TiO2-Laponite	29(5) / pp 1108-1112	Asian Journal of Chemistry
40.	2017	Preparation of KF-Modified Kaolinite As Green and Reusable Catalyst for Microwave Assisted Biodiesel Conversion	172 (1): Article number 01202 6	IOP Conf. Series: Materials Science and Engineering
41.	2017	Preparation of TiO ₂ -SiO ₂ via sol-gel method: Effect of Silica precursor on Catalytic and Photocatalytic properties	172 (1): Article number 01202 5	IOP Conf. Series: Materials Science and Engineering
42.	2017	Preparation of TiO ₂ /MCM-41 photocatalyst using rice husk ash as silica source	1823 (1): 020124-1 - 020124-7	AIP Conference Proceeding
43.	2017	Preparation of sodium dodecyl sulphate- functionalized activated carbon from Gnetum gnemon shell for dye adsorption	1823 (1): 020125-1 - 020125-6	AIP Conference Proceeding
44.	2017	Control of wastewater using multivariate control chart	1823 (1): 020126-1 - 020126-11	AIP Conference Proceeding
45.	2017	Effect of nitric acid treatment on activated carbon derived from oil palm shell	1823 (1): 020129-1 - 020129-6	AIP Conference Proceeding
46.	2017	Biosythesis of Silver Nanoparticles using Putri Malu (<i>Mimosa pudica</i>) Leaves Extract and Microwave Irradiation Method	11(2):288-298	Journal Molekul
47.	2017	N-[3-(Trimethoxysilyl)propyl]ethylenediamine Functionalized Saponite as Adsorbent of Nickel from Aqueous Solution	21(2), 2017	Engineering Journal, 2017
48.	2017	Preparation, characterization and photocatalytic study of sn/TiO2-laponite	29(5), pp. 1108-1112	Asian Journal of Chemistry
49.	2017	Methenamine-Smectite Clay as Slow Release Fertilizer: Physicochemical and Kinetics Study	56, pp. 1639- 1644	Chemical Engineering Transaction
50.	2017	Study on ZnO catalytic activity in salycilic acid degradation by sonophotocatalysis	56, pp. 1651- 1656	Chemical Engineering Transaction
51.	2017	Chitosan-modified smectite clay and study on adsorption-desorption of urea	56, pp. 1645- 1650	Chemical Engineering Transaction



No	Year	Title of paper	Volume/No.	Journal
52.	2017	KF-Modified Natural Halloysite as Green Catalyst in	105 (2017)	Procedia Energy
		Microwave Assisted Biodiesel Conversion	1796 – 1805	
53.	2017	Low cost heterogenous catalyst from (Achatina	909(1),012082	Journal of Physics:
		Fulica) snail shell and its application for biodiesel		Conference Series
		conversion via microwave irradiation		
54.	2017	Preparation, characterization and physicochemical	Article in press	King Saud University
		study of 3-amino propyl trimethoxy silane-		Journal of Science
		modified kaolinite for Pb(II) adsorption		
55.	2016	Novel sulphated zirconia pillared clay nanoparticles	31(4): 222-228	Material Technology
		as catalyst in microwave assisted conversion of		
		citronellal		
56.	2016	Preparation of TiO ₂ -ZnO and its activity test in	107 (2016)	IOP Conf. Series:
		sonophotocatalytic degradation of phenol	012003	Materials Science and
				Engineering
57.	2016	Green synthesis of ZnO nanoparticles via complex	1710,	AIP Conf. Proc.
		formation by using Curcuma longa extract	030027 (2016)	
58.	2016	Preparation Of Zeolite Supported TiO ₂ , ZnO And	1717,	AIP Conf. Proc
		$ZrO_2 And$ The Study On Their Catalytic Activity In	030005 (2016)	
		NOx Reduction And 1-Pentanol Dehydration		
59.	2016	Effect Of Calcination Temperature On The Synthesis	16(1)	Indonesian Journal of
		Of ZrO ₂ -Pillared Saponite To Catalytic Activity In		Chemistry
		Menthol Esterification		
60.	2016	Effect of Pt on Catalytic Activity of Al- and Zr-	28(11):2365-	Asian Journal of
		Pillared Smectite	2370	Chemistry
61.	2016	Plant Extract Mediated of ZnO Nanoparticles by	148(43-48)	Procedia Engineering
		Using Ethanol Extract of Mimosa Pudica Leaves and		
		Coffee Powder		
62.	2016	Modeling of Photocatalytic Activity of ZnO/AC by	148:1112-1120	Procedia Engineering
		Using Linear Probability Model, Logit and		
		Complementary Log Transformation		
63.	2016	Physicochemical and Photocatalytic Properties of	11 (3): 398-	Bulletin of Chemical
		Fe-Pillared Bentonite at Various Fe Content	405	Reaction Engineering
				and Catalysis
64.	2016	Effect of Zn Content on the Physicochemical	2016, Vol. 32,	Oriental Journal of
		Characteristics and Photoactivity of ZnO Supported	No. (5):	Chemistry
		Activated Carbon	Pg. 2757-2768	



No	Year	Title of paper	Volume/No.	Journal
65.	2016	Green synthesis of silver nanoparticles using extract	7(6): 91-96	Journal of Advanced
		of Parkia speciosa Hassk pods assisted by		Research
		microwave irradiation		
66.	2015	Microwave assisted preparation of TiO ₂ /Al-pillared	8(2), pp. 228-	Arabian Journal of
		saponite for photocatalytic phenol photo-oxidation	232	Chemistry
		in aqueous solution		
67.	2015	Environmentally Friendly Catalys t of Zirconium	1101 (2015)	Advanced Materials
		Pillared Saponite for Solvent Free Esterification of		Research
		Menthol		
68.	2015	Preparation, Characterization And Catalytic Activity	1123:96-99	Advanced Materials
		Of Sulfated Zirconia By Varied Sol-Gel Method		Research
69.	2015	Microwave assisted preparation of TiO ₂ /AI-pillared	8, 228–232	Arabian Journal of
		saponite for photocatalytic phenol photo-oxidation	,	Chemistry
		in aqueous solution		
70.	2015	Fe(III)/TiO ₂ -Montmorillonite Photocatalyst in	2015	International Journal
		Photo-Fenton-Like Degradation of Methylene Blue		of
- 74	2045		2015 027	Chemical Engineering
/1.	2015	Preparation and characterization of NI/Zr-saponite	2015 82/ (2015) pp 211	Material Science
		of Isopulerol	(2015) pp 511- 316	
	2045			
/2.	2015	Environmentally Friendly Catalyst of Zirconium	Vol. 1101 (2015) pp 272	Advanced Materials
		Menthol	2013) pp 272-	heseurch
70	2015		2, 20, 25	.
/3.	2015	Pt Dispersed Un Sulfated-Zirconium Pillared Sanonite As Catalyst In Citronellal Conversion	2: 20-25	Proscience
				DOI:10.14644/amam.
				2015.004
74.	2015	Ni Dispersed on Sulfated Zirconia Pillared	19(5), 43-53	Engineering Journal
		Montmorillonite as Bifunctional Catalyst in Eco-		http://engj.org/index.
				php/ej/article/viewFil
				<u>e/778/419</u>
75.	2015	Ceramic Membrane Based on TiO ₂ -Modified	118(C) : 207-	Applied Clay Science
		Kaolinite as Low Cost Material for Water Filtration	211	
76	2015	The Improvement of montmorillonite activity In 2-	10(5).74-82	Iournal of Engineering
, 0.	2015	butanol dehydration by metal oxide pillarization	10(3/17102	Science and
				Technology



No	Year	Title of paper	Volume/No.	Journal
				http://jestec.taylors.e
				du.my/Special%20lss
				<u>ue%</u>
77	2014	Preparation of bifunctional ceramic membrane	5(6)	lournal of Materials
//.	2011	based on TiO ₂ /Kaolinite for Water Desinfection	5(0)	and Environmental
				Science
70	2014		2014	
/8.	2014	Preparation of ZrU ₂ /Al ₂ U ₃ -montmorillonite	2014	Journal of Advanced
				Research
79.	2014	Effect Of Sulfation On Zirconia Pillared -	2014	International Journal
		Montmorillonite To The Catalytic Activity In		of Chemical
		Microwave Assisted Citronellal Conversion		Engineering
80.	2014	ZnO-SiO ₂ /laponite photocatalyst: Kinetic study on	896	Advanced Materials
		photocatalytic decolorization of methylene blue		Research
<u>81</u>	2014	Effect of Calcination Temperature in The	26(15)	Asian Journal of
01.	2014	Prenaration of $7n\Omega$ -Si Ω_2/I anonite on Physical	20(13)	Chemistry
		Character and Photocatalytic Activity		chemistry
82.	2013	Preparation of silver immobilised TiO ₂ -hectorite for	/(3)	Bulletin of Chemical
		phenoi removal and eschericia coll desintection		Reaction Engineering
				unu cuturysis
83.	2013	Preparation of cetyltrimethylammonium	74(2013)	Applied Clay Science
		intercalated Indonesian montmorillonite for		
		adsorption of toluene		
84.	2013	Evaluation of photodegradation efficiency on	4(2)	International Journal
		semiconductor immobilized clay photocatalyst by		of Chemical and
		using probit model approximation		Analytical Science
85	2013	Organoclay of Cetyl trimethyl ammonium-	7(2013)	World Academy of
05.	2015	montmorillonite: Preparation and Study in	, (2013)	Science, Engineering
		Adsorption of Benzene-Toluene-2-Chlorophenol		and Technology
				Journal
86	2012	Photocatalytic antibacterial activity of	10(3)	International Journal
00.	2012	ZnO/hectorite and ZnO/montmorillonite	10(3)	of Chemical Sciences
87.	2012	Reaction efficiency of crossed-aldol condensation	8(5)	Journal of Applied
		perween acetone and benzaldehyde over ZrU2 and		Sciences Research
88.	2012	Composite of TiO ₂ -montmorillonite from indonesia	3(5)	Journal of Materials
		and its photocatalytic properties in methylene blue		and Environmental
		and e.coli reduction		Science





No	Year	Title of paper	Volume/No.	Journal
89.	2011	ZnO/montmorillonite for photocatalytic and photochemical degradation of methylene blue	53(4)	Applied Clay Science
90.	2011	Preparation of ZnO/CTMA/Hectorite as catalyst in Alizarin Red S Photo-oxidation	23(2011)	Asian Journal of Chemistry
91.	2010	Preparation of ZrO ₂ /Al ₂ O ₃ -pillared saponite and its spectroscopic investigation on NO _X adsorption	21(1)	Journal of Physical Science
92.	2010	Preparation of aluminium pillared clay from Indonesian montmorillonite and its catalytic activity in bio-oil cracking	22(5)	Asian Journal of Chemistry
93.	2010	Composites of TiO ₂ -aluminum pillared montmorillonite: Synthesis, characterization and photocatalytic degradation of methylene blue	50(4)	Applied Clay Science
94.	2010	Photocatalytic generation of sulphate and hydroxyl radicals using zinc oxide under low-power UV to oxidise phenolic contaminants in wastewater	157(1-4)	Catalysis Today
95.	2010	Adsorption of anionic dyes in aqueous solution using chemically modified barley straw	62(5)	Water Science & Technology





Name: Prof. Riyanto, S.Pd., M.Si., Ph.D.Date of Birth: Ngawi, 04 Mei 1971Email: riyanto@uii.ac.idEducational Background:Professor, Electrochemistry, Islamic University of Indonesia (UII), 2016Ph.D., Chemistry, National University of Malaysia (UKM), 2008M.Sc., Chemistry, Gadjah Mada University (UGM), 2000S.Pd., Chemical Education, Jambi University (UNJA), 1996

Experties:

Electrochemical Approaches to Humans and the Environment

Research Interests:

- 1. Preparation, characterization and application of glucose, uric acid and urea medical test using composite electrode (non-enzymatic sensor) fourth generation.
- 2. Preparation, Characterization and Application of Carbon-Modified Electrode for Electrochemical Degradation of Waste Water Batik, Textile and Laundry
- 3. Preparation, Characterization and Application of Carbon-Modified Electrode for Electrochemical Disinfection of Drinking Water









Figure 2. Electrochemical degradation of batik, laundry and textile waste

Publications

- 1. Riyanto, Muhamad Mawazi, Cahyati, Jumardin Rua, Rama Prasetia Ridwan, 2018, The Effect of Aeration and Hydrogen Peroxide on the Electrochemical Degradation of Methylene Blue Using Carbon Composite Electrodes, *Chemical Engineering Transactions*, 63, 811-816.
- 2. Riyanto, Jumardin Rua, Yulanc, Mega Maghfirotul Fajrin, Zaina Rohayati, 2018, The Effect of Potential to Colour and COD Removal from Waste Textile Industry by Electrochemical Method, *Chemical Engineering Transactions*, 63, 751-756.
- 3. Riyanto, Dyah Tri Untari dan Nahar Cahyandaru, 2016, Isolation and Application of the Lemongrass Essential Oil of Cymbopogon Nardus L.as a Growth Inhibitor of Lichens on Stone Cultural Heritage, *Journal of Applied Chemistry*, 9, 9, 109-117.
- 4. Riyanto dan Sri Wulan Nas, 2016, Validation of Analytical Methods for Determination of Methamphetamine Using Fourier Transform Infrared (FTIR) Spectroscopy, *Journal of Pharmacy and Biological Sciences*, 11, 5, 51-59.
- 5. Riyanto, Hardjono Sastrohamidjojo, Erni Fariyatun, 2016, Synthesis of Methyl Eugenol From Crude Leaf Oil Using Acid and Based Chemicals Reactions, *Journal of Applied Chemistry*, 9, 9, 105-112.
- 6. Riyanto and Mohamed Rozali Othman, 2015, Electrosynthesis and Characterization of Cu(OH)₂ Nanoparticle using Cu and Cu-PVC Electrodes in Alkaline Solution, *Int. J. Electrochem. Sci.*, 10, 4911-4921.
- 7. Riyanto and Azan Anshori, 2014, Electroanalysis of Mefenamic Acid Using Platinum Powder Composite Microelectrode (PPCM), *Anal.& Bioanal. Electrochem.* 6, 2, 2014, 01-11.
- 8. Riyanto and Ahmad Safarudin, 2014, Preparation and Application of Platinum Composite Microelectrode (PCM) for the Routine Analysis of Acetaminophen in Pharmaceutical Products, *Indo. J.Chem.* 14. 2, 109-115.
- 9. Riyanto, 2013, Textile Industries Wastewater Treatment by Electrochemical Oxidation Technique Using Metal Plate, *Int. J. Electrochem. Sci.*, 8, 11403-11415.
- 10. Riyanto, 2013, Design and Application of Cu, Co, Ni, Pt and Ir Powder Composite Electrode (PCE) For Electrosynthesis and Electroanalysis in Alkaline Solution, *J. App. Chem.* 4, 3, 64-69.
- 11. Riyanto, 2013, Preparation and Characterization of Nano Size NiOOH by Direct Electrochemical Oxidation of Nickel Plate, *Int. J. Electrochem. Sci.*, 8, 4747-4760.





: Prof. Dr.rer.nat Ir. Agus Taftazani : Jogjakarta, 22 Juli 1952 : agus.taftazani@uii.ac.id,

Education Background :

B.Sc (Ir) in Nuclear Technology -Universitas Gadjah Mada Dr.rer.nat in energy of chemistry - Gesamt Höchschule Kassel, Germany

Experties:

- 1. *Environmental Specimen Bank (ESB):* Identification of Heavy Metals and radionuclides in environmental samples (land, rivers, beaches) with Nuclear Analysis Techniques.
- 2. Development of Nuclear Analysis Techniques (TAN) for the identification of environmental and industrial pollutant samples
- 3. Assessment of Air Pollutants due to the impact of coal combustion (pollutants: Heavy metals, natural radionuclides in coal, fly ash, bottom ash, filters (TSP, PM10 and PM2.5).
- 4. Quality Assurance and Quality Control of Nuclear Analytical Techniques.

Name

Email

Date of Birth

No	Year	Title of Paper	Volume/No	Journal
1	2018	<i>Effect of Temperature to Adsorption Capacity</i> <i>and Coefficient Distribution on Rare Earth</i> <i>Elements Adsorption (Y, Gd, Dy) Using SIR.</i>	doi:10.1088/1757- 899X/349/1/012041	IOP Publishing
2	2018	Isolation and Molecular Identification of Uranium Tolerant Bacteria Potential for Uranium Bioprecipitation	Ganendra Journal of Nuclear Science and Technology	21(1) 45 – 53.
3	2017	Comparison of NAA XRF and ICP-OES Methods on Analysis of Heavy Metals in Coals and Combustion Residues.	Indonesia J. Chem	17(2),228-237
4	2015	Study of Multi Elements in Mahogany Wood as Finger Print Data Base from Various Locations	Prosiding Seminar Nasional Teknik Analisis Nuklir	ISSN : 2338-0642
5	2015	Electrodeposition Optimization and Isotope Ratio Test 238U, 235U, 234U Bangka Tin Sand Waste	Prosiding Seminar Nasional Teknik Analisis Nuklir	ISSN 2338-0642
6	2014	Evaluation of Comparative Test between AAN Laboratories to Determine Elemental Content in Environmental Samples	Proceedings of PPI- PD Nuclear Science and Technology, PSTA-BATAN	ISSN 0216-3128



No	Year	Title of Paper	Volume/No	Journal
7	2014	Analysis and Measurement of Kartini	Jurnal Teknologi	16 (2), Juni 2014.
		Reactor Parameters for Application of the	Reaktor Nuklir Tri	ISSN 1411-240x
	KO-NAA Method	Dasa Mega		
8	2012	Trace analysis of Indonesian volcanic ash	International Journal	57 (4) 585-589
	using thermal and epithermal neutron activation analysis	of Nuclear Chemistry		
9	2012	Preparation of certified reference materials	13 th International	Juni 2012
		(CRMs); Zircon Sand	Symposium on	
			Biological and	
			Environmental	
			References Materials	
			(BERM 13)	



14



Name: Dr. Noor Fitri, S.Si., M.Sc.Date of Birth: 6 Desember 1970Email: nfitri@uii.ac.idEducation Background:B.Sc. in Chemistry, Hasanuddin UniversityM.Sc in Chemistry, ITBDr. in Chemistry, ITB

Experties :

Analytical Chemistry, Enviromental Chemistry, Chemical saparation and purification, chemical spesiasi

No	Year	Title of Paper	Volume/No	Journal
1	2020	Optimization of gas chromatography	2229/1/030041	AIP Conference
		operational conditions for analysis of ginger		Proceedings
		oil from Zingiber officinale var. Amarum		
2	2020	Empowering Women/Single Mothers Through	2/01/26-37	Jurnal Abdimas
		Training on Making Halal and Healthy Home		Madani dan Lestari
		Industry Products as an Effort to Increase Self-		(JAMALI)
		Efficacy in Entrepreneurship		
3	2020	Anti-Aging Serum Formulation of Piper	5/01/1-11	Asian Journal of
		Nigrum L Black Pepper Essential Oil and		Innovation and
		Antioxidant Activity Test Using the DPPH		Entrepreneurship
		Method		
4	2020	Production of Shredded Catfish as a Business	4/3/199-206	Asian Journal of
		Alternative to Improve the Economy of		Innovation and
		Pelutan Village		Entrepreneurship
5	2019	Essential Oil Production To Develop Pelutan	1/02/79-96	Jurnal Abdimas
		Village, Gebang District, Purworejo, Central		Madani dan Lestari
		Java As An Essential Oil Center		(JAMALI)
6	2019	Compliance of Indoor Air Contaminants within	24/2/105-121	Journal of
		the Main Prayer Halls of Mosques in Malacca		Construction in
		with Malaysia's Indoor Air Quality Standard		Developing
				Countries
7	2019	Comparison between maceration and	523/1/012024	IOP Publishing
		microwave extraction techniques of		
		strawberry fruit (fragaria sp) and antioxidant		
		activity test		
8	2019	EFFECT OF ADDING ASPERGILLUS NIGER	19/1/15-25	Journal Eksakta
		MUSHROOM ON PATCHOULI FERMENTATION		
		PROCESS		



No	Year	Title of Paper	Volume/No	Journal
9	2017	Problem-based learning on quantitative	1911/1/020028	AIP Publishing
		analytical chemistry course		
10	2017	A comparative study of water-steam	1823/1/020122	AIP Publishing
		distillation with water-bubble distillation		
		techniques to increase the quality of patchouli		
		essential oil		
12	2017	Formulation of antiacne serum based on lime	1823/1/020123	AIP Publishing
		peel essential oil and in vitro antibacterial		
		activity test against Propionibacterium acnes		







Name: Drs. Allwar, M.Sc, Ph.D.Date of Birth: Pekanbaru, 2 Mei 1962E Mail: allwar@uii.ac.idEducational Background:S1: (Drs) in Chemistry, Riau State Univesity Riau (UNRI), IndonesiaS2: (M.Sc) in Inorganic Chemistry, Howard University (HU), Washington.D.C. USA.S3: (Ph.D) in Enviromental Chemistry and Material Sciences, UniversitiSains Malaysia (USM), Pulau Finang, Malaysia

Experties:

Synthesis and characterization of Nano composite metal oxide and activated carbon from biomass waste were used as adsorbent for multipurpose of separation and purification methods. Since the adsorbents have excellent properties, they have been used for removal of heavy metals and organic/inorganic pollutant. In the future, the research will be focused on the synthesize and improvement of many types of nano composite from waste of raw materials and metal oxide Characterization and application of nano composite will be carried out by FTIR, EXD, SAA, SEM-EDX, SAA, UV-Vis, Thermogravimetery, etc.



Figure 1. Characteristics of biomass empty fruit bunch using thermogravimetric analysis





Figure 2. Nitrogen adsorption desorption isotherms at 77K of activated carbons prepared with 65% potassium hydroxide



Figure 3. Pore size distribution for activated carbon prepared with 65 % phosphoric acid at different temperatures







Figure 4. XRD Analysis of composite Al₂O₃/activated carbon



Figure 5. FT-IR spectra of activated carbon with phosphorous acid at different temperatures



Figure 6. Structural morphology of activated carbon from biomass empty fruit bunch prepared with 65% potassium hydroxide at 700°C: (a) external structure, (b) chemical composition of the activated carbon by

EDX





Figure 7. Activatred carbon palm oils shell



Figure 8. Surface morphology and elemental analysis of rice husk activated carbon



Publ	ications	:		
No	Year	Title of Paper	Volume/No/Page	Journal
1	2021	Physical-chemical Characterization of Nano- Zinc Oxide/Activated Carbon Composite for Phenol Removal from Aqueous Solution	16/1/136-147	Bulletin of Chemical Engineering & Catalysis
2	2021	Synthesis and Characterization of TiO2 Nanoparticles Doping on Cellulose as Adsorbent for Removal of Rhodamine B in Aqueous Solution	2/1/45-54	EKSAKTA Journal of Sciences and Data Analysis
3	2020	Preparation and characterizations of activated carbon from banana fruit bunch with chemical treatments using hydrothermal processes	2220/1/030028	AIP Publishing
4	2020	Synthesis and characterization of ZnO/Al ₂ O ₃ /activated carbon composite from banana fruit bunch using hydrothermal method	2020/1/030027	AIP Publishing
5	2020	Potential-Magnetic Composite of Fe3O4/Activated Carbon from Palm Oil Shell	897/-/68-72	Applied Mechanics and Materials
6	2019	Removal of phenol and 2-chlorophenol by banana bunch activated carbon prepared by hydrothermally-assisted KOH activation.	12/2/598-607	Rasayan Journal of Chemistry
7	2019	Removal of Cu (II) ions from aqueous solution by activated carbon produced from banana fruit bunch (Musa paradisiaca)	172/-/139-147	Desalination and Water Treatment
8	2018	Preparation and characterization of hydrothermal activated carbon from banana empty fruit bunch with ZnCl 2 activation for removal of phenol in aqueous solution	11/20-28	Asian. J. Appl. Sci
9	2018	Preparation and characteristics of highly microporous activated carbon derived from empty fruit bunch of palm oil using KOH activation	11/1/280-286	Rasayan Journal of Chemistry
10	2018	Synthesis and characterization of composite of Al ₂ O ₃ /activated carbon from palm oil shell by hydrothermal method	2026/1/020094	AIP Publishing
11	2018	Synthesis and Characterization of Activated Carbon from Hydrothermally Banana Empty Fruit Bunch for Adsorption of Pb (II) and Cr (VI) in Aqueous Solution.	20/7	Asian Journal of Chemistry





Name: Rudy Syah Putra, S.Si., M.Si., Ph.D.Date of Birth: Aceh Timur, 3 Agustus 1972Email: rudy.syahputra@uii.ac.idEducational Backgroud:B.Sc. in Chemistry, Gadjah Mada University, 1997M.Sc. in Chemisrty, Gadjah Mada University, 2002Ph.D. in Chemisty, Hokkaido University, 2011Post-Doctoral in Hokkaido University, 2011-2012

Experties:

Enviromental Chemistry, Chemical instrumentation analysis, Enviromental chemical remediation

Research Interests

- 1. The preliminary study of silver-selective membrane electrodes based on liphophilic stearic acid: a comparison between coconut oil and dibenzyl ether (dbe) as a plasticizer, 2000. (member of team)
- 2. Synthesis of butane-1,4-diyl[bis(chloroethanoate)] and its utilization as ionophore on ammoniumselective membrane electrodes, 2002. (principle investigator)
- 3. Quality on undergraduate education program batch V, "The Application of Hybrid Problem-Based Enviromental chemical reme to Increase Teaching-Learning Process", The Ministry of National Education, April 2003 November 2004. (member of team)
- 4. Study on remediation of aquatic environment from heavy metal pollutant by aquatic plants, March 2004 December 2008. (principle investigator)
- 5. Development of lead (Pb) removal from contaminated soil using EAPR and EZ-EK system, April 2008 June 2011. (principle investigator)
- 6. Development remediation method for Cs radionuclide contaminated soil using EAPR and EZ-EK system, July 2011 – present. (principle investigator)
- 7. Application of EAPR system and electrocoagulation process on the treatment of aquatic contaminated plume, April 2013 present. (principle investigator)
- 8. Application of electrolysis on the production of biodiesel using acid or alkaline catalyst, April 2014 present. (principle investigator)



Figure 1. Water and soil remediation research scheme



22



Figure 2. System reactor EAPR (A) sampling point reactor (B) pot shaped cathode(C)



Research: Renewable energy







Figure 4. Biodiesel process by electrolysis usisng graphite electrodes coated with chitosan gel.

- 1. **Putra**, R.S., Antono, Y., 2017, Carbon@Chitosan composite as catalyst on the synthesis of FAME from soybean oil with electro-catalytic, IOP Conf. Series: Journal of Physics: Conf. Series 877 (2017) 012063.
- Putra, R.S., Liyanita, A., Arifah, N., Puspitasari, E., Sawaludin, Hizam, MN., 2017, Enhanced electrocatalytic process on the synthesis of FAME using CaO from eggshell, Energy Procedia 105 (2017) 289 – 296.
- Putra, R.S., Trahadinata,G.A., Latif, A., Solehudin, M., 2017, Wastewater treatment of chemical laboratory using electro assisted-phytoremediation (EAPR), AIP Conf. Proc. 1823, 020077-1–020077-5.
- 4. **Putra**, R.S., Pratama, K., Antono, Y., Idris, M., Rua, J., and Ramadhani, H., 2017, Enhanced electrolytic biodiesel production with chitosan gel (hydrogel and xerogei), Procedia Engineering, 148, 609 614.
- 5. **Putra**, R.S., Cahyana, F., Novarita, D., 2015, Removal of lead and copper from contaminated water using EAPR system and uptake by water lettuce (*Pistia Stratiotes* L.), Procedia Chemistry, 14, 381-386.
- 6. **Putra**, R.S., Hartono, P., and Julianto, T.S., 2015, Conversion of methyl ester from used cooking oil: the combined use of electrolysis process and chitosan, Energy Procedia, 65, 309-316.
- Putra, R.S., Julianto, T.S., Hartono, P., Puspitasari, R.D. and Kurniawan, A., 2014, Pre-treatment of used-cooking oil as feedstocks of biodiesel production by using activated carbon and clay minerals, Int. Journal of Renewable Energy Development, 3(1), 33-35.
- 8. **Putra**, R.S., Ohkawa, Y., and Tanaka, S., 2013, Application of EAPR system on the removal lead from sandy soil and uptake by Kentucky bluegrass (*Poa pratensis* L.), Separation and Purification





Technology, 102, 34–42

- 9. Yasuhisa Ohkawa, Syah **Putra** Rudy, Naoya Fujiwara, Kazuo Jin, Shunitz Tanaka, 2012, Presumption of the source of lead contaminated soil by isotope analysis with sequential extraction, BUNSEKI KAGAKU, 61 (2), 95-101. (in Japanese)
- 10. **Putra**, R.S., and Tanaka, S., 2011, Aluminum drinking water treatment residuals (AI-WTRs) as an entrapping zone for lead in soil by electrokinetic remediation, Separation and Purification Technology, 79, 208-215.
- 11. **Syahputra**, R., 2005, Phytoremediation of Heavy Metal Cd and Pb by Water Lottuce (*Pistia statiotes*), LOGIKA, 2(2), 57-67.
- 12. **Syahputra**,R., Siswanta, D., and Kuncaka, A., 2003, Synthesis of Butane-1,4-Diyl[Bis(Chloroethanoate)] and Its Utilization as Ionophore on Ammonium-Selective Membrane Electrodes, TEKNOSAINS, Seri A, 16 (3), 343-355.
- 13. **Syahputra,** R., 2002, Simulation of Separation Factor in Counter Current Extraction : A Spreadsheet Approach, EKSAKTA, v.4., 2. 57-61.
- 14. **Syahputra**.,R., Hasri, Imelda, F., Siswanta, D., 2000, The Preliminary Study of Silver-Selective Membrane Electrodes Based on Lipophilic Stearic Acid : A Comparison Between Coconut Oil and Dibenzyl Ether (DBE) as A Plasticizer, EKSAKTA, v. 1., 2, 56-63.

Appreciation:

- 1. Beasiswa Pascasarjana (BPPS), 1999 2002, Program Magister Kimia, Ditjen Dikti, Kementrian Pendidikan dan Kebudayaan.
- 2. Beasiswa Pascasarjana, 2008 2011, Program Doktoral, Ditjen Dikti, Kementrian Pendidikan Nasional.
- 3. Visiting researcher, Graduate School of Environmental Science, Hokkaido University, Japan, 5-11 November 2006 (sponsored by JSPS, MEXT Japan)
- 4. Visiting researcher, Graduate School of Environmental Science, Hokkaido University, January June 2008 (sponsored by BKLN, Kementrian Pendidikan Nasional).
- 5. Visiting researcher, Graduate School of Environmental Science, Hokkaido University, September October 2013 (sponsored by SAME Program 2013, Direktorat Pendidik dan Tenaga Kependidikan, Ditjen Dikti, Kementrian Pendidikan Nasional).
- 6. Graduate Assistant, Division of Environmental Science Development, Hokkaido University Presidential Scholarship for distinguish student, April October 2008 (sponsored by Global Centre of Excellent (GCOE), MEXT, Japan).
- 7. Travel Grant, The 12th Seoul National University Hokkaido University Joint Symposium on Environmental Science, Seoul, Korea, 19 24 November 2009 (sponsored by GCOE, MEXT, Japan)
- 8. Travel Grant, The 9th International Symposium on Electrokinetic Remediation (EREM) 2010, Kaohsiung, Taiwan, 27-30 June 2010 (sponsored by GCOE, MEXT, Japan)
- 9. Travel Grant, 2nd International Conference of Natural Sciences (ICONS 2014), Machung Univ., Malang, 25 -28 September 2014 (sponsored by Alexander van Humboldt Foundation)
- 10. Pioneer Spirit Award (economy, industry and energy field) for the best poster in Sustainability Weeks 2010, November 2nd 2010, Hokkaido University, Sapporo, Japan.
- 11. Secretary General, The 11th International Symposium on Electrokinetic Remediation (EREM) 2012, 8 11 July 2012, Sapporo, Japan.



- 12. Secretary General, The 2nd International Conference of the Indonesian Chemical Society (ICICS) 2013, 22 - 23 October 2013, Yogyakarta, Indonesia
- 13. The Best 10th Poster in Humboldt Kolleg International Conference on Natural Sciences, HK-ICONS 2014, 25 28 September 2015, Ma-Chung University, Malang, Indonesia
- 14. Environmental Protection and Green Technology (EPGT) Program 2014 in National Tsing Hua University, 9 14 November 2015, Tsinchu, Taiwan.
- 15. LPDP Reward for International Publication (PPII Batch I), 2 papers, Ministry of Research and Technology and Higher Education, The Republic of Indonesia, August 2016.



26



Name: Dr. Dwiarso Rubiyanto, S.Si., M.Si.Date of Birth: Bantul, 15 Mei 1974Email: dwiarso@uii.ac.idEducational Background:B.Sc. in Chemistry, Gadjah Mada UniversityM.Sc. in Chemistry, Gadjah Mada UniversityDr. in Chemistry, Gadjah Mada University

Experties :

Organic chemistry: especially essential oils and consultant for essential oil products and analysis

Research roadmap:



No	Year	Title of Paper	Volume/No/page	Journal
1	2020	ZnO-Porous Clay Heterostructure from	15/1/137-145	Chemical Reaction
		Saponite as Green Catalyst for		Engineering&Catalysis
		Citronellal Cyclization		
2	2020	Microwave-assisted synthesized porous	7/10/105006	Material Research
		clay heterostructure-Zn/Si from		Express
		montmorillonite for citronellal		
		conversion into isopulegol		
3	2020	Physicochemical characteristics and	193/-/105671	Applied Clay Science
		photocatalytic performance of Tin		
		oxide/montmorillonite nanocomposites		
		at various Sn/montmorillonite molar to		
		mass ratios		



No	Year	Title of Paper	Volume/No/page	Journal
4	2020	Application of e-learning at the	2229/1/020007	AIP Publishing
		chemistry of essential oils course		
		supported with practical activities		
5	2020	Implementation of student-centered	2229/1/020006	AIP Publishing
		learning (SCL) with retrosynthesis		
		module-assisted on synthetic organic		
		chemistry course		
6	2019	Alginate-modified saponite and study	12/4/1792-1802	Rasayan Journal of
		for ureaslow released fertilizer		Chemistry
		application.		
7	2019	Antimalarial Activity of Andrographis	17/1/788-797	Open Chemistry
		Paniculata Ness's N-hexane Extract and		
		Its Major Compounds		
8	2019	Green conversion of citral and	11/-/61-70	Sustainable Chemistry
		citronellal using tris (bipyridine)		and Pharmacy
		ruthenium (II)-supported saponite		
		catalyst under microwave irradiation		
9	2018	Effect of KF Modification to Kaolinite	61/1/213-223	Egyptian Journal of
		Catalytic Activity in Microwave-Assisted		Chemistry
		Biodiesel Conversion		
10	2018	Problem based learning (PBL) method	2026/1/020090	AIP Publishing
		as a synchronization approach of		
		chromatography course and		
		chromatography laboratory work		
11	2018	Chitosan-smectite composite on the	ISSN: 1708-5284	World Journal of
		urea adsorption-desorption study for		Engineering
		slow-release fertilizer application		

Appreciation :

Certificate of Appreciation from Sleman Regent as Nominee for RUD Krenova Researcher 2014.



28



Name: Dr. Tatang Shabur Julianto, S.Si., M.Si.Date of Birth: Pamekasan, 17 Juli 1976Email: tatang_shabur@uii.ac.idEducational Background:B.Sc. in Chemistry, Diponegoro University, IndonesiaM.Sc. in Chemistry, Gadjah Mada University, IndonesiaDr. in Chemistry, Gadjah Mada University, Indonesia

Experties:

- 1. Development of Natural Plant Drugs and Organic Synthesis
- 2. Food Modification and Diversification
- 3. Development of Natural Pesticides

Research roadmap:





Publications:

No	Year	Title of Paper	Volume/No/Page	Journal
1	2020	Identification and Heme Polymerization	20/1/64-72	EKSAKTA Journal
		Inhibition Activity (HPIA) Assay of Ethanolic		of Sciences and
		Extract and Fraction of Temu Mangga		Data Analysis
		(Curcuma mangga Val.) Rhizome		
2	2021	Molecular Interaction Analysis of COX-2	16-3	Bulletin of
		Against Aryl Amino Alcohol Derivatives from		Chemical
		Isoeugenol as Anti Breast Cancer Using		Reaction
		Molecular Docking		Engineering &
				Catalysis
3	2020	Catalysts of banana stems and utilization in	2229/1/030004	AiP Publishing
		waste cooking oil transesterification		
		reactions assisted by acetone as co-solvent		
4	2019	Production of Bioethanol from Rice Straw	193-199	EKSAKTA Journal
		Assisted by Cellulosic Enzyme Oyster		of Sciences and
		Mushroom Stem Using Simultaneous		Data Analysis
		Saccharification and Fermentation (SSF)		
5	2019	Antibacterial activity of fractions	79/40	International
		(chloroform, ethyl acetate and methanol)		Journal of
		red betel leaf ethanol extract (Piper		Infectious
		crocatum) against Streptococcus pyogenes		Diseases
		bacteria		
6	2018	Synthesis and heme polymerization	2026/1/020104	AIP Publishing
		inhibitory assay of a new arylamino alcohol		
		derivative compound from methyl eugenol		
		and aniline		
7	2018	Preliminary study on fractions' activities of	1954/1/030004	AIP Publishing
		red betel vine (<i>Piper crocatum</i> Ruiz & Pav)		
		leaves ethanol extract toward		
		Mycobacterium tuberculosis		



Name	: Dr. Habibi Hidayat, S.Pd., M.Si.
Date of Birth	: April 13, 1987
Email	: habibihidayat13@uii.ac.id
Education Background	:
B.Sc. Universitas Bengkulu (Bengkulu) in Chemistry Education
M.Sc. Universitas Andalas (P	'adang) in Chemistry
Dr. Universitas Gadjah Mada	ı (Yogyakarta) in Chemistry



Expertise

Development of microorganisms and microbes for environmental and health applications



Research Roadmap:

The research scheme to be carried out can be summarized in the following roadmap:

- In the early stages (2016), employing the microorganisms in producing chemical compounds that are very beneficial, especially for global public health, by evaluating the antioxidants, antibacterial, and antifungals performances to improve health levels.
- In 2017-2021, developing on increasing the value and alternative functions of microorganisms in reducing waste, especially plastic waste to create a global health, clean, and sustainable community through biodegradation, bioconversion and biomaterial processes of waste.
- 3. In 2021-2024, the long term of this research is to produce alternative energy from microorganisms through molecular characterization.





Publications:

- 1. H Hidayat, W HARYADI, S MATSJEH, TRIJ RAHARJO. Molecular identification 16S rRNA gene of active proteolytic lactic acid bacteria (LAB) isolated from kelengkeng (Dimocarpus longan) fruit. Biodiversitas *Journal of Biological Diversity* 20 (8).
- 2. H HIdayat, W Haryadi, TRIJ RAHARJO. Three-dimensional structure modeling of a protease from lactic acid bacteria Leuconostoc mesenteroides K7 using automated protein homology analysis. Biodiversitas *Journal of Biological Diversity* 21 (7).
- 3. H Hidayat, E Fadilah, MM Musawwa. Bioconversion of anthocyanin to anthocyanidin from fermented fruit and vegetable waste by Leuconostoc mesenteroides as probiotik food material. E&ES 463 (1), 012100.
- 4. H Hidayat. The molecular identification of pathogenic bacteria from pineapple fruit (*Ananas comosus* Merr.). AIP Conference Proceedings 2026 (1), 020103.
- 5. H Hidayat, MA Auliya, R Anggreyani. Isolation and identification of probiotics bacteria as a producer of protease enzyme from fermentation of papaya seeds. AIP Conference Proceedings 2026 (1), 020084.
- 6. HH Hidayat. Biochemical Test and Isolation of Antimicrobial Activity From Seeds Starfruit Extract (Averrhoa carambola. L). INDONESIAN JOURNAL OF CHEMICAL RESEARCH 3 (1), 6-19.
- 7. H Hidayat. Analysis of 16S rRNA gene lactic acid bacteria (LAB) isolate from Markisa fruit (Passiflora sp.) as a producer of protease enzyme and probiotics. AIP Conference Proceedings 1823 (1), 020110.
- H Hidayat. Identifikasi Morfologi dan Uji Aktivitas Antimikroba Terhadap Bakteri Escherichia coli Dari Fermentasi Buah Markisa (Passiflora sp.). EKSAKTA: Journal of Sciences and Data Analysis 15 (1-2), 75-84.





Name: Dr. Maisari Utami, S.Si.Date of Birth: Bandar Lampung, May 10, 1992Email: maisariutami@uii.ac.idEducational Background:B.Sc. in Chemistry (Universitas Gadjah Mada)MSc. in Chemistry & Dr. in Chemistry (Universitas Gadjah Mada)

Expertise: Material chemistry

Research Roadmap:



Publications:

No	Year	Title of Paper	Name of Journal, Volume, Page	DOI
1	2021	Simultaneous Extraction and In-Situ	Korean Journal of	https://doi.org/10.3740/mrsk.
		Transesterification of Chlorella vulgaris Using	Materials Research,	<u>2021.31.4.181</u>
		Microwave-Assisted Method for Biodiesel	2021, 31, 181-187	
		Production		
2	2021	Mesoporous Silica Preparation Using Sodium	Silicon, 1, 1-9	https://doi.org/10.1007/s1263
		Bicarbonate as Template and Application of the		<u>3-021-00946-3</u>
		Silica for Hydrocracking of Used Cooking Oil into		
		Biofuel		
3	2021	Solid State Mixing Preparation of CaO/Bentonite	Advanced Materials	https://doi.org/10.4028/www.
		Nanocomposite and Its Application to Improve	Research, 1162, 21-	scientific.net/AMR.1162.21
		the Quality of Patchouli Oil	26	
4	2021	Synthesis and Application of Nanolayered and	ICS Physical	https://doi.org/10.34311/icspc
		Nanoporous Materials	Chemistry, 1, 1-9	<u>.2021.1.1.1</u>
5	2021	Synthesis and Application of Na ₂ O/ZrO ₂	ICS Physical	https://doi.org/10.34311/icspc
		Nanocomposite for Microwave-assisted	Chemistry, 1, 26-31	<u>.2021.1.1.26</u>
		Transesterification of Castor Oil		



No	Year	Title of Paper	Name of Journal, Volume, Page	DOI
6	2020	Preparation of Calcium Oxide/Zeolite	Key Engineering	https://doi.org/10.4028/www.
		Nanocomposite and Its Application to Improve	Materials, 849, 119-	scientific.net/KEM.849.119
		the Quality of Patchouli Oil	124	
7	2020	Catalytic Synthesis of Diethanolamide Surfactant	Eksakta, 2020, 1, 2,	<u>https://doi.org/10.1007/s1263</u>
		from Used Cooking Oil	133-138	<u>3-021-00946-3</u>
8	2019	Hydrothermal Preparation of a Platinum-loaded	RSC Advances, 9 ,	https://doi.org/10.1039/C9RA
		Sulphated Nanozirconia Catalyst for the Effective	41392-41401	<u>08834B</u>
		conversion of Waste Low Density Polyethylene		
		into Gasoline-range Hydrocarbons		
9	2018	Pt-promoted Sulfated Zirconia as Catalyst for	Materials Chemistry	https://doi.org/10.1016/j.matc
		Hydrocracking of LDPE Plastic Waste into Liquid	and Physics , 2018,	<u>hemphys.2018.03.055</u>
		Fuels	213, 548-555	
10	2017	Effect of Sulfuric Acid Treatment and Calcination	Key Engineering	https://doi.org/10.4028/www.
		on Commercial Zirconia Nanopowder	Materials, 2017, 757,	scientific.net/KEM.757.131
			131-137	
11	2014	Study of Acid Leaching in the Preparation of	International Journal	http://www.ijasrjournal.org/w
		Silicon from Lapindo Mud	of Academic and	<u>p-</u>
			Scientific Research,	content/uploads/2014/12/DEC
			2014, 2, 4, 31-36	13-14.pdf



34



: Nurcahyo Iman Prakoso, S.Si., M.Sc. Name **Date of Birth** : Sleman, November 5, 1988 Email :nurcahyo.ip@uii.ac.id Educational Background : B.Sc. in Chemistry (Universitas Gadjah Mada) M.Sc. in Chemistry (Universitas Gadjah Mada) Ph.D. (Cand.) in Chemistry (Hokkaido University)

Expertise:

玩加比加快

Development of Natural Products for Health



Publications:

Year	Title of publication (Original and English)	Subject/Topic	Туре	Publisher	Authors
2016	O-Methylation of Natural Phenolic Compounds Based on	Organic Synthesis	International Proceeding	IOP Conf. Series: Materials Science and Engineering	N I Prakoso ^{1*}
	Green Chemistry Using Dimethyl Carbonate		_	107 (2016) 012065 page 1-7	P H Pangestu ² and
				doi:10.1088/1757-899X/107/1/012065	T D Wahyuningsih ²
2016	Study on Lignin Isolation from Oil Palm Empty Fruit Runches	Natural Product	Journal	Eksakta Jurnal Ilmu-Ilmu MIPA, Vol 16, No.1 page 46-54	Nurcahyo Iman Prakoso ^{1*} ,
				DOI : 10.20885/eksakta.vol16.iss1.art6	Suryo Purwono ² , Rocmadi ²
2017	Synthesis of Sodium Lignosulphonate From Oil Palm	Organic Synthesis	International Proceeding	AIP Conference Proceedings 1823, 020037 (2017): page 1-5	Nurcahyo Iman Prakoso ^{1*} ,
	Empty Fruit Bunches's Lignin	,		doi: 10.1063/1.4978110	Suryo Purwono ² , Rocmadi ²
2017	Molecular Modeling of An Analog Of Curcumin Compounds Pentagamavunon- O (PGV-0) and Pentagamavunon-1 (PGV-1) Through Computational Chemistry Methods Ab-Initio HF/4-31G	Computational Chemistry	Journal	Indonesian Journal of Chemical Research, Volume 2, Issue 1-2, page 28-39 DOI : 10.20885/ijcr.vol2.iss1.art4	Nurcahyo Iman Prakoso 1*, Lukman Hakim ² Nuri Hidayati ²
2018	Synthesis and Application of Green Surfactant from Oil Palm Empty Fruit Bunches's Lignin for Enhanced Oil Recovery (EOR) Studies	Organic Synthesis	Journal Q3	Chemical Engineering Transactions Vol 16 (2018) ISBN 978-88-95608-61-7; ISSN 2283- 9216 page 739-744 DOI: 10.3303/CET1863124	Nurcahyo Iman Prakoso 1*, Suryo Purwono ² , Rocmadi ²
2018	Application of Sodium Ligno	Engineering	International Proceeding	IOP Conf. Series: Materials Science and	Nurcahyo Iman Prakoso 1*,
	Enhanced Oil Recovery and Its		Trocecung	doi:10.1088/1757-899X/349/1/012043	Rocmadi ²
	reasibility rest for TPN 000 OII				Suryo Purwono ²
2018	The Initial Comparison Study of Sodium Lignosulfonate,	Engineering	International Proceeding	IOP Conf. Series: Materials Science and Engineering 349 (2018) 012005 page 1-5	Argo Khoirul Anas
	Sodium Dodecyl Benzene Sulfonate, and Sodium p- Toluene			doi:10.1088/1757-899X/349/1/012005	Nurcahyo Iman Prakoso
	Sulfonate Surfactant for Enhanced Oil Recovery				Dilla Sasvita
2018	Application of Lignin as Adsorbent for Silver (Ag) and Copper (Cu) on Electroplating Waste in Kota Gede	Application of Natural Product	Journal	Indonesian Journal of Chemical Research, Volume 3, Issue 1, page 1-7, DOI : 10.20885/ijcr.vol3.iss1.art1	Nurcahyo Iman Prakoso
2018	An Investigation of Insect Ovipositing Repellent Activity of Andrographis paniculata Ness, Acacia auriculiformis and Piper betle Linn Leaves Extracts to Batrocera carambolae	Application of Natural Product	Journal	Eksakta Jurnal Ilmu-Ilmu MIPA, Vol 18, Issue 1, page 1-7 DOI : 10.20885/eksakta.vol18.iss1.art1	Nurcahyo Iman Prakoso ⁽¹⁾ *, Umul Azizah ⁽²⁾ , Zahrah Nur Zakiyah ⁽³⁾ , Mila Tria Nita ⁽⁴⁾ , Arida Liyanita ⁽⁵⁾ , Suputa Suputa ⁽⁶⁾ ,
2018	Extraction of yttrium	Analytical	International Proceeding	AIP Conference Proceedings 2026, 020078 (2018); page 1-7	Mila Tria Nita, Tri Handini, and Nurcahyo Iman
	from yttrium concentrate (YPO4) using aliquat 336 (tryoctylmethylammonium chloride)		,	doi: 10.1063/1.5065038	Prakoso
2019	Synthesis and Structure Activity Relationship of Omaezallene Derivatives	Organic Synthesis	Journal Q2	Chem. Biodiversity 2019, 16, e1800451 page 1-13 DOI: 10.1002/cbdv.201800451	Taiki Umezawa,*a Nurcahyo Iman Prakoso,a, b Miho Kannaka,a Yasuyuki Nogata,c Erina Yoshimura,d Tatsufumi Okino,a and Euvuhiko Matsuda*a





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Expertise:

Synthesis and modeling of molecules catalyst **Research roadmap:**



No	Year	Title of paper	Volume/No.	Journal
1.	2021 (as co author)	Visible light sensitized porous clay heterostructure photocatalyst of zinc-silica modified montmorillonite by using tris(2,2'-bipyridyl) dichlororuthenium	204, 106023	Applied Clay Science
2.	2021 (as co author)	Clitorea ternatea-mediated silver nanoparticle-doped hydroxyapatite derived from cockle shell as antibacterial material	769, 138412	Chemical Physics Letters
3.	2021 (as co author)	Enhanced performance of magnetic montmorillonite nanocomposite as adsorbent for Cu(II) by hydrothermal synthesis	9 (1), 104968	Journal of Environmental Chemical Engineering
4.	2020	A molten salt-based nitridation approach for synthesizing nanostructured InN electrode materials	10, 37576 — 37581	RSC Advances
5.	2020		394, 112499	



No	Year	Title of paper	Volume/No.	Journal
		Photo-electrochemical property of 2D hexagonal- shape GaN nanoplates synthesized using solid nitrogen source in molten salt		Journal of Photochemistry and Photobiology A: Chemistry
6.	2020 (as co author)	Microwave-assisted synthesized porous clay heterostructure-Zn/Si from montmorillonite for citronellal conversion into isopulegol	7, 105006	Materials Research Express
7.	2020 (as co author)	Green synthesis of hematite/TUD-1 nanocomposite as efficient photocatalyst for bromophenol blue and methyl violet degradation	13, 8395 — 8410	Arabian Journal of Chemistry
8.	2020	Use of Ketapang seeds for biofuel production as renewable energy using catalytic hydrocracking method	2229, 030003	AIP Conference Proceedings
9.	2018	Pengaruh variasi HA-TCP (Hydroxy Apatit-Tricalcium Pospat) terhadap biokomposit (HA: TCP)-Gelatin-CMC sebagai injectable bone subtitute (IBS)	3 (1)	Indonesia Journal of Chemical Research
10.	2017 (as co author)	Modeling Alkyl p-Methoxy Cinnamate (APMC) as UV absorber based on electronic transition using semiempirical quantum mechanics ZINDO/s calculation	909, 012081	Journal of Physics: Conference Series
11.	2017	Development of computational-based visualization method in physical chemistry practical course	2 (1)	International Journal of Science and Applied Science; Conference Series
12.	2017	Adsorption isoterm studies of Rhodamin B on <i>Citrus</i> Sinesis peel	2 (1-2)	Indonesia Journal of Chemical Research
13.	2016	Synthesis of porous TiO ₂ with starch template and its photoactivity towards photodegradation of methylene blue	15 (1-2)	Eksakta: Journal of Science and Data Analysis
14.	2016	Theoretical study of adsorption and dissociation of NH ₃ on pentanuclear Fe(111) surface	107, 012068	IOP Conference Series: Materials Science and Engineering



38



Name: Salmahaminati, S.Si., M.Sc., Ph.D.Date of Birth: Nganjuk, April 3, 1989Email: salmahaminati@uii.ac.idEducation Background:B.Sc. in Chemistry (Universitas Gadjah Mada)MS.Sc. In Chemistry (University of Groningen)Ph.D in Chemistry (Tokyo Metropolan University)

Expertise

Computational chemistry



:

Figure 1. Road map Research

My postgraduate research topic is about photochemical processes on amino acids using the Ab Intio method (CASSCF and CASPT2). Amino acid compounds that have aromatic groups are predicted to have absorption and emission in UV light. After calculating the computational chemistry, it was found that tryptophan is an amino acid that has the lowest energy absorption and emission.



39



Figure 2. Spectra of tryptophan in the gas phase

Publ	lications:

No	Year	Title of paper	Volume/No.	Journal
1.	2021	Density Functional Study of Metal-to-Ligand Charge Transfer and Hole-Hopping in Ruthenium(II) Complexes with Alkyl- Substituted Bipyridine Ligands	6(1), pp. 55–64	Journal ACS Omega
2.	2019	Factors influencing the photoelectrochemical device performance sensitized by ruthenium polypyridyl dyes	48(2), pp. 688– 695	Dalton Transactions
3.	2018	Analysis of Hydrogen Sulfide (H2S) and Hydrocarbon Composition of Natural Gas from GMS (Gas Metering Station) in PT. Pupuk Sriwidjaja Palembang	4 (1), 17-23	INDONESIAN Journal of Chemical Research
4.	2018	Simple Harmonic Oscillator Model of O2 Molecule in Vacuum: A Classical Molecular Dynamics Study	4 (1), 8-16	INDONESIAN Journal of Chemical Research
5.	2017	Modeling Alkyl p-Methoxy Cinnamate (APMC) as UV absorber based on electronic transition using semiempirical quantum mechanics ZINDO/s calculation	909(1), 012081	Journal of Physics: Conference Series
б.	2017	Synthesis propanol by esterification and reduction reaction	795(1), 012065	Journal of Physics: Conference Series
7.	2017	Statistical t Analysis for the Solution of Prediction Trash Management in Dusun Tanjung Sari Kec. Ngaglik Kab Sleman, Yogyakarta	795(1), 012046	Journal of Physics: Conference Series
8.	2017	Synthesis Propyl Propanoic from Propanoic Acid by Esterification Reaction	105, pp. 1090– 1095	Energy Procedia
9.	2017	Synthesis of chitosan from the crab shell with encapsulation method	12(18), pp. 4725–4729	Journal of Engineering and Applied Sciences
10.	2016	Synthesis of polypropylene from 1-propanol using AlCl ₃ Ziegler- Natta catalyst	1787, 030011	AIP Conference Proceedings
11.	2015	Semiempirical Study On Electronical Transition Spectra Of Ethyl Pmethoxycinnamate (EPMS) From Kencur (Kaempferia Galanga) For Sunscreen Component	15 (1-2), 38-47	EKSAKTA: Journal of Sciences and Data Analysis





: M. Arsyik Kurniawan S., S.Si., M.Sc. : Jakarta, February 24, 1985 : m.arsyik@uii.ac.id

Educational Background : B.Sc. in Chemistry (Universitas Gadjah Mada) MS.Sc. In Chemistry (Universitas Gadjah Mada) Ph.D (Cand.) in Chemistry (Akdeniz University)

Expertise:

Physical and computational chemistry for materials

- Studi Komputasi Metode Ab Initio DFT dalam Kajian Struktur Dan Sifat Elektronik Senyawa Kalsium Borohidrid-diamonia Sebagai Senyawa Penyimpan Hidrogen (Eksakta, Jurnal Ilmu-ilmu MIPA Vol. 15 No. 1-2 (2015) ISSN:1411-1047).
- The Utilization Density Functional Theory in Structure Determination And Hydrogen Storage Properties of Ca(BH4)2·2NH3 Compounds (The First International Conference on Statistical Methods in Engineering, Science, Economy, and Education (SESEE-2015) September, 30th 2015 ISBN:978-602-99849-2-7).
- 3. Studi Stabilitas Komposit Karbon/Na-Alginat Sebagai Material Elektroda Sel Elektrokimia (Seminar Nasional Kimia, Lombok 10-11 Agustus 2016, ISBN: 978-979-89119-7-2).
- 4. Conversion of Eugenol to Metileugenol : Computational Study And Experimental (AIP Conference Proceedings **1823**, 020109 (2017); doi: <u>http://dx.doi.org/10.1063/1.4978182</u>).
- 5. <u>Pengaruh Penambahan Na-Alginat Dalam Proses Eksfoliasi Grafit Dengan Metode Pencampuran</u> (Jurnal PIJAR MIPA Vol 12, No 1 (2017): Maret, ISSN 1907-1744).
- 6. Influence Of Macrocyclic Ring Size On The Corrosion Inhibition Efficiency Of Dibenzo Crown Ether, Indonesian Journal of Chemistry, Vol 17, No 3 (2017), ISSN 1411-9420.
- 7. Sintesis dan Karakterisasi Komposit Alginat/Zeolit/Fe-Zn Sebagai Salah Satu Material Pupuk Penyimpan Fe dan Zn, Indonesian Journal of Chemical Research, Vol 4, No. 1 (2018), e-ISSN 2354-9610.
- 8. Penghilangan Zat Warna menggunakan Kompleks Polielektrolit Kitsan-Alginat, Journal of Pharmaceutical Science and Clinical Research, Vol. 3 No. 1 (2018), ISSN 2503-331X.
- 9. Heavy Metals (Fe And Cd) Adsorption By Natural Zeolite From Laboratory Liquid Waste Of Institut Pertanian (INTAN) Yogyakarta, International Conference of Chemistry, Chemical Process, and Engineering, Chemistry Dept, UII, 14 Agustus (2018).
- 10. Composites Films Conductivity of Polyvinyl Alcohol/Graphene Oxide with Electrical Properties, International Conference of Chemistry, Chemical Process, and Engineering, Chemistry Dept, Ull, 14 Agustus (2018).





Name: Mai Anugrahwati, S.Si., M.Sc.Tanggal Lahir: Bantul, September 19, 1988Email: mai.anugrahwati@uii.ac.idEducational Background:B.Sc. in Chemistry (Universitas Gadjah Mada)M.Sc. In Chemistry (Universitas Gadjah Mada- TU Braunschweig)

Expertise:

Analytical and environmental chemistry

- Mai Anugrahwati, Tuti Purwaningsih, Rustina, J.A.Manggalarini. N.B. Alnavis, D.N. Wulandari, H.D. Pranowo. 2016. Extraction of Ethanolic Extract of Red Betel Leaves and Its Cytotoxicity Test odn HeLa Cells. Procedia Engineering, 148, p. 1402-1407.
- Salmahaminati, Mai Anugrahwati, Novita Sari dan Zafrullah Muslim. 2016. Sintesis dan Analisis Pemodelan Senyawa Turunan Kalkon (4-hydroxy-3-(-3-phenylacryloly) benzoic acid) Sebagai Bahan Tabir Surya. Prosiding Seminar Nasional Kimia dan Pendidikan Kimia VIII (SN-KPK VIII), Universitas Sebelas Maret, 14 Mei 2016.
- 3. Gani P., Is Fatimah, Salmahaminati, Mai Anugrahwati. 2016. The Development of Contextual Collaborative Learning Model for Chemical Bonding Course. Proceeding of 3rd International Conference on Research, Implementation and Education of Mathematics and Science, Yogyakarta, 16-17 May 2016.
- 4. Tri Joko Raharjo, Bambang Sutriyanto, Mai Anugrahwati, Nurul Hidayat Aprilita. 2013. Validasi Metode Analisis Multiresidu Pestisida Organoklor Dalam Salak Menggunakan Kromatografi Gas-Detektor Penangkap Elektron. Agritech Jurnal Teknologi Pertanian UGM, 33.



47



Name: Argo Khoirul Anas, S.Si., M.Sc.Date of Birth: Wonosobo, September 14, 1989Email: argokhoirulanas@uii.ac.idEducational Background::B.Sc. in Chemistry (Universitas Negeri Yogyakarta)M.Sc. In Chemistry (Universitis Pendidikan Sultan Idris, Malaysia)

Expertise:

Carbon Materials and Surfactants



- Anas, A.K., Izzah, A., Pratama, S.Y. and Fajarwati, F.I., 2020, April. Removal of methylene blue using biochar from cassava peel (*Manihot utilissima*) modified by sodium dodecyl sulphate (SDS) surfactant. In *AIP Conference Proceedings* (Vol. 2229, No. 1, p. 030024). AIP Publishing LLC.
- Anas, A. K., Prakoso, N. I., & Sasvita, D. 2018. The Initial Comparison Study of Sodium Lignosulfonate, Sodium Dodecyl Benzene Sulfonate, and Sodium p-Toluene Sulfonate Surfactant for Enhanced Oil Recovery. In *IOP Conference Series: Materials Science and Engineering* (Vol. 349, No. 1, p. 012005). IOP Publishing.
- Anas, A.K., Ariefta, N.R., Nurfiana, Y. and Rohaeti, E., 2018, October. Mechanical properties of bioplastic from jackfruit seed (Artocarpus heterophyllus) plasticized by 1.4-butanediol and polyethylene glycol (PEG) 1000. In *AIP Conference Proceedings* (Vol. 2026, No. 1, p. 020081). AIP Publishing LLC.
- Anas, A.K., Ariefta, N.R., Nurfiana, Y. and Rohaeti, E., 2016. Pengaruh Penambahan 1, 4-Butanadiol Dan Polietilen Glikol (PEG) 1000 Terhadap Kemudahan Biodegradasi Bioplastik Dari Biji Nangka (Artocarpus Heterophyllus). *Jurnal Inovasi dan Kewirausahaan*, *16*(2), pp.115-123.
- Mohamed, A., Anas, A.K., Bakar, S.A., Ardyani, T., Zin, W.M.W., Ibrahim, S., Sagisaka, M., Brown, P. and Eastoe, J., 2015. Enhanced dispersion of multiwall carbon nanotubes in natural rubber latex nanocomposites by surfactants bearing phenyl groups. *Journal of colloid and interface science*, 455, pp.179-187.



 Mohamed, A., Anas, A.K., Bakar, S.A., Aziz, A.A., Sagisaka, M., Brown, P., Eastoe, J., Kamari, A., Hashim, N. and Isa, I.M., 2014. Preparation of multiwall carbon nanotubes (MWCNTs) stabilised by highly branched hydrocarbon surfactants and dispersed in natural rubber latex nanocomposites. *Colloid and Polymer Science*, 292(11), pp.3013-3023.



44



Name: Dhina Fitriastuti, S.Si., M.Sc.Date of Birth: Sleman, April 24, 1990Email: dhinaf@uii.ac.idEducational Background:B.Sc. in Department of Chemistry, Universitas Gadjah MadaM.Sc. in Department of Chemistry, Universitas Gadjah Mada

Experties:

Organic synthesis and isolation of natural product chemistry for drugs esp. antimalarial active compounds

Research Roadmap:



- 1. D Fitriastuti, TS Julianto, AWN Iman, 2020, Identification and Heme Polymerization Inhibition Activity (HPIA) Assay of Ethanolic Extract and Fraction of Temu Mangga (Curcuma mangga Val.) Rhizome, EKSAKTA: Journal of Sciences and Data Analysis 20 (1), 64-72.
- 2. D Rubiyanto, NI Prakoso, MM Musawwa, D Fitriastuti, 2020, Application of e-learning at the chemistry of essential oils course supported with practical activities, AIP Conference Proceedings 2229 (1), 020007.
- 3. D Rubiyanto, NI Prakoso, D Fitriastuti, 2020, Implementation of student-centered learning (SCL) with retrosynthesis module-assisted on synthetic organic chemistry course, AIP Conference Proceedings 2229 (1), 020006.



- 4. MID Mardjan, D Fitriastuti, B Purwono, J Jumina, 2019, Synthesis of 1-(2-Methoxybenzyl)-1, 10phenanthrolin-1-ium Bromide from Gandapura Oil, The Journal of Pure and Applied Chemistry Research 8 (3).
- 5. NI Prakoso, ZN Zakiyah, A Liyanita, D Rubiyanto, D Fitriastuti, 2019, Antimalarial Activity of Andrographis Paniculata Ness's N-hexane Extract and Its Major Compounds, Open Chemistry 17 (1), 788-797.
- 6. N Fitri, D Fitriastuti, 2019, Comparison between maceration and microwave extraction techniques of strawberry fruit (fragaria sp) and antioxidant activity test, IOP Conference Series: Materials Science and Engineering 523 (1), 012024.
- 7. NI Prakoso, D Fitriastuti, IQ Wafiya, A Saeful, 2019, Sintesis Senyawa Polihidroksi Xanthone 1, 3, 7trihydroxy-9H-xanthen-9-one Sebagai Kandidat Anti Kanker Payudara, Prosiding SENIATI, 274-279.
- 8. FK Yustica, NI Widiastuti, N Sapitri, D Fitriastuti, 2019, Essential oils from Alpinia purpurata (Zingiberaceae): Chemical composition and Formulation of antiacne cream, INDONESIAN JOURNAL OF CHEMICAL RESEARCH 4 (1), 14-21
- 9. NN Arif, AD Rizki, D Fitriastuti, 2018, Nanoencapsulation Of Graviola (Annona Muricata L.) Seed By-Products Ethanolic Extract For Breast Cancer Activity, ASEAN/Asian Academic Society International Conference Proceeding Series, 86-89.
- 10. D Fitriastuti, AWN Iman, DA Lutfiani, D Yuliyanti, 2018, In vitro antiplasmodial activity of extract and fraction of temu mangga (Curcuma mangga) against Plasmodium falciparum 3D7, AIP Conference Proceedings 2026 (1), 020105.
- 11. N Hidayah, D Arohman, IA Rohmah, DR Pramuditya, D Nasriyanti, D. Fitriastuti, 2018, Reducer of glycemic index in rice (ROGER): A novel device to reduce the glycemic index in rice for diabetic patient, AIP Conference Proceedings 2026 (1), 020106.
- 12. FO Nitbani, HE Wogo, RI Lerrick, D Fitriastuti, 2018, Green one-step synthesis of 1-monoolein from Kabate larva oil, AIP Conference Proceedings 2026 (1), 020047.
- 13. T. Nuryastuti, S. Setiawati, N. Ngatidjan, M. Mustofa, J. Jumina, D. Fitriastuti and M.I. Darussalam, 2018, Antibiofilm activity of (1)-N-2-methoxybenzyl-1,10-phenanthrolinium bromide against Candida albicans, Journal de Mycologie Médicale, Journal de Mycologie Médicale 28 (2), 367-373.
- 14. T. S. Julianto, D. Fitriastuti, A. Diniaty, L. Fauzi'ah, W. N. Arlianty, B. W. Febriana and Muhaimin, 2017, The implementation of case study with module-assisted to improve students' understanding on phytochemistry course, AIP Conference Proceedings, ISBN: 978-0-7354-1603-1, 1911, 020026.
- 15. D. Fitriastuti, Jumina, and Priatmoko, 2017, Heme polymerization inhibition activity (HPIA) assay of synthesized xanthone derivative as antimalarial compound, AIP Conference Proceedings, ISBN: 978-0-7354-1491-4, 1823, 020120.
- 16. S. Setiawati, T. Nuryastuti, N. Ngatidjan, M. Mustofa, J. Jumina and D. Fitriastuti, 2017, In vitro antifungal activity of (1)-N-2-methoxybenzyl-1,10-phenanthrolinium bromide against Candida albicans and its effects on membrane integrity, Mycobiology, 45 (1), 25-30.
- 17. D. Fitriastuti, Jumina, and Priatmoko, 2016, Synthesis and Characterization of 2, 3, 4-Trihydroxy-5methyl Xanthone as Antimalarial Compound, Eksakta: Jurnal Ilmu-Ilmu MIPA, 16 (2), 94-102.



- 18. F. O. Nitbani, Jumina, D. Siswanta, E. N. Sholikhah and D. Fitriastuti, 2016, Synthesis and antibacterial activity of 2-monolaurin, Orient. J. Chem., 32 (6), 3113-3120.
- 19. D. Fitriastuti, Jumina, Priatmoko dan I. Tahir, 2016, QSAR Study of Antimalaria of Xanthone Derivatives using Multiple Linear Regression Methods, Proceeding of 3rd International Conference On Research, Implementation and Education Of Mathematics And Science, ISBN 978-602-74529-0-9, Yogyakarta.
- D. Fitriastuti, M. I. D. Mardjan, Jumina, and Mustofa, 2014, Synthesis and Heme polymerization inhibitory activity (HPIA) assay of antiplasmodium of (1)-N-(3,4-dimethoxybenzyl)-1,10phenanthrolinium bromide from vanillin, Indo. J. Chem., 14 (1), 1–6.







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Experties::

Synthesis and natural products for medicinal and pharmaceutical chemistry

Research Roadmap:

Research plan road map



Publication:

1. FI Fajarwati, NI Yandini, M Anugrahwati, A Setyawati, 2020, Adsorption Study of Methylene Blue and Methyl Orange Using Green Shell (Perna Viridis), EKSAKTA: Journal of Sciences and Data Analysis 20 (1), 92-97.



- 2. A Setyawati, LW Mardyaningrum, T Damayanti, 2020, Formulation, physical stability test and antibacterial test of nanoemulsion from water and n-hexane extract of Cinnamomum burmanii, AIP Conference Proceedings 2229 (1), 030031.
- 3. A Setyawati, 2019, Analysis Methods Verification of Boron in River Water Using the Uv-Vis Spectrophotometer with Curcumin Complex as Alternative Practical Educations, International Journal of Chemistry Education Research 3 (2), 60-65.
- 4. A Setyawati, N Yuliningtyas, AA Zamar, MS Zamzamie, 2018, Physicochemical character of nanoencapsulated Kencur (Kaempferia galanga L.) dreg extracts, AIP Conference Proceedings 2026 (1), 020089.
- 5. Amri Setyawati*, Deni Pranowo and Indriana Kartini, 2016, Effect of Microwave Irradiation on Synthesis of Chitosan for Biomedical Grade Applications of Biodegradable Materials, Eksakta: Jurnal-Jurnal Ilmu Mipa 16 (2), 137-148
- 6. A Setyawati, TD Wahyuningsih, B Purwono, 2017, Synthesis and characterization of novel benzohydrazide as potential antibacterial agents from natural product vanillin and wintergreen oil, AIP Conference Proceedings 1823 (1), 020121.
- 7. A Setyawati, TD Wahyuningsih, B Purwono, 2017, Syntheses of Novel Pyrazoline as Antibacterial Agents from Natural Product Vanillin, Asian Journal of Chemistry 29 (2), 454-456.
- 8. Amri Setyawati1*, Indriana Kartini2, Deni Pranowo2, Lisna Junaeni Muiz3 and Syafitri Hasyati2, 2017, Synthesis and Characterization of Biodegradable Film Chitosan and Carboxymethyl Chitosan to Substitute Silver Wound Healer Plaster, Oriental Journal of Chemistry 33(6):3003-3008.







Name

Email

: Imam Sahroni, S.Si., M.Sc. **Date of Birth** : Pati, October 05, 1991 : sahroni@uii.ac.id **Educational Background :** B.Sc. in Department of Chemistry, Universitas Islam Indonesia M.Sc. in Department of Chemistry, National Chiao Tung University

Experties:

Material Chemistry

Research Roadmap:





- 1. Imam Sahroni, Hsin-Chieh Lin, Paten, Thermosensitive Compound Peptide Hydrogel (NCTU-18001-TWI).
- 2. I Fatimah, I Sahroni, HP Putra, MR Nugraha, UA Hasanah, Jurnal Ceramic membrane based on TiO2-modified kaolinite as a low cost material for water filtration, Applied Clay Science 118, 207-211.
- 3. I Fatimah, I Sahroni, HP Putra, MR Nugraha, UA Hasanah, Seminar TiO2 -Modified Kaolinite Based on Ceramic Membrane as Low Cost Material forWater Filtration, ISAFM Conference 2014.
- 4. I Fatimah, I Sahroni, HP Putra, UA Hasanah, Prosiding Preparation of TiO2/Kaolinite for Ceramic Membrane Formulation in Nitrate, Phenol and Eschericia coli Adsorption, ICICS 2013.
- I Fatimah, W Novita, Y Andika, I Sahroni, B Djaelani, YN Yunani, Jurnal Organoclay of Cetyl Trimethyl Ammonium-Montmorillonite: Preparation and Study in Adsorption of Benzene-Toluene-2-Chlorophenol, World Academy of Science, Engineering and Technology, International Journal of Chemical, Molecular, Nuclear, Materials and Metallurgical Engineering.
- 6. I Sahroni, Z Zuhrufa, C Nisaa, HBN Sajidah, Prosiding Alat Penangkap Bau Dan Uap Bahan Kimia Berbahaya Untuk Melindungi Pekerja Kerajinan Fiberglass Di Prambanan DIY, Prosiding Elektronik Pekan Ilmiah Mahasiswa Nasional 2013.
- 7. Imam Sahroni, Yuyun Yunani N, Is Fatimah, Seminar Preparation of TiO2/Zeolite and Kinetics Study on Photo-degradation of Rhodamine B., Seminar Nasional di ITB, Bandung.





Experties:

Material Chemistry, Adsorption, Photocatalysis

Materials based:



- 1. Conservation of underwater cannonball heritage obtained from a shipwreck in the sea of Batavia, Jakarta, Indonesia
- 2. Application of e-learning at the chemistry of essential oils course supported with practical activities
- 3. Physicochemical characteristics and photocatalytic performance of TiO2/SiO2 catalyst synthesized using biogenic silica from bamboo leaves
- 4. The Influence of Cu Dopant Concentration on The Optical Properties of Fe304/Si02/Ti02 Nanocomposite
- 5. Glycerol to solketal for fuel additive: recent progress in heterogeneous catalysts



52



Name Date of Birth Email

: Febi Indah Fajarwati, S.Si., M.Sc. : Indramayu, 4 Februari 1990 : febi.indah@uii.ac.id

Educational Background :

B.Sc. in Department of Chemistry, Universitas Islam Indonesia M.Sc. in Department of Chemistry, Universitas Gadjah Mada

Experties:

Material Chemistry, Adsorption, Photocatalysis

- 1. Adsorption Study of Magnetic Carbon Composite from Salacca Zalacca Peel and Iron Oxide to Reduce Chemical Oxygen Demand (Cod) Levels in Laundry Waste
- 2. Effect of Solvents On Aricryl Polymerization and Application in Wood Coatings
- 3. Study of The Effect of Solvent and Quantity of Catalyst On Aricryl Polymerization at Pt. Aristek Highpolymer Bekasi
- 4. Adsorption Study of Methylene Blue and Methyl Orange Using Green Shell (Perna Viridis)
- 5. Adsorption of Pb (II) from aqueous solution using magnetic carbon composite of banana peel
- 6. Removal of methylene blue using biochar from cassava peel (Manihot utilissima) modified by sodium dodecyl sulphate (SDS) surfactant
- 7. Adsorption study of methylene blue and eriochrome black T dyes on activated carbon and magnetic carbon composite
- 8. Characterization of Nano Chitosan-Cucumber Suri (Cucumis melo L.) Seeds with Sodium Tripolyphosphate as Crosslinker
- 9. Adsorption of Fe (III) on the biosorbent from polymerization process of nephelium fruit peel extract
- 10. Utilization of bamboo leaves wastes for methylene blue dye adsorption
- 11. Penghilangan Zat Warna menggunakan Kompleks Polielektrolit Kitosan-Alginat
- 12. Penentuan Kadar Logam B3 Dalam Pupuk Cair Dengan Metode Analisis Aktivasi Neutron (AAN)
- 13. Formulation of antiacne serum based on lime peel essential oil and in vitro antibacterial activity test against Propionibacterium acnes
- 14. Film of Chitosan-Carboxymethyl Cellulose Polyelectrolyte Complex as Methylene Blue Adsorbent





: Ika Yanti, S.Si., M.Sc. : Bantul, March 28, 1990 : ika.yanti@uii.ac.id around :

Educational Background :

Name

Email

Date of Birth

B.Sc. in Department of Chemistry, Universitas Gadjah Mada M.Sc. in Department of Chemistry, Universitas Gadjah Mada

Experties: Material Chemistry, Adsorption



- 1. Bentonite-Biochar Combination for Manganese Ion Removal from Water
- 2. Adsorption Kinetics Study of Cu (II) and Pb (II) Using Biosorbent from Nephelium Fruit Peel Extract Polymers
- 3. Application of Mg/Al-hidrotalcite to reduce Cu (II) and Pb (II) metals in ground water in the environment of a used battery home industry at Pesarean Village, Tegal, Central Java
- 4. Adsorption study of methylene blue and eriochrome black T dyes on activated carbon and magnetic carbon composite
- 5. Verifikasi Metode Analisis TBC (p-tert butylcatechol) pada Air Limbah Industri dari Proses Polimerisasi
- 6. Interaction study between 3,4,5-trihydroxy benzoic acid-modified Mg/Al-hydrotalcite with Au ions on the adsorption process of AuCl4—
- 7. Adsorption of Fe (III) on the biosorbent from polymerization process of nephelium fruit peel extract
- 8. Utilization of hydrotalcite modified with 3, 4, 5-trihydroxybenzoic acid for the treatment of silvercontaining wastewater
- 9. Extraction Temperature Effect in Modification of Nephelium Tannin Based Biosorbent

- 10. Modification of humic acid by ether functional group as biosorbent to Au (III) adsorption in the presence of Sn (II) and Ni (II)
- 11. Kinetics study of Au (III) adsorption on gallic acid intercalated mg/Al-hydrotalcite
- 12. Synthesis of Gallic Acid Intercalated Mg/Al-Hydrotalcite by Direct Co-Precipitation Method and Its Application to Adsorption of Au (III)

55

Name: Wiyogo Prio Wicaksono, S.Si., M.Si.Date of Birth: Kebumen, September 30, 1991Email: wiyogo.prio@uii.ac.idEducational Background:B.Sc. in Department of Chemistry, Universitas IndonesiaM.Sc. in Department of Chemistry, Universitas Indonesia

Experties:

Development of nanomaterials and electrochemistry for applications in health and the environment, as well as industry

Research Roadmap:

- 1. G. Fadillah, W.P. Wicaksono, I. Fatimah, T.A. Saleh, 2020. A sensitive electrochemical sensor based on functionalized graphene oxide / SnO2 for the determination of eugenol, Microchem. J. 105353.
- 2. W.P. Wicaksono, I. Sahroni, A.K. Saba, R. Rahman, I. Fatimah, 2020. Biofabricated SnO2 nanoparticles using Red Spinach (Amaranthus tricolor L.) extract and the study on photocatalytic and electrochemical sensing activity, Mater. Res. Express. 7, 075009.
- 3. W.P. Wicaksono, R.D. Hutama, M. Ridwanto, 2020. A facile electrochemical synthesis of graphene from battery waste for sensing application A Facile Electrochemical Synthesis of Graphene from Battery Waste for Sensing Application, 040051.
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