



CURRICULUM VITAE



1. PERSONAL PARTICULARS

Name	DR. SAFURA TAUFIK
Current Position Faculty / Department	SENIOR LECTURER / DS51 CENTER FOR DEFENCE FOUNDATION STUDIES
Addresss	DEPARTMENT OF CHEMISTRY & BIOLOGY, CENTRE FOR DEFENCE FOUNDATION STUDIES
Mobile No:	012-6757295
Email:	safura@upnm.edu.my

2. ACADEMIC AND PROFESSIONAL QUALIFICATIONS

(Please list all academic qualifications, from your first degree, in chronological order)

Year	Degree	Discipline	University
2007	Bachelor of Science (Hons)	Industrial Chemistry	Universiti Putra Malaysia
2011	Master of Science	Analytical Chemistry	Universiti Putra Malaysia
2017	Doctor of Philosophy	Chemistry	University of New South Wales, Sydney, AU

3. TITLES OF POSTGRADUATE THESES WRITTEN

No.	TITLES OF POSTGRADUATE THESES
1. Master	Bismuth Oxide Nanoparticles/ Chitosan – Modified Electrodes as Biosensor for DNA Hybridisation
2. PhD	An Antifouling Electrode for the Detection of Haemoglobin and Glycosylated Haemoglobin

4. WORK EXPERIENCE (Please list your relevant experience in chronological order)

Year	Position	Organisation	Start and End Date
2005	Practical Trainee	Lembaga Getah Malaysia	
2007	Research Assistant	Universiti Putra Malaysia	
2014	Lab Demonstrator	Chemistry Lab, UNSW	
2011 - 2017	Tutor	Centre for Defence Foundation Studies, UPNM	1/8/2011 – 20/6/2017
2017 - present	Senior Lecturer	Centre for Defence Foundation Studies, UPNM	21/6/2017 – present

5. TEACHING EXPERIENCES

No	Course Title	Level (Post Graduate courses, first degree, diploma or pre-degree courses)	Semester	Year
1.	FKA 0121 – Chemistry Lab I FKA 0241 – Chemistry Lab II	Pre-degree courses	Semester I Semester II	2011 - 2012
2.	FCH0216 Chemistry I FCH0226 Chemistry II	Pre-degree courses	Semester I Semester II	2016 - present
3.	TMA 4353 (Marine Corrosion)	Postgraduate course (master by coursework)	Semester I	2023

6. PREVIOUS ACADEMIC COURSES TAKEN

Core courses	Elective courses	University requirement courses
Safety in the Chemistry Laboratory	Functional Malay	Islamic Civilization
Research Methodology in Chemistry	Volunteerism	Malaysian Nationhood
Spectroscopy I	Islamic Family Law	Asian Civilization
Physical and Inorganic Chemistry	Arabic I	Computer Programming I
Organic Chemistry		
Calculus		
Thermal and Modern Physics		
Inorganic Chemistry I		
Analytical Chemistry		
Algebra		
Mechanics and Waves		
Concepts of Biology		
Physical Chemistry		
Chemical Spectroscopy		
Man and Environment		
Organic Chemistry II		
Chemical Technology Principles		
Industrial Chemistry I		
Polymer Chemistry		
Inorganic Chemistry III		
Industrial Chemistry II		
Chemical Kinetics		
Industrial Polymer Chemistry		

7. RESEARCH AREA

Biosensors, Electrochemical Sensors, Surface Modification, Antifouling Electrode

8. RESEARCH ACTIVITIES

No	Title	Role • Principal • Members	Grant Year	Source Amount	Status • Completed • In Progress
1	Investigation of electrochemical behaviour of Pyocyanin based graphene nanocomposite-modified electrode for potential application in diagnostic of Pseudomonas aeruginosa infections	Member	2017	FRGS RM78,200	Completed
2	Polyonic Liquid – Metal Oxide Nanocomposite Based Sensor For Detection Of Sarin Gas	Member	2018	CHEMDEF RM 200,000	Completed
3	Anion Characteristic of Seaweed based Green Biopolymer Electrolytes for Aluminium-Air Battery	Member	2018	GPJP RM 20,000	Completed
4	Investigation of electrochemical impedimetric behaviour of the DNA aptamer conjugated gold nanoparticles/reduced graphene oxide-modified electrode for the determination of malathion.	Principal	2019	FRGS- RACER RM 31,400	In Progress
5	Synthesis and Characterization of Hydrophobic Benzoyl Carrageenan Electrolyte	Member	2019	FRGS- RACER RM 31,400	Completed
6	Magnetic ionic liquid-Ag-nanocellulose composites as a promising SERS substrate for pesticide residue monitoring	Member	2021	FRGS RM107,000	In Progress
7	Development of Electrochemical Sensor based Aptamer Conjugate Gold Nanoparticles / Reduced Graphene Oxide for Detection of Malathion	Principal	2022	GPPP RM20,000	Completed
8	Investigation of Spectroscopy Method for Elemental Profiling of Soy Sauce in Malaysia	Member	2023	GPJP RM20,000	In Progress
9	Functionalized Cellulose as Antimicrobial Materials: Computational Studies	Member	2023	GPJP RM20,000	In Progress
10	Glutaric Anhydride Kappa Carrageenan as Highly Conductive Gel Polymer Electrolyte: Structural Modification by Conventional and Microwave Heating Methods	Member	2023	GPJP RM20,000	In Progress
11	Investigation of the Binding Interaction between Molecularly Imprinted Polymer (MIP) and PFAS Molecules: Computational and Experimental Studies using ortho-phenylenediamine (o-PD) based Polymers	Principal	2024	RM10,000	In Progress
12	In Silico Design of Novel Guanine-rich ssDNA Aptamers for Pyocyanin Detection: Integration	Member	2024	RM10,000	In Progress

into a Portable Electrochemical Sensit Smart Biosensor

9. SUPERVISION

No	Name of Student	Project Title	Level (PhD, Master, Final year research project)	Role (Main/Co-Supervision)	Status <ul style="list-style-type: none"> • Completed • Submitted • In progress 	University
1	Farah Nabila binti Diauddin	Electrochemical Aptasensor based Polypyrrole-Iron Oxyhydroxide Nanocomposite for Detection of Dimethyl Methylphosphonate (DMMP)	Master (by research)	Co-supervisor	Completed	UPNM
2	Muhammad Amir Irfan bin Azizan	Electrochemical Impedimetric Aptasensor based Reduced Graphene Oxide-Gold Nanoparticles for Detection of Malathion	Master (by research)	Main Supervisor	In Progress	UPNM
3	Dhanendiran A/L Narayanasamy	An Electrochemical Sensor based on Reduced Graphene Oxide-Modified Electrode for the Detection of Pyocyanin Toxin	PhD	Co-supervisor	In Progress	UPNM

10. THESIS EXAMINER

No.	Name of Student	Project Title	Level (PhD, Master, Final year research project)	External / Internal	Date of Viva	University
1.	Vayithiswary A/P Kannan	Electrochemical Detection of Cortisol Based on Reduced Graphene Oxide Modified Screen Printed Carbon Electrode (rGO-SPCE)	Master	Internal	29 March 2022	UPNM

11. ARTICLES/ PROCEEDING/ BOOK

No	Authors, year, title, publisher/journal/conference, volume and number of pages (Please bold your name)	<ul style="list-style-type: none"> • Level • International • National • University
1	Taufik, Safura , Nor Azah Yusof, Tan Wee Tee, and Irmawati Ramli. "Bismuth oxide nanoparticles/chitosan/modified electrode as biosensor for DNA hybridization." <i>International Journal of Electrochemical Science</i> 6 (2011): 1880-1891.	International Scopus
2	Taufik, S. ; Barfidokht, A.; Alam, M. T.; Jiang, C.; Parker, S. G.; Gooding, J. J., An antifouling electrode based on electrode–organic layer–nanoparticle constructs: Electrodeposited organic layers versus self-assembled monolayers. <i>Journal of Electroanalytical Chemistry</i> . 2016, 779, 229-235.	International Scopus (Q2)
3	Jiang, C.; Alam, M. T.; Silva, S. M.; Taufik, S. ; Fan, S.; Gooding, J. J., Unique Sensing Interface That Allows the Development of an Electrochemical Immunosensor for the Detection of Tumor Necrosis Factor α in Whole Blood. <i>ACS Sensors</i> 2016, 1 (12), 1432-1438	International Scopus (Q1)
4	Rashid, J. I. A.; Kannan, V; Ahmad, M. H.; Mon, A. A.; Taufik, S. ; Miskon, A.; Ong, K. K.; Yusof, N. A., An Electrochemical Sensor based on reduced Graphene Oxide Nanocomposites Modified Electrode for the Detection of Toxic Pigment Pyocyanin in <i>Pseudomonas aeruginosa</i> Infection. <i>Materials Science and Engineering C</i> 2020, 120	International Scopus
5	Diauddin, F. N.; Noor, S. A. M.; Rashid, J. I. A.; Knight, V. F.; Yunus, W. M. Z.; Ong, K. K.; Kasim, N. A. M.; Taufik, S. ; Samsuri, A.; Shamsudin, I. J. Latip, W., Preparation and Characterization of Polypyrrole-Iron Oxyhydroxide Nanocomposite as Sensing Material. <i>Advances in Materials Science and Engineering</i> 2020.	International Scopus
6	Norherdawati Kasim, Norhana Abdul Halim, Fadhlul Wafi Badrudin, Ahmad Farid Mohd Azmi, Azuraida Amat, Jahwarhar Izuan Abdul Rashid, Noor Aisyah Ahmad Shah, Noor Azilah Mohd Kasim, Moor Fadhilah Rahmat, Nor Azlian Abdul Manaf, Norli Abdullah, Safura Taufik , Siti Hasnawati Jamal, Siti Zulaikha Ngah Demon, Wan Yusmawati Wan Yusoff (2020) <i>Kompilasi Ujikaji Sains untuk Sekolah Rendah dan Menengah</i> , Penerbit UPM	National
7.	Azizan, M. A. I, Taufik, S. , Norizan, M. N., Rashid, J. I. A.; A review on surface modification in the development of electrochemical biosensor for malathion, <i>Biosensors and Bioelectronics: X</i> , 2023,13, 100291, ISSN 2590-1370.	International Scopus
8.	Shrgawi, N.; Shamsudin, I. J.; Hanibah, H.; Kasim, N.; Noor, S. A. M.; Taufik, S. ; Green electrolyte host based on synthesized benzoyl kappa-carrageenan: Reduced hydrophilicity and improved conductivity, <i>Arabian Journal of Chemistry</i> , 2023, 16(5), 104687, ISSN 1878-5352	International Scopus
9.	Dhanendiren Narayanasamy, Safura Taufik , Ahmad Farid Mohd Azmi, Siti Aminah Mohd Nor, Jahwarhar Izuan Abdul Rashid,; Modern technology advances of <i>Pseudomonas aeruginosa</i> based biosensor approach, <i>Biosensors and Bioelectronics: X</i> , 2024, 17, 100441	International Scopus
10.	Mohd Junaedy Osman, Safura Taufik , Alinda Samsuri, Siti Hasnawati Jamal. Yippie Organo Tiles – An Interactive Game for Pre-University Organic Chemistry, <i>Creations de UiTM e-proceeding</i> , eISBN 978-967-17072-6-5 (2022)	National

12. INTELLECTUAL PROPERTY

No	Authors, year, title, publisher/journal/conference, volume and number of pages (Please bold your name)	Type <ul style="list-style-type: none">• Copyright• Patent
1	Dr. Hidayati Hamdan, Dr. Mohd Junaedy Osman, Dr. Noor Aisyah Ahmad Shah, Prof. Dr. Ong Keat Khim, Prof. Madya Dr. Noor Azilah Mohd Kasim, Prof Madya Dr. Siti Aminah Mohd Noor, Prof. Madya Dr. Norli Abdullah, Dr. Norherdawati Kasim, Dr. Jahwarhar Izuan Abdul Rashid, Dr. Intan Juliana Shamsudin, Dr. Alinda Samsuri, Dr. Siti Hasnawati Jamal, Dr. Safura Taufik , Dr. Nor Laili-Azua Jamari, Dr. Ahmad Farid Mohd Azmi, Ts. Syed Mohd Shafiq Syed Ahmad, Mej. Madinah Jaafar Mad Ariff. Yippie Organo Tiles – An Interactive Game for Pre-University Organic Chemistry. 2022	Copyright
2.	Syed Mohd Shafiq Syed Ahmad, Siti Hasnawati Jamal, Alinda Samsuri, Safura Taufik , Ahmad Farid Mohd Azmi, Hidayati Hamdan, Mohd Junaedy Osman. Biology Exploding Stratified Epithelial Set (BESET). 2024	Copyright

13. CONFERENCES

No.	Event	Title of Paper Presented	Role (Keynote Speaker/ Invited Speaker/ Presenter)	Date	Organizer
1	19 th Australia/ New Zealand Electrochemistry Symposium	Formation of a Stable Sensing Interface based on Aryl Diazonium Salt and Gold Nanoparticles Modified on Gold Electrode	Presenter	November 2013	Monash University, Australia
2	XXIII International Symposium on Bioelectrochemistry and Bioenergetics (BES2015)	Development of an Amperometric Sensor for the Detection of Haemoglobin in Human Blood	Presenter	14 – 18 June 2015	Bioelectrochemical Society
3	6 th International Nanomedicine Conference	Amperometric Sensor for the Detection of Haemoglobin in Human Blood	Presenter	6 – 8 July 2015	Australian Centre for NanoMedicine (ACN)
4	Defence, Security and Sustainability Exhibition (DSS2017)	Development of an Amperometric Sensor for the Detection of Haemoglobin	Presenter	10 – 11 July 2017	UPNM
5	Invention, Innovation & Design Exposition 2017 (IIDEX2017)	A Novel Antifouling Interface for Electrochemical Determination of Haemoglobin Level	Presenter	25 – 29 September 2017	UiTM
6	4 th Advanced Materials Conference (AMC2018)	An Antifouling Interface for Electrochemical Determination of Hemoglobin Level in Blood	Presenter	27 – 28 November 2018	SIRIM Berhad
7	Defence, Security and Sustainability	An Antifouling Electrode as a Sensing Platform for the	Presenter	25 April 2019	UPNM

	(DSS) Exhibition 2019	Development of an Electrochemical Immunosensor for the Determination of Glycosylated Hemoglobin (HbA1c)			
8	7 th International Conference on Solid State Science & Technology (ICSSST2019)	An Antifouling Electrode as a Sensing Platform for the Development of an Electrochemical Immunosensor for the Determination of Glycosylated Hemoglobin (HbA1c)	Presenter	11 – 13 November 2019	The Malaysian Solid-State Science and Technology (MASS) & UPNM
9	8 th International Conference on Solid State Science & Technology (ICSSST2021)	An electrochemical sensing interface based on aptamer conjugated gold nanoparticles/reduced graphene oxide for the determination of malathion	Presenter	1 – 3 November 2021	MASS
10	Defence, Security and Sustainability Exhibition (DSS2022)	Development of an electrochemical impedimetric aptasensor for detection of malathion	Presenter	3 – 4 August 2022	UPNM
11	31 st Regional Conference on Solid State Science & Technology (RCSSST2022)	Aptamer-Conjugated Gold Nanoparticles/ Reduced Graphene Oxide For Electrochemical Detection Of Malathion	Presenter	6 – 8 September 2022	Universiti Malaysia Kelantan (UMK) & The Malaysian Solid State Science and Technology (MASS)
12	9 th International Conference on Solid State Science & Technology (ICSSST2023)	Electrochemical sensor based on reduced graphene oxide and gold nanoparticles for the detection of malathion	Presenter	5 – 7 December 2023	Universiti Malaysia Sabah (UMS) & The Malaysian Solid State Science and Technology (MASS)

14. EXHIBITION

No.	Event	Title of project	Award	Date	Organizer
1	Defence, Security and Sustainability Exhibition (DSS2017)	Development of an Amperometric Sensor for the Detection of Haemoglobin	Gold	10 – 11 July 2017	UPNM
2	Invention, Innovation & Design	A Novel Antifouling Interface for Electrochemical Determination of Haemoglobin Level	Gold	25 – 29 September 2017	UiTM

	Exposition 2017 (IIDEX2017)				
3	Defence, Security and Sustainability (DSS) Exhibition 2019	An Antifouling Electrode as a Sensing Platform for the Development of an Electrochemical Immunosensor for the Determination of Glycosylated Hemoglobin (HbA1c)	Silver	25 April 2019	UPNM
4	Material Technology Challenge (MTC)	An Antifouling Electrode as a Sensing Platform for the Development of an Electrochemical Immunosensor for the Determination of Glycosylated Hemoglobin (HbA1c)	Silver	11 – 13 November 2019	The Malaysian Solid State Science and Technology (MASS) & UPNM
5	Pre-University Malaysia Innovation Competition 2021 (PIITRAM2021)	The NOA: Food Waste-based Absorbent for Oily Foods Dr. Safura Taufik Dr. Noor Aisyah Ahmad Shah	Gold	7 – 9 March 2021	UMT & UniSZA
		Delivery- UAV of Hope	Silver		
		Learnly Bot	Silver		
		Whoopee Organo Troop: Informative Card Game for Pre University Organic Chemistry	Bronze		
6	PAP Innovation Competition (PAPIC2021)	The NOA: Food Waste-based Absorbent for Oily Foods Dr. Safura Taufik Dr. Noor Aisyah Ahmad Shah	3 rd Best Innovation Award	30 March 2021	Pusat Asasi Pertahanan, UPNM
		Learnly Bot	1 st Popular Poster Award		
7	Pre-University Malaysia Innovation Competition 2022 (PIITRAM2022)	From plastics to shelter	Gold	2 – 4 & 8 March 2022	Pusat Asasi Pertahanan, UPNM
		AllDayOxi – 24 Hour Energy-saving Oxygen Producing Room	Gold		
		SMARTEX – Smart Latex Cup for Rubber Plantation	Gold		
		SelfCharge - DIY Device Charger For Emergency.	Silver		
		NeoRail Technology – Innovative and Eco-Friendly MATRIX RAILWAY SYSTEM	Silver		
		Yippee Organo Tiles– An Interactive Game for Pre-University Organic Chemistry	Gold 2 nd Best Poster Award		
8	Creations de UiTM International Mega Innovation Carnival 2022	Yippee Organo Tiles– An Interactive Game for Pre-University Organic Chemistry	Gold	24 March – 8 April 2022	UiTM
9	Defence, Security and	Development of an electrochemical impedimetric	Gold	3 – 4 August 2022	UPNM

	Sustainability Exhibition (DSS2022)	aptasensor for detection of malathion			
10	Persidangan dan Ekspo Ciptaan Institusi Pengajian Tinggi Antarabangsa (Pecipta'22)	Yippee Organo Tiles– An Interactive Game For Pre-University Organic Chemistry	Silver	1 – 3 November 2022	Kementerian Pengajian Tinggi
11	PAP Innovation Competition (PAPIC2022)	AUXO	Gold	9 November 2022	PAP, UPNM
		'QenLa On' – Smart Luggage	Gold		
		SUT - Shoe rack Utility Technology	Silver		
12	Pre-University Malaysia Innovation Competition 2023 (PIITRAM2023)	AUXO	Gold	17 – 18 Februari 2023	UPM
		'QenLa On' – Smart Luggage	Gold		
13	PAP Innovation Competition (PAPIC2023)	Biology Exploding Stratified Epithelial Set (BESET)	Gold	18 Oktober 2023	PAP, UPNM
14	Pre-University Malaysia Innovation Competition 2024 (PIITRAM2024)	Biology Exploding Stratified Epithelial Set (BESET)	Gold	24 February 2024	Pusat Tamhidi, USIM
15	Creations de UiTM International Mega Innovation Carnival 2024	Biology Exploding Stratified Epithelial Set (BESET)	Gold	27 April 2024	UiTM Dengkil

15. MEMBERSHIP

No	Membership	Position	Duration
1	International Society of Electrochemistry	Member	2013 - present
2	The Malaysian Solid State Science and Technology (MASS)	Member	2017 - present
3	Persatuan Sensor Teknologi Malaysia	Member	2022 - present

16. Academic Recognition and Leadership

Academic recognition and leadership such as Academic Award , Academic Assessor/External Examiner/Ph.D. Thesis Examiner, Master's Thesis Examiner/Promotion Assessor (External), Internal Thesis Examiner, Visiting Professor/Fellowship, Invited Speaker, Editorial Board and other academic recognition.

(Please list in chronological order and state: Academic Recognition (e.g. award name, invited speakers etc.), year, level and awarding body/ name of institution)

No	Academic Recognition	Year	Level	Awarding Body / Name of Institution
1	Manuscript reviewer for Zulfaqar International Journal of Defence Science, Engineering & Technology (IJDSET)	2019	University	UPNM Press/ Universiti Pertahanan Nasional Malaysia (UPNM)
2	Manuscript reviewer for Journal of Solid State Phenomena (SSP)	2019	International	Solid State Phenomena (SSP)
3	Editor for Chemistry Module I	2019 & 2020	University	UPNM
4	Coordinator for Postgraduate Programme (Chemistry)	2019-2021	University	UPNM
5	Editor for BuletinRIA@PAP 2 nd and 3 rd Edition	2020 & 2021	Faculty/Centre	Centre for Defence Foundation Studies, PAP, UPNM
6	External Examiner for Chemistry Course, Kolej Asasi MARA	2020 & 2022	National	Bahagian Pendidikan Tinggi MARA
7	Pakar Rujuk Penggubalan Maklumat Kursus Program Ijazah Sarjana Muda Perguruan (PISMP)	2021	National	Institut Pendidikan Guru Kampus Pulau Pinang
8	Anugerah Inovasi Pengajaran	2021	University	UPNM
9	Jury for oral presentation	2021	International	International Conference on X-Ray and Related Technique in Research and Industry 2021 (ICXRI 2021)
10	Colloquium reviewer	2021	University	Center for Graduate Studies, UPNM
11	Jury for poster presentation	2022	National	Pre-University Malaysia Innovation Competition 2022 (PIITRAM2022)
12	Jury for poster presentation	2022	University	Pusat Asasi Pertahanan Innovation Competition (PAPIC 2022)
13	Penilai permohonan persidangan	2022	Faculty/ Centre	Centre for Defence Foundation Studies, PAP, UPNM
14	Jury for video presentation	2022	International	Negeri Sembilan International Exposition 2022 (NSIEx 2022)
15	Pentaksir soalan peperiksaan akhir Kursus Kimia I, Program Asasi Genius Pintar UKM	2022	National	Pusat GENIUS@Pintar, UKM

16	Internal Thesis Examiner (Master's)	2022	University	Center for Graduate Studies, UPNM
17	Treasurer for Science, Technology, Engineering and Mathematics (STEM) PAP	2022 – 2024	Faculty/ Centre	Centre for Defence Foundation Studies, PAP, UPNM
18	Penilai permohonan geran dalaman	2023	University	UPNM
19	Penilai manuskrip (Jurnal Antarabangsa)	2023	International	Jurnal Kimia Sains dan Aplikasi
20	Anugerah Perkhidmatan Cemerlang 2022	2023	University	UPNM
21	Pakar Penyelidik – Alat Potentiostat	2023 - present	University	UPNM
22	Head of Programme – Postgraduate Chemistry	2022 - present	University	UPNM
23	Jury for PIITRAM2024	2024	National	USIM
24	Editor for IConMAS 2024	2024	International	IConMAS

16. REFERENCES

Name: Prof. Dr. Nor Azah Yusof Address: Faculty of Science, Universiti Putra Malaysia Email: azahy@upm.edu.my Office No:	Name: Prof. Madya Dr. Norli Abdullah Address: Center for Defence Foundation Studies, Universiti Pertahanan Nasional Malaysia Email: norli.abdullah@upnm.edu.my Office No:
---	--