



## CURRICULUM VITAE



### I. PERSONAL PARTICULARS

<b>Name</b>	<b>ASSOC. PROF Ts. DR. NORLI BINTI ABDULLAH</b>
<b>Current Position Faculty / Department</b>	<b>SENIOR LECTURER DEPARTMENT OF CHEMISTRY &amp; BIOLOGY, CENTRE FOR DEFENCE FOUNDATION STUDIES</b>

### II. ACADEMIC AND PROFESSIONAL QUALIFICATIONS

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

Year	Degree	Discipline	University
2012	Doctor of Philosophy	Advanced Material (Catalysis)	University of Malaya
2004	Master of Philosophy	Advanced Material (Catalysis)	University of Malaya
2001	Bachelor of Science (Honours)	Petroleum Chemistry	University Putra Malaysia

### III. TITLES OF POSTGRADUATE THESES WRITTEN (At MSc/PhD Level)

No.	TITLES OF POSTGRADUATE THESES
1.	Design of Bio-Supported Nanostructure : Synthesis Parameter (PhD)
2.	UV/Vis/NIR Diffuse Reflectance Studies of Structurally Complex Molydenum Oxide as Model Catalyst (M.Phil)

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

Year	Position	Field of Work	Place of Work
2017-Current	Assoc Prof	Education	Chemistry Department, Pusat Asasi Pertahanan, Universiti Pertahanan Nasional Malaysia
2016-2016	Post-doctoral	Researcher / R&D	Catalysis Research Center, University College London, England.
2014- 2015	Senior Lecturer	Education	Chemistry Department, Pusat Asasi Pertahanan, Universiti Pertahanan Nasional Malaysia
2012- 2014	Lecturer	Education	Chemistry Department, Pusat Asasi Pertahanan, Universiti Pertahanan Nasional Malaysia
2009-2012	R&D Executive / Chemist	Industrial R&D	Hygienilac Sdn. Bhd. Kuala Lumpur.
2009	Senior Chemist	Laboratory Service	NanoC Sdn. Bhd. Sunway Damansara, Selangor.
2009	Teacher	Education	Kumon Centre, Kuala Lumpur.
2009	Researcher	Laboratory Service	Nano Catalysts Centre, University of Malaya.
2004-2005	Researcher	R&D	Nano Catalysts Centre, University of Malaya . (pursuing master's degree)
2002-2003	Research Assistant	R&D	Fritz Haber Insitute The Max Planck Society, Berlin, Germany. (Attachment UM)
1999 -2002	Lab Demonstrator	Education	Department of Chemistry, Universiti Putra Malaysia, Selangor

**1.0 TEACHING AND SUPERVISION****1.1 Postgraduate Courses**

No.	Course Title	Semester	Year
1.	Research Methodology – Writing Research proposal	Siri 1	2020
2.	Research Methodology – Writing Research proposal	Siri 1	2021

**1.2 Pre-Degree Courses**

No.	Course Title	Semester	Year
1.	FCH 0216 Chemistry 1 & FCH 0226 Chemistry 2	1 & 2	2012/2013
2.	FCH 0216 Chemistry 1 & FCH 0226 Chemistry 2	1 & 2	2014/2015
3.	FCH 0216 Chemistry 1 & FCH 0226 Chemistry 2	1 & 2	2018/2019
4.	FCH 0216 Chemistry 1& FCH 0226 Chemistry 2	1 & 2	2019/2020
5.	FCH 0216 Chemistry 1& FCH 0226 Chemistry 2	1 & 2	2020/2021
6.	FCH 0216 Chemistry 1& FCH 0226 Chemistry 2	1 & 2	2021/2022

### 1.3 Postdoc Supervision

No.	Name	Project Title	Date Registration	Status
1.	Mohd Nurazzi bin Norizan	Role of Intermolecular Interaction in Conductive Polymer Wrapped MWCNT as Organophosphate Sensing Material Structure	1 <sup>st</sup> March 2020 – 30 <sup>st</sup> Jun 2022	Completed

### 1.4 PhD Supervision

No.	Name of Student	Project Title	Registration	Role	Status	University
1.	Nurjahirah Janudin	The effect and Selectivity of Polymer Functionalised CNT for Sensor Development of VOC Organic Compounds.	2015	Co-spvr	Completed. Senat on 5 December 2019	UPNM
2.	Zakiah Jamingan	Lipase 3atalyzed synthesis of epoxidized fatty hydrazides from palm oil and their application as a clay modifier for pla/epo/organoclay nnocomposites.	2015	Co-spvr	Completed. Senat on 27 July 2020	UPNM
3.	Ainil Hawa Jasni	Novel Hybrid Phosphotriesterase Immobilized on CNT Nanocomposite Based BioSensor for Determination of Malathion	2019	Co-spvr	Withdraw	UPNM
4.	Mardhiahtul iftiah binti Ariffin	Development on Interdigitated (IDE) Sensors for Hydrolysis Products of Nerve Agents	2019	Co-spvr	In-progress	UPNM
5.	Thachnatharen A/L Nagarajan	Optimisation of Advanced Microwave Synthesised MoS <sub>2</sub> Nanoparticles for Enhanced Tribological Properties in Military Diesel-Based Engine	2022	Co-spvr	In-progress	UPNM

### 1.5 MSc (by Research)

No.	Name of Student	Project Title	Registration	Role	Status	University
1.	Mardhiahtul Iftiah Ariffin (M.Sc)	Catalytic Conversion, Selectivity and Yields of Supported Catalysts for the production Biofuel from Algae	2015	Main Supervisor	Completed Senat Meeting on Mei 2019	UPNM
2.	Nor Shafiqah Mohamad Saidi (M.Sc)	Determination of Thermal Properties of Carbon Based Nanofluids s heat Transfer Media	2015	Main Supervisor	Completed Viva-Voce 27 July 2021	UPNM
3.	Nurul syahirah nasuha binti sa'aya	Design of Hybrid Carbon Nanotube/Polythiophene based Chemiresistive Sensors for VX-type Nerve Agent Stimulants	2018	Co-Supervisor	Completed Viva-Voce 10 October 2021	UPNM
4.	Thachnatharen A/L Nagarajan	Optimisation of Advanced Microwave Synthesised MoS <sub>2</sub> Nanoparticles for Enhanced Tribological Properties in Military Diesel-Based Engine	2017	Co-Supervisor	Completed Viva-Voce 10 October 2021	UPNM

### 1.6 MSc External/Internal Examination

No.	Name of Student	Project Title	External / Internal	Date of Viva	University
1.	Nur Farahin Pairan	Dipolar Thazole Derivates Incorporating Nitro as Electron Withdrawing	Internal	21 Januari 2020	UPNM
2.	Bushra Rashid	Anti-Cancer Potential of PPG surface modified 2-D MXene (Ti3C2) on Human Cancer Cells	Internal	28 September 2021	UPNM

### 1.7 Supervision (Postgraduate Research Project or Final Year Research Project)

No	Name of Student	Project Title	Year	Role	Status	University
1.	Nazirul Akma Bin Daud	Kajian Keberkesanan Sistem Ganjaran Dalam Meningkatkan Motivasi Dan Prestasi Sesebuah Organisasi	2014	Co-supervisor	Completed	UPNM
2.	Syarifah Norfatin Binti Syed Idrus	Enhancing Thermal Properties of Fluids with Carbon Nanoparticles	2014	Co-supervisor	Completed	UTEM
3.	Syazwani Binti Zainal Abidin	Effect of Carbon Nanotube Structure on Enhancing Thermal Properties of Nanofluids	2014	Co-supervisor	Completed	UTEM
4.	Amirah Binti Abdullah	Dispersion of Nanocarbon in Ethylene Glycol: Formulation, Stabilization and Thermodynamic Properties	2014	Co-supervisor	Completed	UTEM
5.	Rosli Bin Hidayat	Performance Evaluation of Nano-Coolant MWCNT particles in Ethylene Glycol	2014	Co-supervisor	Completed	UTEM
6.	Salina Binti Zaini	Stability and Thermal Characterisation of CNT Water Based Nanofluids	2014	Co-supervisor	Completed	UTEM
7.	Eimy Faisal Bin Mohd Yasin	Characterization of Nanocarbon Materials: Morphology & Structure Analysis.	2010	Co-supervisor	Completed	UTEM
8.	Syed Zulkarnain Bin Syed Saidin	Improving Stability of Water Based Nanocarbon Using OH-CNT Modified with Polyvinyl Pyrolidone (PVP) as Dispersing Agent.	2013	Co-supervisor	Completed	UTEM
9.	Hud Bin Ismail	Synthesis of Nanofluid Based Carbon Nanotube	2014	Co-supervisor	Completed	UTEM

## 2.0 RESEARCH, PUBLICATION AND PRESENTATION

### 2.1 Research Projects

No.	Title	List of Researchers	Year	Source/ Amount	Status
1.	Role of Intermolecular Interaction in Conductive Polymer Wrapped MWCNT as Organophosphate Sensing Material Structure	<b>Dr. Norli Abdullah (Principal)</b> Dr. Siti Zulaikha Ngah Demin Assoc. Prof. Dr Norhana Abdul Halim	2019	MyPAIR – ISIS-NEWTON (International) RM477,150	Completed
2.	Size Controlled Palladium Nanoparticles through Optimised Green Colloidal Synthesis.	<b>Dr. Norli Abdullah (Principal)</b>	2019	SELF-FUND UPNM	Completed

No.	Title	List of Researchers	Year	Source/ Amount	Status
		Assoc. Prof. Dr Norhana Abdul Halim			
3.	The Effect of Metal Supported Catalysts on the Conversion, Selectivity and Yields of Biofuel from Microalgae	<b>Dr. Norli Abdullah (Principal)</b> Prof Taufik Yap Yun Hin (UPM) Dr. Fadhlina Che Ros	2015	RACE RM50,000	Completed
4.	Effect of Surface Functional Groups of Carbon in Water-Based Nanofluids for Heat Transfer Media	<b>Dr. Norli Abdullah (Principal)</b> Prof. Dato' Dr. Wan Md Zin bin Wan Yunus P.M. Dr Ong Keat Khim Dr. Noor Azilah Kasim Laili Nor Azua Jamari	2013	FRGS RM105,000	Completed
5.	Functionalized Carbon Nanotubes On Adsorption Of Heavy Metals Species From Aqueous Solution.	<b>Dr. Norli Abdullah (Principal)</b> Dr. Fadhlina Che Ros Prof. Dato' Dr. Wan Md Zin bin Wan Yunus Dr. Noor Azilah Kasim	2012	RAGS RM29,850	Completed
6.	Optical And Surface Plasmon Resonance Of Gold Decorated Graphene Oxide For Nerve Agent Fiber Optics Sensor	Dr. Siti Zulaikha Ngah Demin <b>Dr. Norli Abdullah (member)</b> Dr. Noor Aisyah Ahmad Shah Assoc. Prof. Dr Norhana Abdul Halim	2020	FRGS RM118,000	In-Progress
7.	Effect of Chloric Acid doping into polythiophene nanowire in sturable absorption phenomenon	Dr. Siti Zulaikha Ngah Demin <b>Dr. Norli Abdullah (member)</b> Dr. Noor Aisyah Ahmad Shah Assoc. Prof. Dr Norhana Abdul Halim	2019	GPJP-UPNM RM20,000	Completed
8.	Synthesis and Characterization of Molybdenum Carbide based Catalyst for Low Energy Thermochemical Water Splitting for Hydrogen Production	Dr. Alinda Samsuri <b>Dr. Norli Abdullah (Member)</b> Dr. Siti Aminah Mohd Noor	2019	FRGS-RACER RM 40,000	In-Progress
9.	Design of Hybrid Carbon Nanotubes/Polythiophene Based Chemiresistive Sensor for VX-Type Nerve Agent Simulant	Assoc. Prof. Dr Norhana Abdul Halim <b>Dr. Norli Abdullah (Member)</b> Prof. Dato' Dr. Wan Md Zin bin Wan Yunus Dr. Siti Zulaikha Ngah Demon	2017-2021	UPNM/CHEMDEF RM 600,000	Completed
10.	Synthesis of intermetallic-surface-modified carbon nanotubes for optical limiting applications	Dr. Noor Aisyah Ahmad Shah <b>Dr. Norli Abdullah (Member)</b> Prof. Dato' Dr. Wan Md Zin bin Wan Yunus Dr. Siti Zulaikha Ngah Demon	2015	RAGS RM45,000	Completed
11.	Characterisation of New Microwave Dielectrics of A <sub>1-x</sub> Y <sub>x</sub> WO <sub>4</sub> (A=Zn)(Y=Mg, Ca) ceramics	Dr. Fadhlina Che Ros <b>Dr. Norli Abdullah (Member)</b> P.M. Dr. Jumiah Hassan Dr. Rozana Izawan hmad	2015	RACE RM50,000	Completed
12.	Characterization of Newly Developed Ag/ Epoxy Polyurethane Bio-Nanocomposites	P.M Dr. Ong Keat Khim <b>Dr. Norli Abdullah (Member)</b> Dr. Siti Aminah Mohd Noor Dr. Fadhlina Che Ros Syed Shafiq Syed Ahmad	2015	RACE RM50,000	Completed
13.	Mechanism of carbon dioxide adsorption using waste material	Syed Shafiq Syed Ahmad <b>Dr. Norli Abdullah (Member)</b>	2014	Short Term Grant UPNM RM15,000	Completed

No.	Title	List of Researchers	Year	Source/ Amount	Status
		Prof. Dato' Dr. Wan Md Zin bin Wan Yunus P.M.Dr Ong Keat Khim			
14.	Chemical Inventory Database, Storage and Laboratory Security Improvements	Prof. Dato' Dr. Wan Md Zin bin Wan Yunus (Principal) <b>Dr. Norli Abdullah (Member)</b> P.M. Dr Ong Keat Khim Dr. Noor Azilah Kasim Laili Nor Azua Jamari	2014	US Security Grant RM90,000 (International)	Completed

## 2.2 Publications

### 2.2.1 Academic Journal

No.	Authors, Year, Title, Publisher/Journal, Volume And Number Of Pages	Type Of Journal
1.	Mohd Nurazzi Norizan, <b>Norli Abdullah</b> , Siti Zulaikha Ngah Demon, Norhana Abdul Halim, Imran Syakir Mohamad 2022 Heterojunctions of rGO/Metal Oxide Nanocomposites as Promising Gas-Sensing Materials—A Review Nanomaterials 12 (13), 2278	WOS / Q1 IF 4.921
2.	Mohd Nurazzi Norizan, <b>Norli Abdullah</b> , Siti Zulaikha Ngah Demon, Norhana Abdul Halim, Nurul Syahirah Nasuha Sa'aya, Imran Syakir Mohamad Polimery 67 (5), 205-211	WOS / Q3 IF 1.06
3.	Mohd Nurazzi Norizan, Mohd Nor Faiz Norrrahim, F.A. Sabaruddin, Ahmad Ilyas Rushdan, Lee Seng Hua, Farah Nadia Mohamad Padzil, Muhammad Aizat Abdul Ghani <sup>5</sup> , S.S. Shazleen <sup>6</sup> , Aisyah Humaira Alias <sup>7</sup> , N.A. Mohidem <sup>3</sup> , M.R.M. Asyraf, <b>Norli Abdullah</b> , S.M. Sapuan, Khalina Abdan and N.M. Nor 2022, Mechanical Performance Evaluation of Bamboo Fibre Reinforced Polymer Composites and its Applications: A Review Functional Composites and Structures	WOS / Q1
4.	Mohd Nurazzi Norizan, Aisyah Humaira Alias, FA Sabaruddin, MRM Asyraf, SS Shazleen, NA Mohidem, SH Kamarudin, Mohd Nor Faiz Norrrahim, Ahmad Ilyas Rushdan, MR Ishak, <b>Norli Abdullah</b> , NM Nor, 2021 Effect of silane treatments on mechanical performance of kenaf fibre reinforced polymer composites: a review, Functional Composites and Structures, 3 045003	WOS / Q1 IF 4.921
5.	NM Nurazzi, FA Sabaruddin, MM Harussani, SH Kamarudin, M Rayung, MRM Asyraf, HA Aisyah, MNF Norrrahim, RA Ilyas, <b>N Abdullah*</b> , ES Zainudin, SM Sapuan, A Khalina, 2021 Mechanical Performance and Applications of CNTs Reinforced Polymer Composites—A Review Nanomaterials 2021, 11, 2186.	WOS / Q1 IF 4.921
6.	NM Nurazzi, MRM Asyraf, S Fatimah Athiyah, SS Shazleen, S Ayu Rafiqah, MM Harussani, SH Kamarudin, MR Razman, M Rahmah, ES Zainudin, RA Ilyas, HA Aisyah, MNF Norrrahim, <b>N Abdullah*</b> , SM Sapuan, A Khalina 2021 A review on mechanical performance of hybrid natural fiber polymer composites for structural applications Polymers 13 (13), 2170	WOS / Q1 IF 3.426
7.	The Influence of Reaction Time on Non-Covalent Functionalisation of P3HT/MWCNT Nanocomposites NM Nurazzi, <b>N Abdullah*</b> , SZN Demon, NA Halim, IS Mohamad 2021 Polymers 13 (12), 1916	WOS / Q1 IF 3.426
8.	Fabrication, functionalization, and application of carbon nanotube-reinforced polymer composite: an overview 2021 N Mohd Nurazzi, MR Muhammad Asyraf, A Khalina, <b>N Abdullah*</b> Polymers 13 (7), 1047	WOS / Q1 IF 3.426
9.	A review on natural fiber reinforced polymer composite for bullet proof and ballistic applications NM Nurazzi, MRM Asyraf, A Khalina, <b>N Abdullah*</b> , HA Aisyah, S Rafiqah, 2021 Polymers 13 (4), 646	WOS / Q1 IF 3.426
10.	Mohd Nurazzi Norizan, Muhammad Harussani Moklis, Aisyah Humaira Alias, Ahmad Ilyas Rushdan, Mohd Nor Faiz Norrrahim, Khalina Abdan, <b>Norli Abdullah*</b> 2021	WOS/Q1

	Treatments Of Natural Fibre As Reinforcement In Polymer Composites-Short Review, Functional Composites And Structures Functional Composites and Structures 3 (2), 024002	
11.	Norizan M Nurazzi, <b>Norli Abdullah*</b> , Siti ZN Demon, Norhana A Halim, Ahmad FM Azmi, Victor F Knight, Imran S Mohamad 2021 The frontiers of functionalized graphene-based nanocomposites as chemical sensors Nanotechnology Reviews 10 (1), 330-369	WOS / Q1 IF 7.34 Top 10%
12.	MN Norizan, NDS Zulaikha, AB Norhana, MI Syakir, <b>A Norli</b> 2021* Carbon Nanotubes-Based Sensor For Ammonia Gas Detection–An Overview Polimery 66 (3), 175-186	WOS / Q3 IF 1.06
13.	H Bahruji, M Almalki, <b>N Abdullah</b> Highly Selective Au/Zno Via Colloidal Deposition For CO2 Hydrogenation To Methanol: Evidence Of Au Zn Role Bulletin Of Chemical Reaction Engineering & Catalysis 16 (1), 44-51	WOS / Q3
14.	NM Nurazzi, MM Harussani, NDS Zulaikha, AH Norhana, MI Syakir, <b>N. Abdullah*</b> 2021 Composites Based On Conductive Polymer With Carbon Nanotubes In DMMP Gas Sensors–An Overview Polimery 66 (2), 85-97	WOS / Q3
15.	N Janudin, <b>N Abdullah</b> , F Md Yasin, MH Yaacob, MZ Ahmad, 2021 Multi-Walled Carbon Nanotubes Functionalized With Carboxyl And Amide For Acetone Detection At Room Temperature Solid State Phenomena 317, 195-201	SCOPUS / Q3
16.	NSN Sa'aya, SZN Demon, <b>N Abdullah</b> , N Abdul Halim 2021 Morphology Studies Of SWCNT Dispersed In Conducting Polymer As Potential Sensing Materials Solid State Phenomena 317, 189-194	SCOPUS / Q3
17.	NA Halim, SZN Demon, <b>N Abdullah</b> , N Ahmad, ZHZ Abidin 2021 Localized Deep And Shallow Traps Of A-Peaks From Thermally Stimulated Current (TSC) Measurement On Thermoplastic Polymers Solid State Phenomena 317, 369-376	SCOPUS / Q3
18.	NA Ahmad Shah, SZN Demon, FN Diauddin, N Kasim, <b>N Abdullah</b> , 2021 The Study Of Platinum Coated Carbon Nanotubes As Third-Order Nonlinear Optical Materials Solid State Phenomena 317, 166-172	SCOPUS / Q3
19.	CH Lee, A Khalina, NM Nurazzi, <b>A Norli</b> , MM Harussani, S Rafiqah, 2021 The Challenges And Future Perspective Of Woven Kenaf Reinforcement In Thermoset Polymer Composites In Malaysia: A Review Polymers 13 (9), 1390	WOS / Q1 IF 3.426
20.	N Mohd Nurazzi, MR Muhammad Asyraf, A Khalina, <b>N Abdullah*</b> 2021 Fabrication, Functionalization, And Application Of Carbon Nanotube-Reinforced Polymer Composite: An Overview Polymers 13 (7), 1047	WOS / Q1 IF 3.426
21.	NM Nurazzi, MRM Asyraf, A Khalina, <b>N Abdullah*</b> , HA Aisyah, S Rafiqah, 2021 A Review On Natural Fiber Reinforced Polymer Composite For Bullet Proof And Ballistic Applications Polymers 13 (4), 646	WOS / Q1 IF – 3.426
22.	MSM Shukri, MNS Saimin, MH Samat, <b>N Abdullah</b> , SZN Demon (2020) First-Principles Study Of CH4 And NH3 Adsorption On Graphene Oxide Epoxy And Graphene Oxide Hydroxyl. International Journal Of Nanoelectronics & Materials 13	WOS / Q3
23.	MN Norizan, MH Moklis, SZN Demon, NA Halim, A Samsuri, IS Mohamad, <b>N. Abdullah*</b> Carbon Nanotubes: Functionalisation And Their Application In Chemical Sensors RSC Advances 10 (71), 43704-43732	WOS / Q1 IF 3.070
24.	<b>Norli Abdullah*</b> , Hasliza Bahruji 2020 Synthesis, Characterization And Catalytic Activity Of Pd Nanoparticles Supported On Anatase (Pd/Tio2) For Cinnamaldehyde Hydrogenation Reaction Malaysian Journal Of Analytical Sciences 24 (5), 727-735	Q4 SCOPUS Submitted
25.	Ainnur Izzati Kamisan, <b>Norli Abdullah</b> , Siti Zulaikha Ngah Demon, And Norhana Abdul Halim, 2019 <i>Electrochemical Performance Of Graphene Based Material In Gas Sensor Application: A Review</i> Sensor & Materials, Vol. 32, No. 2 (2020) 759–777	WOS / Q3

26.	Mardhiahtul Iftiah Ariffin, <b>Norli Abdullah*</b> , Hasliza Bahruji, Noor Azilah Mohd Kasim, Siti Hasnawati Jamal, Noor Aisyah Ahmad Shah, Norhana Abdul Halim, Taufiq Yap Yun Hin, 2019 <i>Optimization Of Biodiesel Production From Chlorella Vulgaris Using Cuo, Nio And Mgo On Zeolite 4A Catalysts</i> Journal Of Physics: Conference Series (JPCS) 1349 (2019) 012065	Q3 SCOPUS
27.	Nurul Syahirah Nasuha Sa'aya, Siti Zulaikha Ngah Demon, <b>Norli Abdullah</b> , Victor Feizal Knight Ernest Abd Shatar, Norhana Abdul Halim, 2019 <i>Optical And Morphology Studies Of Conductive Polymer Blend Of P3HT/MWCNT Nanocomposites</i> Sensor & Materials, Vol. 31, No. 9 (2019) 2997-3006	WOS / Q3
28.	<b>Norli Abdullah</b> , Hasliza Bahruji, Michael Bowker, Scott M. Rogers, Peter P. Wells, C. Richard A. Catlow, 2019 <i>Efficient Electronic Transfer On Palladium / Tio<sub>2</sub> For Hydrogen Production From Photocatalytic Reforming Of Methanol</i> Physical Chemistry Chemical Physic (PCCP) 2019, 21, 16154	WOS / Q1 IF 3.567
29.	George F. Tierney, <b>Norli. Abdullah</b> , Scott M. Rogers, Shusaku. Hayama, Martha. Briceno De Gutierrez, Paul. Collier, C. Richard. A. Catlow, Nikoloas. Dimitratos, Peter P. Wells. 2019 <i>Extracting Structural Information Of Au Colloids At Ultra-Dilute Concentrations: Identification Of Growth During Nanoparticle Immobilization</i> Nanoscale Advances., 2019,1, 2546-2552	WOS / Q1
30.	Zakiah Jamingan, WMZW Yunus, <b>N Abdullah</b> , OK Khim, TNMT Ismail, 2019 Clay Modification By Epoxidized Fatty Hydrazides Synthesized From Palm Oil AIP Conference Proceedings 2068 (1), 020067	Scopus
31.	N Janudin, <b>N Abdullah</b> , WMZW Yunus, FM Yasin, MH Yaacob, N Kasim, 2019 Carbon Nanofibers Functionalized With Amide Group For Ammonia Gas Detection AIP Conference Proceedings 2068 (1), 020061	Scopus
32.	Ali Rinaldi, <b>Norli Abdullah</b> , Mua'taz Ali, Annette Furche, Sharifah Bee Abd. Hamid, Dang Sheng Su And Robert Schlogl , 2009, <i>Controlling The Yield And Structure Of Carbon Nanofibers Grown On A Nickel/Activated Carbon Catalyst,</i> Carbon, Volume 47, (13) Pg 3023-3022.	WOS / Q1 IF 7.082
33.	Sharifah Bee Abd. Hamid, Nordiana Othman, <b>Norli Abdullah</b> , Olaf Timpe, Stephen Knoble, Dirk Niemeyer, Jacob Wagner And Dang Sheng Su, 2003, <i>Structurally Complex Molybdenum Oxide Catalysts For The Selective Oxidation Of Propene,</i> Topic In Catalysis, Volume 4 (1-4) Pg 87-95.	WOS / Q1 IF 2.439
34.	Zakiah Jamingan, Wan Md. Wan Yunus, Ong Keat Khim And <b>Norli Abdullah</b> Enzymatic Synthesis Of Epoxidized Fatty Hydrazides From Epoxidized Palm Oil Using Native Muchor Meihei Lipase In N-Hexane Solvent Asian Journal Of Chemistry; Vol. 30, No. 8 (2018), 1755-1758	SCOPUS / Q4
35.	Nurjahirah Janudin, L.C. Abdullah, <b>Norli Abdullah</b> , Norshafiqah Mohamad Saidi And Noor Azilah Mohd Kasim. 2018 Characterization Of Amide And Ester Functionalized Multiwalled Carbon Nanotubes. Asian Journal Of Chemistry Vol 30 (7) 1613-1616 Q4	SCOPUS / Q4
36.	S Zainal Abidin, I.S Mohamad, A.Y Bani Hashim, <b>N Abdullah</b> , M.I.M Hafiz, N.A.B Masripan, A Abdullah. 2018 Investigation Of Thermal Characteristics Of CNF-Based Nanofluids For Electronic Cooling Applications Journal Of Mechanical Engineering Vol 15(1) 59-68	SCOPUS / Q4
37.	SZ Abidin, IS Mohamad, AYB Hashim, <b>N Abdullah</b> , TB Tuan, A Abdullah. 2018 Thermophysical Properties Of Nanocarbon Particles In Ethylene Glycol And Deionized Water Journal Of Engineering Technology Vol 9(1) 2180	Peer-Review
38.	SZ Abidin, IS Mohamad, AYB Hashim, <b>N Abdullah</b> , A Abdullah. 2018 Textural And Adsorption Analysis Of Nanocarbon Particles. International Journal Of Nanoelectronics & Materials 11 (3)	WOS / Q3
39.	Nurjahirah Janudin, <b>Norli Abdullah</b> , Faizah Md Yasin, Mohd Hanif Yaacob, Muhammad Zamharir Ahmad, Luqman Chuah Abdullah, Raja Nor Izawati Raja Othman, Noor Aisyah Ahmad Syah, Shafreeza Sobri, Noor Azilah Mohd Kasim, 2018 <i>Low Cost And Room Temperature Methane Detection Using Multi Walled-Carbon Nanotubes Functionalized With Octadecanol</i>	Peer-Review



	Zulfaqar Int. J. Def. Sci. Eng. Tech. Vol.1 Issue 2 (2018) 65-75	
40.	Nurjahirah Janudin, <b>Norli Abdullah</b> , Faizah Md Yasin, Mohd Hanif Yaacob, Muhammad Zamharir Ahmad, Luqman Chuah Abdullah, Raja Nor Izawati Raja Othman, Noor Aisyah Ahmad Syah, Shafreeza Sobri, Noor Azilah Mohd Kasim, 2018 <i>Carbon Nanotubes-Based Gas Sensor In Detection Of Methane Gas At Room Temperature</i> Zulfaqar Int. J. Def. Sci. Eng. Tech. Vol.1 Issue 2 (2018) 76-84	Peer-Review
41.	Zakiah Jamingan, Wan Md Zin Wan Yunus, <b>Norli Abdullah</b> , Ong Keat Khim, 2018 <i>Synthesis Of Epoxidized Fatty Hydrazides From Palm Olein: A Preliminary Study</i> Zulfaqar Int. J. Def. Sci. Eng. Tech. Vol. 1 Issue 2 (2018) 99-106	Peer-Review
42.	Mardhiahtul Iftiah Ariffin, <b>Norli Abdullah*</b> , Noor Azilah Kasim, Siti Hasnawati Jamal, Noor Aisyah Ahmad Shah, 2018 <i>Solid Metal Oxide Catalysts: Synthesis And Characterisation</i> Zulfaqar Int. J. Def. Sci. Eng. Tech. Vol.1 Issue 1 (2018) 28-37	Peer-Review
43.	Nurjahirah Janudin, L.C. Abdullah, <b>Norli Abdullah</b> , Norshafiqah Mohamad Saidi And Noor Azilah Mohd Kasim. 2017 Comparison And Characterization Of Acid Functionalization Of Multi Walled Carbon Nanotubes Using Various Methods Solid State Phenomena, ISSN: 1662-9779, Vol. 264, Pp 83-86	SCOPUS / Q3
44.	Norshafiqah Mohamad Saidi, Noor Azilah Mohd Kasim, Mohd Junaedy Osman, Nurjahirah Janudin, Imran Syakir Mohamad And <b>Norli Abdullah*</b> , 2017 <i>The Influences Of Chemical And Mechanical Treatment On The Morphology Of Carbon Nanofibers.</i> Solid State Phenomena, ISSN: 1662-9779, Vol. 264, Pp 107-111 2017	SCOPUS / Q3
45.	Amirah Abdullah, Imran Syakir Mohamad, Bani Hashim, <b>Norli Abdullah</b> , Syazwani Zainal Abidin, 2016 <i>Thermal Conductivity And Viscosity Of 9Eionized Water And Ethylene Glycol-Based Nanofluids.</i> Journal Of Mechanical Engineering And Sciences (JMES) ISSN (Print): 2289-4659; E-ISSN: 2231-8380, Volume 10, Issue 3, Pp. 2249-2261,	SCOPUS / Q2
46.	Syazwani Zainal Abidin, Imran Syakir Mohamad, Bani Hashim, <b>Norli Abdullah</b> , Amirah Abdullah 2016 <i>Investigation Of Thermal Characteristics Of CNF-Based Nanofluids For Electronic Cooling Applications</i> Journal Of Mechanical Engineering And Sciences (JMES) ISSN (Print): 2289-4659; E-ISSN: 2231-8380, Volume 10, Issue 3, Pp. 2336-2349,	SCOPUS / Q2
47.	Syarifah Norfatin Syed Idrus, Nor Salihah Zaini, Imran Syakir Mohamad, <b>Norli Abdullah</b> , Mohd Haizal Mohd Husin, 2015 <i>Comparison Of Thermal Conductivity For Hht-24-Cnf-Based Nanofluid Using Deionized Water And Ethylene Glycol</i> Journal Teknologi 77:21 (2015) 85–89, Eissn 2180–3722	SCOPUS / Q3
48.	<b>Norli Abdullah*</b> , Wan Md Zin Wan Yunus, Imran Syakir Mohamad. 2015 <i>Thermal Conductivity Comparisons Of Original And Oxidized Multiwalled Carbon Nanotubes-Waterbased Fluids,</i> Journal Teknologi 76:9 (2015) 43–47 Eissn 2180–3722	SCOPUS / Q3
49.	<b>Norli Abdullah*</b> , Ali Rinaldi And Sharifah Bee Abd. Hamid, 2014, <i>Synthesis And Adsorption Performance Of Carbon Materials For Removal Of Iron (III) From Aqueous Solution.</i> Applied Mechanics And Materials Vol. 699 Pp 988-994,	SCOPUS / Q4
50.	<b>Norli Abdullah*</b> , Imran Syakir Mohamad & Sharifah Bee Abd. Hamid, 2014. <i>Removal Of Iron, Manganese And Boron From Industrial Effluent Water Using Carbon Nanofibers.</i> Advanced Materials Research. ISSN: 1662-8985, Vol. 1109. Pp 158-162. 2015 (SCOPUS)	SCOPUS
51.	<b>Norli Abdullah*</b> Ali Rinaldi, Sharifah Bee Abd. Hamid, 2014 <i>Effect Of Solvent On The Morphology Of Catalytic Growth Carbon Nanofibers: Water Versus Acetone.</i> ZULFAQAR International Journal Of Defence Science, Engineering & Technology, Vol 1(1).	Peer Review
52.	<b>Norli Abdullah*</b> , Ali Rinaldi, Imran Shakir Muhammad, Sharifah Bee Abd. Hamid, Dang Sheng Su And Robert Schlogl, 2009. <i>Catalytic Growth Of Macroscopic Carbon Nanofibers Bodies With Activated Carbon.</i> American Institute Of Physic Proceeding. Vol 1136 Pg 238, 2009.	SCOPUS
53.	<b>Norli Abdullah*</b> , Ali Rinaldi, Sharifah Bee Abd. Hamid, 2014 <i>Controlled Growth Of Bio-Supported Filamentous Carbon Nanofibers: Role Of Hydrogen Gas</i> ZULFAQAR International Journal Of Defence Science, Engineering & Technology, Vol 1(2).	Peer-Review

### 2.2.2 Book/Chapter in Book:

No.	Authors, year, title, publisher, volume and number of pages (Please bold your name)	Level
1.	NM Nurazzi, <b>N Abdullah</b> , MNF Norrahim, SH Kamarudin, S Ahmad, SS Shazleen, M Rayung, MRM Asyraf, RA Ilyas, M Kuzmin, 2021 Thermogravimetric Analysis TGA and Differential Scanning Calorimetry DSC of PLACellulose Composites Polylactic Acid-Based Nanocellulose and Cellulose Composites CRC Press, Technology & Engineering	International
2.	N. Mohd Nurazzia , <b>A. Norli</b> , Mohd Nor Faiz Norrahim , S. Ayu Rafiqah , A. Khalina , S.M. Sapuan, and R.A. Ilyas, 2021 Thermal properties of sugar palm yarn reinforced unsaturated polyester composites as an alternative for automotive applications Biocomposite and synthetic composites for automotive application, Woodhead Publishing Series in Composites Science and Engineering 2021, Pages 19-49	International
3.	Sharifah Bee Abd. Hamid, <b>Norli Abdullah</b> 2009. Design of Bio-Supported Nanostructure for Water Treatment, Malaysia Energy Guide, Yellow Pages TM Info-Media Sdn Bhd- ISSN 1985-367X (pg 61-66)	International
4.	Norli Abdullah and Sharifah Bee Abd. Hamid, 2010. Adsorption Performance of Carbon Materials in Wastewater Industry: A Brief Study on Heavy Metal Removal, Buletin FKM UteM. ISSN 2180-2912. 1st ed. Pp 25-26	National
5.	Kompilasi Ujikaji Sains (untuk sekolah Rendah & Menengah) Penulis Bersama Penerbit UPNM - 2021	National

### 2.2.3 Proceeding Articles :

Bil	Authors, year, title, publisher/journal/conference, volume and number of pages	Level
1.	SZ Abidin, IS Mohamad, AYB Hashim, <b>N Abdullah</b> , A Abdullah <i>Thermal conductivity of carbon nanofiber in EG-DI based nanofluids</i> Proceedings of Mechanical Engineering Research Day 2017 2017, 430-431	National
2.	A Abdullah, IS Mohamad, AYB Hashim, <b>N Abdullah</b> , SZ Abidin, <i>Development of ethylene glycol and water mixture MWCNT-OH based nanofluid with high thermal conductivity</i> Proceedings of Mechanical Engineering Research Day 2017 2017, 426-427	National
3.	A Abdullah, IS Mohamad, AYB Hashim, <b>N Abdullah</b> , SZ Abidin <i>Optimization parameter for high thermal conductivity and heat transfer using ethylene glycol and water mixture MWCNT-OH based nanofluids</i> Proceedings of Mechanical Engineering Research Day 2017 2017, 428-429	National
4.	SZ Abidin, IS Mohamad, AYB Hashim, <b>N Abdullah</b> Characterization of nanocarbon particles using nitrogen adsorption analysis: Isotherm, pore type, pore size and BET surface area Proceedings of Mechanical Engineering Research Day 2016 2016, 127-128	National
5.	A Abdullah, IS Mohamad, AYB Hashim, <b>N Abdullah</b> , SZ Abidin <i>Effect of duration time of homogenization and sonication on stability of MWCNT-OH in ethylene glycol and deionized water</i> Proceedings of Mechanical Engineering Research Day 2016, 171-172	National
6.	SZ Abidin, IS Mohamad, <b>N Abdullah</b> , AYB Hashim <i>The effect of nanocarbon characteristics on enhancing thermal properties of nanofluids</i> Proceedings of Mechanical Engineering Research Day 2015: MERD'15 2015, 9-1	National
7.	F Zahari, MN Salim, I Mohamad, <b>N Abdullah</b> , S Thiru <i>Thermal properties and heat transfer study of dispersed fluid with functionalized multi-walled carbon nanotube (mwcnt) particles</i> Proceedings of mechanical engineering research day, 11-12	National
8.	<b>Norli Abdullah</b> , Imran Shakir Mohamad, Ali Rinaldi, Salamiah Zakaria, Robert Schloegl, 2009. <i>Synthesis of Carbon – Based Supporting Material followed by Carbon Nanostructures Growth for Catalysis.</i> International Chemistry Conference 5 (SICC5), Singapore, 2009	International

9.	Ali Rinaldi, <b>Norli Abdullah</b> , Muataz Ali, Sharifah Bee Abd. Hamid, Robert Schloegl 2008. <i>Improving the Quality and Quantity of CNT growth on AC.</i> Institute of Catalysis, May 11-15 2008	International
10.	Ali Rinaldi, <b>Norli Abdullah</b> , Muataz Ali, 2008. CNF/C: Influence of the Nature of the Carbon Support on the Structure and yield of the synthesized Nanofibers. 14 <sup>th</sup> International Congress on Catalysis, July 9-12, 2008, Kyoto, Japan.	International
11.	Olaf Timpe, Nordiana Othman, <b>Norli Abdullah</b> , Stephen Knoble, Dirk Niemeyer, Jacob Wagner, Dang Sheng Su, Sharifah Bee Abd. Hamid, Robert Schloegl, 2004. <i>Catalytic Studies of Nanostructured Mo Oxides by Temperature Programme Reaction Spectroscopy,</i> Jahrestagung Deutscher Katalytiker March 17-19 2004, Weimar, Germany.	International
12.	Jorg Melsheimer, <b>Norli Abdullah</b> , Stephen Knobl, Dirk Niemeyer, Sharifah Bee Abd. Hamid, RobertSchlogl, 2004. <i>A Contribution of In Situ UV/Vis/NIR Spectroscopy to Characterizing Molybdenum Oxide Catalysts.</i> Jahrestagung Deutscher Katalytiker March 17-19 2004, Weimar, Germany.	International
13.	S. Knobl, O. Timpe, <b>Norli Abdullah</b> , ND. Othman, R. E. Jentoft, D. Niemeyer, S. B. A. Hamid, R. Schlogl, 2004. <i>Controlled Precipitation of Nanostructured Molybdenum Oxides for Selective Oxidation Reactions.</i> International Conference in Catalysis, 21- 23 March 2004, Paris, France.	International

### 2.3 Presentation:

No.	Event	Title of Paper Presented	Role	Date	Organizer
1.	1st Malaysia International Conference On Nanotechnology & Catalysis	Mwcnt Dispersed Conducting Polymer (Mwcnt/P3ht) Nanocomposites: Structural And Morphological Studies	Presenter	1-3 september 2021	NANOCAT, UM
2.	3rd Virtual Symposium on Multidisciplinary Science 2021 (V-SMS2021)	The Effect of Functionalized MWCNTs on the Stability and Thermal Conductivity of Water-based Nanofluids	Presenter	7 <sup>th</sup> July 2021	ASASI UPM
3.	International Conference on Solid State Science & Technology 2019	Synthesis, Characterization and Catalytic Activity of Pd Nanoparticles Supported on Anatase (Pd/TiO <sub>2</sub> ) for Cinnamaldehyde Hydrogenation Reaction	Invited Presenter	12-13 <sup>th</sup> November 2019	MASS & UPNM
4.	International Conference of Nanomaterials: Science, Engineering & Technology 2019	Optimization of Biodiesel Production from Chlorella vulgaris using CuO, NiO and MgO on Zeolite 4A Catalysts	Presenter	5-6 August 2019	UiTM, Pulau Pinang
5.	Research Environment Among Department (READ) ASASI	Nanocarbon: An Extraordinary Material	Presenter	30 November 2018	ASASI, UPNM
6.	International Conference of Analytical Science 2018 (SKAM31)	Size-controlled synthesis of palladium nanoparticles supported on titania for hydrogenation reaction	Presenter	17-19 August 2018	UIAM & Malaysia Society of Analytical Chemistry
7.	UK Catalysis Hub Winter Conference	Tailored Pd/TiO <sub>2</sub> catalysts for Hydrogen Production From Photocatalytic Reforming of Methanol.	Presenter	14 <sup>th</sup> - 15 <sup>th</sup> Dec 2017	UK Catalysis Hub, University College London
8.	European Symposium on Catalysis (EUROPACAT)	Sol-Immobilised Pd NPs Supported on TiO <sub>2</sub> and Their Catalytic Properties on Selective Hydrogenation Reactions	Presenter	27 <sup>th</sup> – 31 August 2017	European Research Institute of Catalysis (ERIC aisbl) Italian Chemical Society (SCI)

9.	UK Catalysis Hub Summer Conference, , Harwell Campus, UK.	Cinnamaldehyde hydrogenation of Pd/TiO <sub>2</sub> : Effect of Pd Particle size & Nature of the Supports	Presenter	11th- 12th July 2017	UK Catalysis Hub, University College London
10.	International Conference on Advances in Mechanical Engineering (ICAME2015), , Bali, Indonesia.	Conductivity Comparisons of Multiwalled Carbon Nanotubes- Waterbased Fluids	Presenter	26th – 27th August 2015	UITM
11.	.International conference on Mathematics, Engineering & Industrial Applications (ICOMEIA) Gurney Hotel, Penang	Isotherm Study of Copper Ion From Aqueous Solution By Filamentous Nanocarbons	Presenter	28th -30th May 2014,	Uitm, Shah Alam.
12.	NANO-SCITECH 2014 & IC-NET 2014, , UiTM, Shah Alam, Selangor.	Manganese and Boron from Industrial Effluent Water using Carbon Nanofibers.	Presenter	28 Feb – 3 March 2014	Uitm, Shah Alam.
13.	International Conference & Exhibition (ICE-SEAM)	Synthesis and Adsorption performance of Carbon material for removal of Iron	Presenter	30 – 31 October 2013	UTEM
14.	The 26th Regional Symposium of Malaysia Analytical Sciences (SKAM-26), Hilton, Sarawak.	Synthesis and characterization of bio-supported nanofibers	Presenter	4-6 Dec 2013,	Uitm, Kulim, Kedah
15.	NANO-SCITECH 2008 & IC-NET 2008, , UiTM, Shah Alam, Selangor	Catalytic Growth of Macroscopic Carbon Nanofibers Bodies with Activated Carbon	Presenter	Nov 18-21 2008	Uitm, Shah Alam.
16.	Symposium Kimia Analisis Malaysia (SKAM-17) in Kuantan, Malaysia,	Effect of Cation and Various Parameters on the Synthesis of Molybdenum Oxide based Catalyst.	Presenter	24 August – 26 August 2004.	UKM

### 3.0 ACADEMIC RECOGNITION AND LEADERSHIP, CONSULTANCY, SERVICE TO THE UNIVERSITY AND SERVICE TO THE COMMUNITY

#### 3.1 Academic Recognition and Leadership

No	Academic Recognition	Year	Level	Awarding Body / Name of Institution
1.	Best Oral Presenter	2021	International	1st Malaysia International Conference On Nanotechnology & Catalysis
2.	Silver Award PIITRAM – Malaysia – 2021 – Kebangsaan (Mentor) Kategori A- Student	2021	National	Asasi Council Malaysia / UMT/ UnisZa
3.	Silver Award PIITRAM – Malaysia – 2021 – Kebangsaan (Member) Kategori B- Academician	2021	National	Asasi Council Malaysia / UMT/ UnisZa
4.	MCO Publication contest I (Gold Award)	2021	University	National Defence University of Malaysia (UPNM)
5.	Excellent performance certificate	2021	University	National Defence University of Malaysia (UPNM)
6.	MCO Publication contest II (Bronze Award)	2020	University	National Defence University of Malaysia (UPNM)
7.	Anugerah Kualiti Penyelidikan Terbaik Individu (Kategori Sains)	2019	University	National Defence University of Malaysia (UPNM)

	Timbalan Naib Canselor (Penyelidikan & Inovasi) 2020			
8.	Excellent performance award certificate –UPNM - APC	2019	University	National Defence University of Malaysia (UPNM)
9.	Gold Medal Award (Material Technology Challenge)	2019	International Conference	International Conference on Solid State Science & Technology 2019 / Malaysia Solid State Society
10.	Gold Medal Award	2019	National Exhibition	Defence, Security & Sustainability Exhibition / UPNM
11.	Bronze Medal Award	2019	National Exhibition	Defence, Security & Sustainability Exhibition / UPNM
12.	Best Oral Presenter	2018	International	International Conference of Analytical Science (SKAM31) / analytical Chemistry Society, Malaysia
13.	Excellent performance certificate	2018	National	National Defence University of Malaysia (UPNM)
14.	Postdoctoral Scholarship Award	2016	National	Ministry of Higher Education / UPNM
15.	Young Investigator Award	2015	International Conference	Regional Symposium of Malaysia Analytical Science (SKAM28) / Akademi Sains Malaysia / YoungScientist Network Malaysia
16.	Bronze Medal Award	2015	National Exhibition	Defence, Security & Sustainability Colloquium and Exhibition / UPNM
17.	Bronze Medal Award	2015	National Exhibition	Defence, Security & Sustainability Colloquium and Exhibition / UPNM
18.	Excellent performance award certificate –UPNM - APC	2015	University	National Defence University of Malaysia (UPNM)
19.	Best Poster Award	2014	International Conference	NANO-SCITECH 2014 & IC-NET 2014 (UiTM)
20.	Postgraduate Scholarship (PASCA)	2006	PhD	Ministry of Science, Technology and Innovation, Malaysia
21.	Manuscript Reviewer	2013	International	International Journal of Electroactive Materials
22.	Manuscript Reviewer	2015	International	Malaysia Journal of Analytical Science
23.	Manuscript Reviewer	2018	National	Proceedings of Mechanical Engineering Research Day 2018
24.	Manuscript Reviewer	2018	International	Journal of Palm Oil Research
25.	Manuscript Reviewer	2020	International	Malaysia Journal of Analytical Science
26.	Internal Thesis Examiner	2020	National	UPNM
27.	Poster Session Judge	2014	International Conference	Regional Symposium of Malaysia Analytical Science (SKAM27)
28.	Oral Presentation Judge	2019	International Conference	International Conference on Solid State Science & Technology 2019
29.	Oral Presentation , Chairperson	2019	International Conference	International Conference on Solid State Science & Technology 2019

### 3.3 Service to the University

No	Position/Membership	Committee	Duration
1.	Timbalan Pengarah (Akademik & Penyelidikan)	Pusat Asasi Pertahanan (PAP)	2019-2021

2.	Timbalan Penyelaras	Pre-Interuniversity Innovation Competition 2022, PAP UPM	2021-2022
3.	Ketua Jabatan	Jabatan Kimia & Biologi, PAP	2014-2015
4.	Timbalan Dekan	Pusat Pengajian Siswazah	2012-2013
5.	Ketua Protokol	International Conference on Solid State Science & Technology 2019 / PAP UPM	2019
6.	Ketua Editor, Buletin Asasi	Pusat Asasi Pertahanan (PAP)	2019
7.	Pembantu Penyelaras Subjek	Jabatan Kimia & Biologi, PAP	2018
8.	Penilai Kolokium	Kolokium Siswazah, FSTP, Kluster Sains dan Teknologi, UPM	2018-2019
9.	Penilai Kertas Cadangan Geran	Geran FRGS dan GPJP Peringkat PAP, UPM	2018-2019
10.	AJK	Wakil Displin Sains Tulen Jawatankuasa Etika Penyelidikan (JKEP), UPM	2018
11.	Penyelaras Program	Pasca siswazah Bidang pengajian kimia, FSTP	2018
12.	AJK	Program Pemindahan Ilmu (KTP) dan Program Sains, Teknologi, Kejuruteraan & Matematik (STEM) ASASI	2018
13.	AJK	Bengkel Perlaksanaan i-CGPA, PAP	2018
14.	Penyelaras penyelidikan,	Jabatan Kimia & Biologi, PAP	2018
15.	Penasihat Akademik	Program Asasi Sesi Akademik 2018/2019	2018
16.	Ketua Editor	Buletin Penyelidikan, PAP	2018-2019
17.	AJK	Penilaian spesifikasi dan teknikal sebutarga, UPM	2018
18.	Pensyarah Pengiring	Penyertaan Pelajar dalam pertandingan PERMATA MODEL UNITED NATION 2018 di UKM	2018
19.	Fasilitator	Modul LDK Minggu Perkasa Jati Diri ASASI & DIPLOMA	2018
20.	Penilai	Kolokium Siswazah bagi Kluster Sains dan Teknologi , FSTP, UPM	2018
21.	AJK	Penilaian spesifikasi dan teknikal sebutarga, UPM	2015
22.	Pengerusi ePembelajaran	Pusat Asasi Pertahanan	2014
23.	Ahli Jawatankuasa Pelaksana Aturcara dan Protokol	Kolokium Sains Bahan Pertahanan & Keselamatan (MaSCoDS2015)	16 Jun 2015
24.	Pengerusi Program	Seminar Saintis Muda / The Young Scientist Seminar (YSS-2015)	25 November 2015
25.	Ahli Jawatankuasa Kerja	Persidangan Meja Bulat Majlis Ketua-Ketua Penyelaras ePembelajaran IPTA (MEIPTA – 20), UPM	4 – 5 Mac 2014
26.	Ahli Jawatankuasa	Cap ePembelajaran, UPM	2014
27.	Penasihat Akademik	Pusat Asasi Pertahanan	2014

28.	Ahli Jawatankuasa	Makmal Penyelidikan, FSTP	2014
29.	Ahli Jawatankuasa	Sub-Kluster Sains & Matematik, PAP	2014
30.	Penasihat Akademik	Pusat Asasi Pertahanan	2013
31.	Ahli Jawatankuasa	Portal Learning Management System, Pusat Asasi Pertahanan	2013
32.	Ahli Jawatankuasa Kerja	Bengkel Penyediaan Dokumen Audit MQA bagi Program Pengajian Siswazah Bil. 1/2013, PPS, UPNM	21 Jan 2013
33.	Penilai	Kolokium Siswazah, Pusat Pengajian Siswazah bagi Kluster Sains dan Teknologi 2012-2013, UPNM	2012-2013
1.	Pengerusi	Bengkel Semakan Yuran bagi Program Pengajian Siswazah, PPS UPNM	25 Feb 2013
2.	Sekretari	Cap Akademia, IPMO UPNM	2012-2013
3.	Penyelaras Subjek	Jabatan kimia, Pusat Asasi Pertahanan	2012

### 3.4 Service to the community

No.	Organization	Role	Start Date	End Date	Level
1.	2 <sup>nd</sup> STEM Seminar Peringkat Kebangsaan, UM, KL	Peserta	16 August 2019	17 August 2019	Kebangsaan
2.	Pameran Sempena Karnival Pendidikan STEM SMK Bdr Tasik Selatan, Peringkat Kuala Lumpur (KPM)	AJK Pelaksana	14 Ogos 2018	16 Ogos 2018	Kebangsaan
3.	Bengkel Training of Trainers bagi Program Mentor Mentee di bawah Inisiatif Pengukuhan STEM (KPM)	Fasilitator	17 Oktober 2018	18 Oktober 2018	Kebangsaan
4.	Ahli ANALIS, MALAYSIA	Ahli Biasa	18 Sept 2018	18 Sept 2020	Kebangsaan