



CURRICULUM VITAE

Ir. Dr. Azil Bahari Bin Alias @ Ales

Associate Professor Ir. Dr. · Dean, Faculty of Chemical Engineering, UiTM (2025 – current)

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RESEARCH IMPACT AT A GLANCE

13 / 18 h-index (Scopus / Google Scholar)	1,848 citations (Google Scholar); Scopus 1,111	72 Scopus-indexed outputs (28 also in Web of Science)	10 Q1 · 13 Q2 Scopus quartile at year of publication
RM 2.00M 37 research grants; 15 as PI (RM 610,557)	RM 2.76M 98 consultancy projects (industry & government)	4 PhD · 11 MSc graduated; 4 PhD + 4 MSc ongoing	6 MyIPO-registered copyrights; 239 CIMA/safety technical reports

Figures compiled 27 October 2026 from UiTM Expert, IRMIS, ICONS, PRIME, UPTrack, Scopus, Web of Science/JCR and Google Scholar.

EDUCATION & PROFESSIONAL REGISTRATION

Qualification	Institution	Years
Ph.D. (Chemical Engineering – Combustion)	University of Melbourne, Australia	2008 – 2012
M.Sc. (Energy and Environment)	Universiti Teknologi MARA	2002 – 2004
B.Eng. (Hons) Chemical Engineering, 2nd Class	Universiti Teknologi Malaysia	1996 – 2000
Professional Engineer – P122025 (registered 01/04/2022)	Board of Engineers Malaysia (BEM)	
Associate Member – 99918708	Institution of Chemical Engineers (IChemE)	

LEADERSHIP & APPOINTMENTS

Position	Organisation	Period
Dean, Faculty of Chemical Engineering	UiTM	2025 – Current
Dean, Industry, Community and Alumni Network (ICAN), College of Engineering	UiTM	2024 – 2025
Head, School of Chemical Engineering, College of Engineering	UiTM	2023 – 2025
Coordinator, Consultation Unit, College of Engineering	UiTM	2022 – 2023
Head, Industrial Process Reliability & Sustainability (INPRES) Research Group (Entiti Kecemerlangan Tier 4)	UiTM	2019 – Current
Deputy Dean (Research & Industrial Linkages), Faculty of Chemical Engineering	UiTM	2015 – 2017
Deputy Dean (Student Affairs), Faculty of Chemical Engineering	UiTM	2013 – 2015
UiTM Engineering Foundation Coordinator (PI009)	UiTM	2007 – 2008

Employment

Position	Organisation	Period
Lecturer → Senior Lecturer → Associate Professor, Faculty of Chemical Engineering	Universiti Teknologi MARA, Shah Alam	2004 – Current
Part-time Lecturer	Universiti Teknologi MARA, Arau, Perlis	2003 – 2004
Process Engineer	Etion Sdn Bhd, Sungai Petani, Kedah	2001 – 2002

RESEARCH PROFILE

Research areas	Green Engineering; Energy and Environment; Biomass Conversion; Coal Cleaning Technology; Waste Management; Process Safety Engineering
Specific expertise	Biomass valorization, green engineering, energy and environment, thermochemical conversion, process safety
Industrial Process Reliability & Sustainability (INPRES)	Head – UiTM Shah Alam – Entiti Kecemerlangan Tier 4 (CoRe1/T4/2019(1)/FMIA(1))
Electronic Architecture and Application (EArA) Research Group	Associate Member – UiTM Shah Alam – Tier 5

Citation metrics

Database	Documents	Citations	h-index	Other
Scopus	73	1,111	13	cited by 1,065 documents
Web of Science Core Collection	28	739	9	
Google Scholar		1,848	18	i10-index 34; since 2021: 1,000 citations, h 15

RESEARCH GRANTS

37 grants totalling RM 1,999,577 – 15 as Principal Investigator (RM 610,557) and 22 as co-researcher (RM 1,389,021); 18 national/international grants; 11 currently active.

No	Project · scheme · reference	Role	Period / status	Amount
1	Hybrid Biochar-Based Supercapacitors Enhanced by AI/Machine-Learning-Driven Material Optimization: a Malaysia–Thailand Strategic Research Partnership Strategic Research Partnership – International (SRP) · International UiTM.800-3/1 SRP INT (010/2026)	PI (Project Leader)	Feb 2026 – Jan 2028 Pending Activation	RM 50,000
2	Prediction of the Newtonian of Preferential Flow in the Gas Mask Filter in Malaysia's Climate Environment Biaya Terus – Government · National UiTM.800-3/5 PBT GOV (117/2026)	PI (Project Leader)	Dec 2025 – Nov 2028 Active	RM 177,800
3	Equilibrium and Kinetic Studies in Adsorption of Volatile Organic Compounds (VOCs) using Coconut Shell Activated Carbon Xerogel (CSACX) Industry grant (private) · Private UiTM.800-3/3 PRI (074/2025)	PI (Project Leader)	Apr 2025 – Apr 2027 Active	RM 10,000
4	Interaction Mechanism of Fungi and Bacteria Utilizing Perfluorinated Alkyl Substances (PFAS) in Marine Environment Fundamental Research Grant Scheme (FRGS) · National 600-RMC/FRGS 5/3 (085/2024) · FRGS/1/2024/TK05/UiTM/02/4 Leader: Norhafezah Kasmuri	Co-researcher	Aug 2024 – Jan 2027 Active	RM 85,200
5	Investigating the efficacy of massive open online courses (MOOCs) in enhancing student learning outcomes: a case study in physical chemistry course of the students form UiTM and UNESA SRP / UiTM	PI (Project Leader)	Dec 2023 – Dec 2025 Completed	RM 20,000
6	Adsorption of Volatile Organic Compounds (VOCs) using Newly Improved Hybrid Carbon Gel Derived from Coconut Shell: Synthesis, Characterization and Optimization Dana Dalam Fakulti (DDF) · University 600-TNCPI 5/3/DDF (KPK) (008/2023)	PI (Project Leader)	Nov 2023 – Oct 2025 Active	RM 10,000
7	Elucidation and stimuli-responsive analyses on conductive bamboo-based cellulose hydrogel as flexible hybrid supercapacitor in energy storage and conversion FRGS (UPM) · National	Co-researcher (UiTM PI)	Jun 2023 – May 2026 Active	RM 94,800

No	Project · scheme · reference	Role	Period / status	Amount
8	Heterogenous Fenton Chemistry: Mechanisms of Degradation Kinetics of Plastic Pollutants by the Interaction Between Iron Bearing Soil Minerals and Glutathione in Soil and Groundwater Fundamental Research Grant Scheme (FRGS) · National 600-RMC/FRGS 5/3 (082/2022) · FRGS/1/2022/STG04/UITM/02/16 Leader: Amnorzahira Amir	Co-researcher	Sep 2022 – Aug 2025 Completed	RM 102,500
9	A Study on Trends in Consultation Types for Each School of Engineering at UiTM Shah Alam in the Years 2021-2023 Geran Sanjung Sarjana (GSS) · University 600-RMC/GSS 5/3 (081/2022)	PI (Project Leader)	Jun 2022 – Oct 2024 Active	RM 1,500
10	Synthesis and Characterizations of Oven-Dried Oil Palm Empty Fruit Bunches (EFB)-Based Xerogels for Absorption of Engine Oil Research Entity Collaboration Grant (KEPU) · University 600-RMC/KEPU 5/3 (017/2021)	PI (Project Leader)	Dec 2021 – Dec 2023 Active	RM 40,000
11	Hydrogen Sulphide Removal using a Blended Series of Biochar and Xerogel Originated from Coconut Shells Dana Dalam Fakulti (DDF) · University 600-TNCPI 5/3/DDF (FKK) (011/2021)	PI (Project Leader)	Dec 2021 – Nov 2023 Completed	RM 20,000
12	A Blending Series of Coconut Shell Biochar (CSB) and Xerogel Based Coconut Shell (XCS) for H₂S Removal in a Multilayered Sorption Bed Industry grant (private) · Private 100-TNCPI/PRI 16/6/2 (024/2022)	PI (Project Leader)	Dec 2021 – Nov 2023 Completed	RM 20,000
13	Conceptual Dynamic Reliability and Risk Assessment Framework in the Control of Major Accident Hazard using Bayesian Approach Fundamental Research Grant Scheme (FRGS) · National 600-RMC/FRGS 5/3 (168/2021) · FRGS/1/2021/TK0/UITM/02/90 Leader: Zulkifli Abd Rashid	Co-researcher	Sep 2021 – Sep 2024 Completed	RM 64,300
14	Dynamic Risk Assessment Method Coupled with Material Strength and Consequence Real Time Analysis in Process Safety Optimization Special Research Grant (GPK) · University 600-RMC/GPK 5/3 (237/2020) Leader: Zulkifli Abd Rashid	Co-researcher	Dec 2020 – Dec 2023 Completed	RM 20,000
15	Green Synthesis of Hybrid Hydrogel from Chitin/Bamboo Nanocellulose on Arsenic Removal Special Research Grant (GPK) · University 600-RMC/GPK 5/3 (124/2020) Leader: Norhayati Talib	Co-researcher	Dec 2020 – Dec 2023 Active	RM 20,000
16	Interaction Between Plant Based Anionic Surfactant and Cd and Pb Ions in Aqueous Solution using Impregnated Activated Carbon Special Research Grant (GPK) · University 600-RMC/GPK 5/3 (242/2020) Leader: Normadyzah Ahmad	Co-researcher	Dec 2020 – Jun 2023 Active	RM 20,000
17	Synthesis of Highly Porous Aerogels Oil Absorbent by Supercritical Drying Young Talent Researcher (YTR) · University 600-RMC/YTR/5/3 (010/2020) Leader: Ana Najwa Mustapa	Co-researcher	Dec 2020 – Jun 2023 Completed	RM 50,000
18	Kinetics and Isotherm Studies SO₂ Adsorption on to Novel Blended Activated Carbon and Hydrogel Biochar Derived from Industrial Solid Waste (Wood Waste) Research Entity Initiative (REI) · University 600-IRMI/REI 5/3 (006/2019)	PI (Project Leader)	Apr 2019 – Mar 2022 Active	RM 32,000
19	Monte Carlo Simulation on CO₂ Transport Diffusion and Phenomena for Newly Developed Adsorbent Material (Hydrogel Biochar Composite) Fundamental Research Grant Scheme (FRGS) · National 600-IRMI/FRGS 5/3 (189/2019) · FRGS/1/2018/TK02/UITM/02/14	PI (Project Leader)	Jan 2019 – Sep 2022 Completed	RM 99,000
20	Development of Palm Oil Based Coating Material from Unripe Empty Fruit Bunch for Oil and Gas Pipeline Application MITRA Perdana · University 600-IRMI/PERDANA 5/3/MITRA (006/2018)-2 Leader: Najmuddin Yaakob	Co-researcher	Jan 2018 – Dec 2020 Completed	RM 36,000

No	Project · scheme · reference	Role	Period / status	Amount
21	Agricultural Waste to Safe Product: Unripe EFB Oil for Production of Eco-Friendly Thermo-Bioplastic Feeding Bottle MITRA PERDANA / UiTM	Co-researcher	Jan 2018 – Dec 2019 Completed	RM 31,000
22	Development of Blended Hydrogel Biochar with Coal Fly Ash for Heavy Metal Removal Geran Insentif Penyelidikan (GIP) · University 600-IRMI/GIP 5/3 (0040/2016)	PI (Project Leader)	Sep 2016 – Aug 2017 Completed	RM 25,000
23	Development of Newly Improved Hydrogel Biochar from Biomass Residues for Harmful Gas Cleaning (SO₂ and H₂S) in a Novel Multi-Layered Sorption Bed Dana BESTARI · University 600-IRMI/DANA 5/3/BESTARI (0008/2016)	PI (Project Leader)	Sep 2016 – Aug 2018 Completed	RM 35,000
24	Prediction of Uncertainty Quantification in the Health Consequences Cause by Fire Explosion (PF) Phenomenon at Industrial Domino Accident Scenarios Fundamental Research Grant Scheme (FRGS) · National 600-RMI/FRGS 5/3 (0094/2016) · FRGS/1/2016/TK02/UITM/02/13 Leader: Zulkifli Abd Rashid	Co-researcher	Aug 2016 – Jan 2020 Completed (Conditional)	RM 131,000
25	Desulphurisation of Coal Combustion Flue Gas using Mixed Activated Carbon from Coconut Shell with Coal Fly Ash Auto Catalytic Adsorbent eScienceFund · National 100-RMI/SF 16/6/2 (4/2014) · 06-01-01-SF0705 Leader: Khudzir Ismail	Co-researcher	Jul 2014 – Dec 2016 Completed	RM 161,000
26	Kinetics Modeling of H₂S Adsorption on Hydrogel Bioadsorbent Fundamental Research Grant Scheme (FRGS) · National 600-RMI/FRGS 5/3 (96/2014) · FRGS/1/2014/TK06/UITM/03/2 Leader: Norhayati Talib	Co-researcher	Jul 2014 – Dec 2016 Completed	RM 119,000
27	Kinetic Behaviour Study on Catalytic Co-Combustion of Torrefied Biomass Waste with Malaysian Coal Fundamental Research Grant Scheme (FRGS) · National 600-RMI/FRGS 5/3 (98/2014) · FRGS/1/2014/TK06/UITM/03/4 Leader: Sharmeela Matali	Co-researcher	Jul 2014 – Dec 2016 Completed	RM 97,000
28	Synthesis And Mechanistic Studies on Biochar-Based Carbon for Energy Storage FRGS (MOHE) · National	Co-researcher	Jun 2014 – Jun 2016 Completed	RM 102,000
29	Coal and Municipal Solid Waste Combustion Kinetic Analysis of a New Evolved Gas Analysis (EGA) Technique Research Acculturation Grant Scheme (RAGS) · National 600-RMI/RAGS 5/3 (83/2013) · RAGS/2013/UITM/TK06/1	PI (Project Leader)	Sep 2013 – Mar 2016 Completed	RM 65,000
30	Changes in the Microscopic Properties of Carbonaceous Adsorbents Upon Charging-Discharging of Methane in the Presence of Pre-Adsorbed Water Fundamental Research Grant Scheme (FRGS) · National 600-RMI/FRGS 5/3 (29/2013) · FRGS/1/2013/TK07/UITM/02/2 Leader: Syed Shatir Asghar Syed Hassan	Co-researcher	Apr 2013 – Sep 2015 Completed	RM 99,000
31	Hydrogel Derived Biochar Composite for Sequestration of Carbon Dioxide E-Science (MOSTI) · National	Co-researcher	Jan 2013 – Jan 2015 Completed	RM 0
32	Development of Oxygen Consumption Model for the Oxidation of Rice Husk and Palm Fibre Research Intensive Faculty (RIF) · University 600-RMI/DANA 5/3/RIF (546/2012)	PI (Project Leader)	Oct 2012 – Sep 2014 Completed (Conditional)	RM 5,257
33	Study on the Liquefied Petroleum Gas (LPG) Tanker Accident Consequences During Road Transportation Research Intensive Faculty (RIF) · University 600-RMI/DANA 5/3/RIF (384/2012) Leader: Zulkifli Abd Rashid	Co-researcher	Sep 2012 – Aug 2014 Completed (Conditional)	RM 8,621
34	Development of Generic Decision Support System for Scheduled Waste Management in Malaysia Fundamental Research Grant Scheme (FRGS) · National 600-IRDC/ST/FRGS.5/3/1313 Leader: Zulkifli Abd Rashid	Co-researcher	Sep 2007 – Jul 2010 Completed	RM 51,000

No	Project · scheme · reference	Role	Period / status	Amount
35	A Kinetic Study of Thermal Behaviour of Bituminous Coal and Industrial Solid Waste (ISW) Blends During Pyrolysis Using Thermogravimetric Analysis FRGS (MOHE) · National	Co-researcher	Sep 2007 – Jan 2013 Completed	RM 80,000
36	Mild Oxidising Treatment of Senakin Bituminous Coal using Sulphuric, Nitric and Hydrochloric Acid Solution Under Ambient Condition Self-funded · Self-Funded 600-IRDC/ST/5/3/1259 Leader: Fariza Bt Hamidon	Co-researcher	Jun 2007 – Jun 2007 Completed	RM 0
37	Modification of a Fluidized Bed Test Rig for Fluidization of Palm Fibre Internal grant · National 600-IRDC/ST/5/3/1078 Leader: Norazah Abd Rahman	Co-researcher	Feb 2006 – Jun 2007 Completed	RM 16,600

PUBLICATIONS

361 recorded outputs: 72 Scopus-indexed (journal articles, proceedings and book chapters; 28 also in Web of Science), 15 other journal articles, 25 other conference papers, 3 monographs and 239 CIMA/safety technical reports.

Scopus quartile (year of publication)	Q1	Q2	Q3	Q4	Not ranked	Total
Scopus-indexed outputs	10	13	26	16	7	72
JCR 2025 quartile (WoS journals)	6	2	6	6		20

Quartile tags: Scopus = best CiteScore subject percentile in the year of publication ($Q1 \geq 75th$, $Q2 \geq 50th$, $Q3 \geq 25th$); JCR = Clarivate Journal Citation Reports 2025. Citation counts as of 27 October 2026. Dr Azil's name in bold.

A. Journal articles indexed in Scopus / Web of Science (50)

- Ismail, S. N. A. S.; Ishak, M. A. M.; Kasim, N. N.; **Alias, A. B.**; Ahmad, R.; Ismail, K. (2026). Physicochemical Properties of Potassium Carbonate-Ethylene Glycol Mixtures at Different Molar Ratios and Temperatures. *Malaysian Journal of Science*, 45(2), 13–22. <https://doi.org/10.22452/mjs.vol45no2.2>
Scopus · Scopus Q3 (37th pct, CiteScore 2025)
- Alias, A. B.**; Ali, O. M.; Shihab, T. A.; Saleh, A. M.; Ling, S. W. H.; Saleh, N. M. (2026). Improving Parabolic Trough Collectors Performance: a Review of Design and Operating Factors. *International Review of Mechanical Engineering*, 20(1). <https://doi.org/10.15866/ireme.v20i1.26878>
Scopus · Scopus Q2 (65th pct, CiteScore 2025)
- Saleh, A. M.; Ali, O. M.; Shihab, T. A.; Saleh, N. M.; **Alias, A. B.**; Abdulqader, M. A. (2026). Hybrid palm kernel shell activated carbon–Xerogel adsorbents for efficient SO₂ capture: Synthesis, characterization, and process optimization. *Separation Science and Technology*, 61(14), 2535–2555. <https://doi.org/10.1080/01496395.2026.2671792>
Scopus + WoS (SCIE) · Scopus Q2 (62th pct, CiteScore 2025) · JCR Q3 (2025)
- Saleh, N. I. M.; Ghani, W. A. W. A. K.; Kamal, S. M. M.; **Alias, A. B.**; Harun, M. R. (2026). Membrane Fouling and Flux Reduction of Nannochloropsis Sp Protein Hydrolysate using Cross-Flow Ultrafiltration Membrane. *Jurnal Kejuruteraan*, 38(1), 399–411. [https://doi.org/10.17576/jkukm-2026-38\(1\)-35](https://doi.org/10.17576/jkukm-2026-38(1)-35)
Scopus + WoS (ESCI) · Scopus Q3 (25th pct, CiteScore 2025) · JCR Q3 (2025)
- Shah, D. R. S. I.; Anuar, N. F.; Roslan, S. Z.; Musa, M.; Daud, W. M. A. W.; **Alias, A. B.**; Aghamohammadi, N. (2025). Innovative resource recovery: converting discarded disposable diapers (D3) into activated carbon using Box–Behnken design. *International Journal of Environmental Science and Technology*, 22(15), 15455–15465. <https://doi.org/10.1007/s13762-025-06638-4>
Scopus + WoS (SCIE) · Scopus Q1 (92th pct, CiteScore 2025) · JCR Q3 (2025) · Cited: Scopus 2, WoS 2, GS 2
- Azmi, N.; Ghani, W. A. W. A. K.; Sobri, S.; Haris, N. I. N.; Kamsani, N. A.; **Alias, A. B.** (2025). Cellulose-based hydrogels in flexible supercapacitors: A sustainable approach for energy storage solutions. *Renewable and Sustainable Energy Reviews*, 221, 115914. <https://doi.org/10.1016/j.rser.2025.115914>
Scopus + WoS (SCIE) · Scopus Q1 (98th pct, CiteScore 2025) · JCR Q1 (2025) · Cited: Scopus 16, WoS 15, GS 16
- Shah, D. R. S. I.; Anuar, N. F.; Daud, W. M. A. W.; **Alias, A. B.**; Aghamohammadi, N. (2025). Mechanistic exploration and optimization of amoxicillin adsorption using discarded disposable diapers (D3) activated carbon: A multi-analytical approach. *Journal of Industrial and Engineering Chemistry*, 148, 665–678. <https://doi.org/10.1016/j.jiec.2025.01.024>
Scopus + WoS (SCIE) · Scopus Q1 (90th pct, CiteScore 2025) · JCR Q1 (2025) · Cited: Scopus 8, WoS 8, GS 9
- Noraini, N.; Zainol, M. M.; **Alias, A. B.**; Sulaiman, N. S.; Azmir, N. A.; Taib, I.; Damanhuri, A. A. M.; Osman, B. (2025). Activated carbon for gas adsorption and its application in gas mask respirator filters: a review. *International Journal of Environmental Science and Technology*, 22(7), 6225–6246. <https://doi.org/10.1007/s13762-024-06188-1>
Scopus + WoS (SCIE) · Scopus Q1 (92th pct, CiteScore 2025) · JCR Q3 (2025) · Cited: Scopus 5, WoS 5, GS 5

9. Saleh, A. M.; **Alias, A. B.**; Hasan, S. S. A. S.; Jawad, A. H.; Shihab, T. A.; Ali, O. M.; Ghani, W. A. W. A. K.; Mahdi, H. H.; Saleh, N. M.; Ahmed, O. K. (2025). Isotherm and kinetic models of SO₂ adsorption on palm kernel shell-activated carbon and xerogel blends: Effect of flow rate and contact time. *Results in Engineering*, 25, 103970. <https://doi.org/10.1016/j.rineng.2025.103970>
Scopus + WoS (ESCI) · Scopus Q1 (88th pct, CiteScore 2025) · JCR Q1 (2025) · Cited: Scopus 13, WoS 11, GS 15
10. Bahari, A.; Saleh, A. M.; Shihab, T. A.; Ali, O. M.; Ling, S. W. H.; Saleh, N. M.; Yassin, K. F.; Ahmed, O. K.; Ezzat, S. B.; Abdulqader, M. A. (2025). Enhancing Flue Gas Cleaning with Modified Activated Carbon Surfaces: a Review Paper. *International Review of Mechanical Engineering*, 19(2), 66–74. <https://doi.org/10.15866/ireme.v19i2.24987>
Scopus · Scopus Q2 (65th pct, CiteScore 2025) · Cited: Scopus 1, GS 1
11. Issa, H. M.; Saleh, A. M.; Hasan, R. A.; Jomaa, M. M.; Saleh, N. M.; Abdulqader, M. A.; **Alias, A. B.**; Keighobadi, J.; Salih, R. A.; Ghdhban, I. I. (2024). Shear Strengthening of Recycled Lightweight Coarse Aggregate Concrete Beams Using NSM Technique. *Mesopotamian Journal of Civil Engineering*, 2024, 115–126. <https://doi.org/10.58496/MJCE/2024/013>
Scopus · Scopus Q1 (85th pct, CiteScore 2025) · Cited: Scopus 7, GS 14
12. Saleh, A. M.; Saleh, N. M.; Ali, O. M.; Hasan, R. A.; Ahmed, O.; **Alias, A. B.**; Yassin, K. F. (2024). Green Building Techniques: Under The Umbrella of the Climate Framework Agreement. *Babylonian Journal of Machine Learning*, 2024, 1–14. <https://doi.org/10.58496/BJML/2024/001>
Scopus · Scopus Q1 (96th pct, CiteScore 2025) · Cited: Scopus 45, GS 58
13. Saleh, A. M.; Mahdi, H. H.; **Alias, A. B.**; Ali, O. M.; Ghani, W. A. W. A. K.; Shihab, T. A.; Hasan, S. S. A. S.; Ahmed, O. K.; Saleh, N. M. (2024). Application of Response Surface Methodology (RSM) for Optimization of Hydrogen Sulphide Adsorption Using Coconut Shell Activated Carbon Xerogel: Effect of Adsorption Pressure and Hydrogen Sulphide Flowrate. *Annales de Chimie: Science des Materiaux*, 48(4), 509–518. <https://doi.org/10.18280/acsm.480408>
Scopus + WoS (?) · Scopus Q3 (28th pct, CiteScore 2024) · Cited: Scopus 7, WoS 5, GS 9
14. Mahdi, H. H.; Saleh, A. M.; Bahari, A.; Ali, O. M.; Ghani, W. A. W. A. K.; Shihab, T. A.; Saleh, N. M.; Yassin, K. F. (2024). Optimization for the Effects of Coconut Shell Activated Carbon Xerogel Weight and Temperature on the Hydrogen Sulphide Adsorption Using Response Surface Methodology. *International Journal on Energy Conversion*, 12(4), 150–158. <https://doi.org/10.15866/irecon.v12i4.25011>
Scopus · Scopus Q2 (60th pct, CiteScore 2024) · Cited: Scopus 7, GS 9
15. Mahdi, H. H.; Saleh, A. M.; **Alias, A. B.**; Jawad, A. H.; Salman, S. D.; Qarizada, D.; Mostafa, M. M.; Saleh, N. M.; Abdulqader, M. A. (2024). Synthesis and Characterization of Xerogel Derived from Palm Kernel Shell Biochar and Comparison with Commercial Activated Carbon. *Journal of Ecological Engineering*, 25(6), 1–11. <https://doi.org/10.12911/22998993/183719>
Scopus + WoS (ESCI) · Scopus Q2 (62th pct, CiteScore 2024) · JCR Q4 (2025) · Cited: Scopus 11, WoS 8, GS 18
16. Saleh, A. M.; Mahdi, H. H.; **Alias, A. B.**; Hadi, N. K. A.; Qarizada, D.; Jawad, A. H.; Saleh, N. M. (2024). Equilibrium and kinetic studies in adsorption of H₂S using coconut shell activated carbon xerogel: Effect of mass adsorbent and temperature. *Desalination and Water Treatment*, 317, 100149. <https://doi.org/10.1016/j.dwt.2024.100149>
Scopus + WoS (SCIE) · Scopus Q3 (48th pct, CiteScore 2024) · JCR Q2 (2025) · Cited: Scopus 32, WoS 29, GS 39
17. **Alias, A. B.**; Qarizada, D.; Ariffin, A.; Noraini, N.; Rashid, Z. A. (2023). Kinetics models of hydrogen sulphide adsorption from hydrogel biochar derived from empty fruit bunch (EFB). *Archives of Materials Science and Engineering*, 120(1), 15–21. <https://doi.org/10.5604/01.3001.0053.5981>
Scopus · Scopus Q3 (40th pct, CiteScore 2023) · Cited: Scopus 1, GS 1
18. Saleh, A. M.; **Alias, A. B.**; Ali, O. M.; Mahdi, H. H.; Mustafa, M. M.; Saleh, N. M. (2023). Impact of Using Different Renewable Energy Sources on Mitigation of CO₂ Emissions and Treatment of Climate Change in Iraq: a Short Review. *International Review of Mechanical Engineering*, 17(11), 549–556. <https://doi.org/10.15866/ireme.v17i11.23860>
Scopus · Scopus Q2 (74th pct, CiteScore 2023) · Cited: Scopus 6
19. Ismail, S.; Ishak, M. A. M.; Ismail, K.; Nawawi, W. I.; Kasim, N. N.; Ani, A. Y.; **Alias, A. B.**; et al. (2023). Optimization Studies of Coal Organic Sulfur Removal using Potassium Carbonate and Ethylene Glycol as a Deep Eutectic Solvent. *Malaysian Journal of Chemistry*, 25(3), 97–106. <https://doi.org/10.55373/mjchem.v25i3.97>
Scopus · Scopus Q4 (10th pct, CiteScore 2023) · Cited: Scopus 4, GS 2
20. Rashid, Z. A. (2023). Severity Impact of a Vapour Cloud Explosion (VCE) – Liquefied Petroleum Gas (LPG) Road Tanker Accident. *ASM Science Journal*, 18. <https://doi.org/10.32802/asmscj.2023.1086>
Scopus · Scopus Q3 (26th pct, CiteScore 2023)
21. Saleh, A. M.; **Alias, A. B.**; Ali, O. M.; Saleh, N. M. (2023). Factors Affecting on Process of Synthesizing Biodiesel and Arranging Production Steps: a Review Study. *International Review of Mechanical Engineering*, 17(1), 1–13. <https://doi.org/10.15866/ireme.v17i1.22675>
Scopus · Scopus Q2 (74th pct, CiteScore 2023) · Cited: Scopus 6, GS 9
22. Kamaruddin, N. A. B.; Ghani, W. A. A. K.; Hamid, M. R. A.; **Alias, A. B.**; Shamsudin, A. H. (2023). Simulation And Analysis Of Calorific Value For Biomass Solid Waste As A Potential Solid Fuel Source For Power Generation. *Journal of Applied Science and Engineering*, 26(2), 163–173. [https://doi.org/10.6180/jase.202302_26\(2\).0002](https://doi.org/10.6180/jase.202302_26(2).0002)
Scopus + WoS (ESCI) · Scopus Q2 (70th pct, CiteScore 2024) · JCR Q3 (2025) · Cited: Scopus 5, WoS 4, GS 7
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14. (2008) Fauziah Bt Marpani, Norazah Binti Abd Rahman (Dr), Nornizar Binti Anuar, **Azil Bahari Bin Alias @ Ales (Dr)**, Tajuddin Bin Md. Jahi, "Cold Flow Binary Fluidization of Oil Palm Residues Mixture in A Gas-solid Fluidized Bed System", Pertanika, UPM, pageno: 201, vol: 16, issues:
15. (2007) **Azil Bahari Bin Alias @ Ales (Dr)**, Robert Michael Savory (Dr), Ghani, W.A.W.A.K. And Cliffe, K.R., "Co-combustion Of Rice Husk with Coal in A Fluidised Bed", Malaysian Journal of Chemical Engineering, UPENA, pageno: 153-162, vol: 1, issues: 1 Proceeding Papers

F. Other conference proceedings (25)

1. (2022) HS Roslan, AN Mustapa, SH Hanipah, **AB Alias**, FM Fuad, Á Martín, MJ Cocero, Characteristics of alginate and soy protein isolates composite aerogels as oil absorbent, IOP Conference Series: Materials Science and Engineering 1257 (1), 012045
2. (2015) **Azil Bahari Bin Alias @ Ales (Dr)**, Zulkifli Bin Abd Rashid, Wan Azlina Wan Ab Karim Ghani "Combustion Characteristics of Municipal Solid Waste and Malaysian Sub-Bituminous Coal Using Evolved Gas Analysis (Ega) Technique", ,UKM/ICHEM-SIME DARBY, Palm Garden Hotel, IOI Resort Putrajaya
3. (2015) **Azil Bahari Bin Alias @ Ales (Dr)**, Zulkifli Bin Abd Rashid, Mohd Shahnor Bani, Anis Farhanah Yong "Smart Vapour Cloud Explosion Incident Identifier Tool Analysis (SAVii) for Chemical Process Industries (CPI)", ,UKM/ICHEM-SIME DARBY/PETRONAS, Palm Garden Hotel, IOI Resort Putrajaya 21-22 October 2015
4. (2015) **Azil Bahari Bin Alias @ Ales (Dr)**, Dayang Nuradila, Wan Azlina Wan Ab Karim Ghani "A Palm Kernel Shell-derived Biochar and catalyst (PKSBC) for Biodiesel Production", ,UKM/ICHEM-SIME DARBY, Palm Garden Hotel, IOI Resort Putrajaya
5. (2015) **Azil Bahari Bin Alias @ Ales (Dr)**, Wan Azlina Wan Ab Karim Ghani, Nur Fitriah Abdullah "Agricultural based biochar composite for effective carbon dioxide removal", UPM-MSAE, UPM
6. (2015) **Azil Bahari Bin Alias @ Ales (Dr)**, Norhayati Binti Talib, Zulkifli Bin Abd Rashid, Nor Hidayah Meri, Wan Azlina Wan Abdul Karim Ghani "Characterization of improved hydrogel biochar as advanced agricultural product from agricultural waste", ,UPM-MSAE, UPM
7. (2009) Sharmeela Binti Matali, Norazah Binti Abd Rahman (Dr), **Azil Bahari Bin Alias @ Ales (Dr)**, Siti Shawalliah Binti Idris, "Thermogravimetric Analysis of The Co-pyrolysis Of the Blends with Malaysian Bituminous Coal (Silantek Coal) and Waste Tyres", International Journal of Chemical Engineering (IJCE), Serials Publications, pageno: 203-211, vol: 2, issues: 2
8. (2009) Sharmeela Binti Matali, Norazah Binti Abd Rahman (Dr), **Azil Bahari Bin Alias @ Ales (Dr)**, Zulkifli Bin Abd Rashid, Siti Shawalliah Binti Idris, "Thermal behaviour of Silantek coal (Bituminous coal) and wood waste blends during pyrolysis using thermogravimetric analysis", ,UMS, Kota Kinabalu, Sabah
9. (2009) Fauziah Bt Marpani, Norazah Binti Abd Rahman (Dr), **Azil Bahari Bin Alias @ Ales (Dr)**, Jahi, T.M. "Binary mixture fluidization behaviour of oil palm residues with silica sand", UiTM, Afamosa Resort, Melaka
10. (2008) **Azil Bahari Bin Alias @ Ales (Dr)**, Zulkifli Bin Abd Rashid, Norazah Binti Abd Rahman (Dr), Siti Shawalliah Binti Idris, Robert Michael Savory (Dr), Halim, N.A. And Ghani, W.A.W.A.K. "A kinetic study of thermal behaviour of Senakin coal and Malaysian solid wastes (i.e. wood waste and RDF) and their blends during pyrolysis using thermogravimetric analysis", University Kebangsaan Malaysia, Impiana KLCC Hotel & Spa, Kuala Lumpur, Malaysia
11. (2008) Zulkifli Bin Abd Rashid, **Azil Bahari Bin Alias @ Ales (Dr)**, Hazlina Binti Husin (Dr), Mohammad Jindra Bin Aris, Mohanad El-harbawi (Dr), Saleh, A.B.S.A.B. And Muhammad, N.A. "Spray Drier chemical and mechanical design via spreadsheet ' Study on the instant coffee Arabica powder production process", Department of Chemical & Process Engineering, UKM, Impiana KLCC Hotel & Spa, Kuala Lumpur
12. (2008) Siti Shawalliah Binti Idris, Norazah Binti Abd Rahman (Dr), Khudzir Bin Ismail (Prof. Dr.), **Azil Bahari Bin Alias @ Ales (Dr)**, "Pyrolysis and combustion characteristics of Malaysian oil palm biomass, low rank coal and their blends during pyrolysis via thermogravimetric analysis (TGA)", ,University Kebangsaan Malaysia, Impiana KLCC Hotel & Spa, Kuala Lumpur, Malaysia
13. (2008) **Azil Bahari Bin Alias @ Ales (Dr)**, Siti Shawalliah Binti Idris, Zulkifli Bin Abd Rashid, Norazah Binti Abd Rahman (Dr), Khudzir Bin Ismail (Prof. Dr.), "Thermogravimetric investigation of the behaviour of Malaysian oil palm biomass, sub-bituminous coal and their blends during pyrolysis", Korea Institute of Ecology Agriculture and Environment; World Society of Sustainable Energy Technologies, Ritz Carlton Hotel, Seoul, Korea
14. (2008) **Azil Bahari Bin Alias @ Ales (Dr)**, Siti Shawalliah Binti Idris, Zulkifli Bin Abd Rashid, Norazah Binti Abd Rahman (Dr), Kamariah Noor Bt Ismail (Dr), "Thermogravimetric investigation of the behaviour of Malaysian oil palm biomass, sub-bituminous coal and their blends during pyrolysis", KIEAE and WSSET, Seoul, Korea
15. (2008) Fauziah Bt Marpani, Norazah Binti Abd Rahman (Dr), Nornizar Binti Anuar, **Azil Bahari Bin Alias @ Ales (Dr)**, Tajuddin Bin Md. Jahi, "Minimum fluidization velocities of mixtures of palm oil residues and sand", Korea Institute of Ecological Architecture and Environment & World Society of Sustainable Energy Technologies, Seoul, Korea
16. (2008) Zulkifli Bin Abd Rashid, **Azil Bahari Bin Alias @ Ales (Dr)**, Ayub Bin Md Som (Dr), Mohammad Jindra Bin Aris, Mohanad M.a.a El- harbawi (Dr), H.n.m Ekramul Mahmud, Sharifah Aishah Syed Abdul Kadir (Prof. Dr.), "A mathematical model to predict the composition and generation of scheduled waste in Malaysia", USM, Penang
17. (2007) **Azil Bahari Bin Alias @ Ales (Dr)**, Zulkifli Bin Abd Rashid, Norazah Binti Abd Rahman (Dr), Siti Shawalliah Binti Idris, Khudzir Bin Ismail (Prof. Dr.), Mohd Azlan Bin Mohd Ishak (Dr), "Pyrolysis characteristics and kinetics of coconut coir and shell

mixtures with sub-bituminous coal using thermogravimetric analysis", University Malaysia Sarawak, Kuching Sarawak; Registered twice in PRIME

18. (2007) **Azil Bahari Bin Alias @ Ales (Dr)**, Mohd Azlan Bin Mohd Ishak (Dr), Zulkifli Bin Abd Rashid, Norazah Binti Abd Rahman (Dr), Siti Shawalliah Binti Idris, Khudzir Bin Ismail (Prof. Dr.), Ghani, W.A.W.A.K. "Thermogravimetric studies of the behaviour of sub-bituminous, wood waste and their blends during devolatilisation", Universiti Putra Malaysia, Universiti Putra Malaysia
19. (2007) **Azil Bahari Bin Alias @ Ales (Dr)**, Ghani, W.A.W.A.K., Abd. Ghani, N., Mohd. Salleh, Md.a., Omar, R., Ali, S. And Idris, A. "Characterization of agricultural waste as biofuels: Significance and impact", IChemE Malaysia and UPM, UPM
20. (2007) Zulkifli Bin Abd Rashid, **Azil Bahari Bin Alias @ Ales (Dr)**, Mohammad Jindra Bin Aris, Mohanad M.a.a El-harbawi (Dr), Norazah Binti Abd Rahman (Dr), Ayub Bin Md Som (Dr), "Hazardous waste management: Current states and future focus in Malaysia", IChemE Malaysia and UPM, UPM
21. (2007) Zulkifli Bin Abd Rashid, **Azil Bahari Bin Alias @ Ales (Dr)**, Mohammad Jindra Bin Aris, Norazah Binti Abd Rahman (Dr), "Problem Based Learning (PBL) in engineering education: A case study based on medical education experience", UTM, Johor
22. (2007) Norazah Binti Abd Rahman (Dr), **Azil Bahari Bin Alias @ Ales (Dr)**, Zulkifli Bin Abd Rashid, Dr Wan Azlina Wan Ab Karim Ghani, "Thermal Behaviour Study Of Senakin Coal And Refuse Derived Fuel (RDF) Blends During Pyrolysis Using Thermogravimetric Analysis", Int.J.Environment And Waste Management, Inderscience Enterprises, pageno : 354-364, vol : 10.
23. (2007) Fauziah Bt Marpani, Norazah Binti Abd Rahman (Dr), Nornizar Binti Anuar, **Azil Bahari Bin Alias @ Ales (Dr)**, Tajuddin Bin Md. Jahi, "Cold Flow Binary Fluidization of Oil Palm Residues Mixture in A Gas-solid Fluidized Bed System", Pertanika, UPM, pageno: 201, vol: 16, issues:
24. (2007) Zulkifli Bin Abd Rashid, Mohanad M.a.a El-harbawi (Dr), Mohammad Jindra Bin Aris, **Azil Bahari Bin Alias @ Ales (Dr)**, Norazah Binti Abd Rahman (Dr), Ayub Bin Md Som (Dr), "Illegal dumping of hazardous waste in malaysia: assessing based on implementation and compliance of environmental quality act (1974) and the regulations", IEM and UPM, The Gurney Resort Hotel & Residences and Evergreen Laurel Hotel, Penang
25. (2006) **Azil Bahari Bin Alias @ Ales (Dr)**, Robert Michael Savory (Dr), Ghani, W.A.W.A.K. And Cliffe, K.R., "Co-combustion Of Rice Husk with Coal in A Fluidised Bed", Malaysian Journal of Chemical Engineering, UPENA, pageno: 153-162, vol: 1, issues: 1 Proceeding Papers

G. Monographs, newsletters and abstracts (5)

1. (2023) ACADEMIC STAFF MOBILITY AND COLLABORATION BETWEEN COLLEGE OF ENGINEERING, UNIVERSITI TEKNOLOGI MARA (UiTM) AND FAKULTAS TEKNIK, UNIVERSITAS NEGERI SEMARANG (UNNES), pp. 15–18
2. (2022) Alumni Newsletter Q2 2022, Vol. 2022, pp. 1–14
3. (2019) Adsorption of Hydrogen Sulphide by Commercialized Rice Husk Biochar (RHB), pp. 1–7
4. (2019) Food Waste and Empty Fruit Bunches (EFB) Characterization for Production of Biogas by Anaerobic Co-digestion, pp. 1–7
5. (2019) ADSORPTION KINETICS AND EQUILIBRIUM ISOTHERMS MODELING OF H₂S ON HYDROGEL BIOCHAR AND BIOCHAR ADSORBENT FROM RICE HUSK, pp. 1–7

H. CIMA / process-safety technical reports (239)

Statutory CIMA (Control of Industrial Major Accident Hazards) safety reports, emergency response plans and risk studies prepared for industry clients, as registered in UiTM PRIME.

Individual report titles are confidential to each client and are not listed in this public version.

INTELLECTUAL PROPERTY

No	Title	Type · reference	Status	Role
1	O-Gel: an Effective and Suitable Ultra Sorbent for Oil Spill Cleanup	Copyright CRLY2024W06041 (IP/CR/07111)	Completed (MyIPO) 26/09/2024	Main Inventor (60%)
2	Innovation for Hazardous Area Classification for Dust Explosive Zoning Using Quantitative Method (HAZDEX)	Copyright CRLY2023W03604 (IP/CR/03625)	Completed (MyIPO) 02/01/2024	Co-Inventor (9%)
3	Intensive DOSO (I-DOSO) Module 1a: Lesson Learned MHI Accident	Copyright CRLY2023W03603 (IP/CR/03514)	Completed (MyIPO) 02/01/2024	Co-Inventor (10%)
4	Intensive DOSO (I-DOSO) Module 1b: Understanding CIMA DOSO Guideline	Copyright CRLY2022W04258 (IP/CR/03515)	Completed (MyIPO) 24/03/2023	Co-Inventor (10%)
5	Natural Oil Absorbent	Copyright CRLY2022W04881 (IP/CR/03403)	Completed (MyIPO) 15/05/2023	Co-Inventor (15%)
6	Biotic Scented Candles	Copyright (IP/CR/02798)	Submitted to MyIPO 03/11/2021	Co-Inventor (10%)

No	Title	Type · reference	Status	Role
7	Phoenix Maven Lip Balm	Copyright CRLY2021W04639 (IP/CR/02788)	Completed (MyIPO) 13/09/2022	Co-Inventor (10%)
8	Hydrogel CHARSH (HC) a powerful adsorbent	Copyright	None	
9	Optimising facility siting and layout through mapping risk estimates using SAVii V2	Copyright	None	
10	Smart vapour cloud explosion incident identifier tool analysis (SAVii)	Copyright	None	
11	Wood char: a new sustainable energy resource	Patent (filing)	Filing (per CV)	Inventor

POSTGRADUATE SUPERVISION

23 postgraduate students: PhD – 4 graduated, 4 ongoing; MSc – 11 graduated, 4 ongoing. Main supervisor for 10.

No	Student · programme · thesis	Level	Role	Status
1	Asnida Yanti Binti Ani · AS950 Co-Liquefaction of EFB and HDPE Toward Bio-Oil Product Distributions Under Supercritical Conditions	PhD	Co-supervisor	Ongoing
2	Nor Mohd Razif Bin Noraini · EH950 Development of Biomass-Derived Carbon Aerogel Filter for Respiratory Protective Equipment	PhD	Main supervisor	Ongoing
3	Nur Sya`fiqa Binti Jamaluddin · CEEC950 Life Cycle Assessment on Constructed Wetlands As Sewage Treatment Alternative in Malaysia Towards 2050's Net Zero Emission Target	PhD	Co-supervisor	Ongoing
4	Nurul Nazira Binti Ibrahim	PhD	Co-supervisor	Ongoing
5	Ahmad Yazid Bin Asuat · EH750 Determine the method which would minimize the uncertainty loopholes in IEC 60079-10-2	MSc	Co-supervisor	Ongoing
6	Ashadi Azwan Bin Abd Rahman · EH750 Development of newly improved hydrogel biochar from biomass residue for SO ₂ gas cleaning in a novel multilayered sorption bed	MSc	Main supervisor	Ongoing
7	Nur Adlina Nadia Binti Ahmad Ridzuan · CEEC750 Synergistic Behaviour of Algae, Fungi and Bacteria Utilizing Perfluorinated Alkyl Substances (PFAS) in Water Environment	MSc	Co-supervisor	Ongoing
8	Nurul Shazviena Binti Mohd Shukry · CEEH750 Hybrid hydrogel and aerogel derived from empty fruit bunch (EFB) as hydrogen sulphide (H ₂ S) adsorbent	MSc	Main supervisor	Ongoing
9	Ali Mohammed Saleh · EH950 Production of Carbon Adsorbent from Petroleum Sludge	PhD	Main supervisor	Graduated Sesi 1 2025/2026
10	Deana Qarizada · EH950 Hydrogen Sulphide adsorption by Xerogel from commercialized biochar originated from rice husk	PhD	Main supervisor	Graduated Sesi 2 2023/2024
11	Hadi Hamdi Mahdi · EH950 Capturing of CO ₂ Gas by Adsorption on Activated Carbon for Facing Climate Change	PhD	Main supervisor	Graduated Sesi 2 2025/2026
12	Syarifah Nursyimi Azlina Binti Syed Ismail · AS950 Desulphurisation of Heterocyclic Sulphur Coal via New Combination of Chemical Pre-Treatments	PhD	Co-supervisor	Graduated Sesi 1 2025/2026
13	Ahmad Arif Bin Azmi · EH750 Extraction of precious metal from electroplating waste using plant extract	MSc	Co-supervisor	Graduated Sesi 2 2019/2020
14	Anis Farhanah Binti Mohd Suhaimi Yeong · EH750 Prediction of uncertainty quantification in the impact consequences cause by fire explosion phenomenon at industrial accident scenarios	MSc	Co-supervisor	Graduated Sesi 2 2018/2019
15	Deana Qarizada · EH750 Effect Of Polymer On Solid Deposits In Gas/Oil Fields	MSc	Co-supervisor	Graduated Sesi 2 2018/2019

No	Student · programme · thesis	Level	Role	Status
16	Mohd Saufi Bin Md Zaini · EH750 Natural gas storage with wet adsorbent	MSc	Co-supervisor	Graduated Sesi 2 2015/2016
17	Mozhdah Qaeem · EH750 Study the best MAH option for the identification of accident scenarios in the framework of land use planning	MSc	Co-supervisor	Graduated Sesi 2 2018/2019
18	Muhamad Ariff Bin Amir Hamzah · EH750 Anaerobic Digestion Of Food Waste And Empty Fruit Bunches (EFB) for Mathane Production	MSc	Main supervisor	Graduated Sesi 2 2021/2022
19	Nik Muhammad Faisal Bin Mat Yasin · EH750 Adsorption of Oil (Pome) using Aerogel from EFB and Pks	MSc	Main supervisor	Graduated Sesi 1 2021/2022
20	Nor Hidayah Binti Meri · EH750 Kinetic Modeling Of H ₂ S Hydrogel Bioadsorbent	MSc	Main supervisor	Graduated Sesi 1 2019/2020
21	Norfazilah Binti Abdullah · EH750 Modification of Palm Shell Activated Carbon Adsorbent via Impregnation of Ni Nanoparticles and NH ₃ Induction for H ₂ S Removal	MSc	Co-supervisor	Graduated Sesi 1 2024/2025
22	Nurul Farhana Binti Ahmad · EH750 Upgrading Hydrogel Biochar from Oil Palm Residue for Waste Sorption	MSc	Main supervisor	Graduated Sesi 2 2018/2019
23	Siti Anis Binti Mohd Amran · AS757 Preparation of Adsorbent from Mixed Biomass	MSc	Co-supervisor	Graduated Sesi 2 2018/2019

Undergraduate supervision

- 5 students on Research Project every year
- 6 students on Design Project every year

POSTGRADUATE EXAMINATION & ASSESSMENT PANELS

Thesis examiner (13)

No	Candidate · programme	Thesis / proposal title	Date
1	Siti Nur Ain Mohd Hassan AS990 (PhD) · Applied Sciences	Co-liquefaction of rubber seed and Malaysian low-rank coal for bio-crude production	
2	Siti Nurlia Ali AS990 (PhD) · Applied Sciences	Liquefaction of Mukah Balingian coal using tetralin-glycerol mixed solvent system	
3	Mohammad Saifulddin Mohd Azami AS757 (MSc) · Applied Sciences	Modification and characterization of microwave-assisted interstitial N-doped TiO ₂ for photodegradation of RR4 dye	
4	Mohamad Azman Che Mat Isa EH780 · Chemical Engineering	Chemically produced activated carbon from palm kernel shell for radioactive iodine scrubbing	
5	Nur Ain Mohd Zainuddin EH750 (MSc) · Chemical Engineering	Rapid Expansion Supercritical Solution (RESS) carbon dioxide as an environmentally friendly method for ginger rhizome solid oil particles formation	
6	Hazlin Hamdan EH750 (MSc) · Chemical Engineering	The fuel properties of coal bio-oil slurry	
7	Nurul Syazmimi Hamzah EH750 (MSc) · Chemical Engineering	Thermal behaviour of co-utilisation of Silantek coal and empty fruit bunch using thermogravimetric analysis	
8	Nurul Hazirah Aina Hasnan EH750 (MSc) · Chemical Engineering	Development of palm oil based coating material from unripe oil palm fresh fruit bunch for industrial application; a comparison with epoxidized used cooking oil based coating materials	
9	Mahmod Abdulkarem Abdulqader EH950 (PhD) · Chemical Engineering	Conversion of oily sludge from North Refineries Company (NRC) Baiji into value-added chars: a comparative study of three thermochemical processes	
10	Sopiah Ambong @ Khalid EH950 (PhD) · Chemical Engineering	An integrated phyto-adsorption remediation of acid mine drainage in Tasik Puteri, Bukit Besi	
11	Mohd Saufi Md Zaini CEEH950 (PhD) · Chemical Engineering	Synthesis and optimization of nitrogen-doped activated carbon from palm kernel shells for enhanced lithium polysulfide adsorption in lithium-sulfur batteries	

No	Candidate · programme	Thesis / proposal title	Date
12	Nur Aina Mohd Hasyim Chan CEEH750 (MSc) · Chemical Engineering	Synthesis of xerogel-immobilized N/S/O-doped carbon quantum dots derived from chitosan-based shrimp shells for CO ₂ capture	
13	Wan Nuraishah Wan Ishak CEEH950 (PhD) · Chemical Engineering	ZnO nanoparticles modified by EFB-derived carbon dots for enhanced photocatalytic tetracycline removal	

Proposal defence (DRP) panel (11)

No	Candidate · programme	Thesis / proposal title	Date
1	Muhammad Amirul Bin Rasidi CEEH950	Synthesis of N/S/O-doped chitosan-derived carbon quantum dots immobilized in xerogel for selective CO ₂ adsorption in hydrogen purification	Aug 2025
2	Ahmad Amirul Adlyi Bin Mohamed CEEH750	Development of GaBiF with various ArtiRock filter media configurations	Feb 2025
3	Nuraqilah Binti Hishammuddin CEEH950	Production of biographene from heterogenous food waste via microwave carbonisation-graphitisation-exfoliation technique	Dec 2024
4	Miradatul Nabilah Binti Muhd Rodhi CEEH950	Physicochemical parameters and contaminant removal efficiency mechanism analysis of ArtiRock as a sustainable filter media in improving water quality	Dec 2024
5	Nur Adlina Binti Azhari CEEH750	Control of major accident hazard: conceptual risk assessment and dynamic reliability framework using Bayesian approach	Sep 2024
6	Shaifulazri Bin Zainulabidin CEEH950	Development of societal risk assessment framework for water treatment plant chlorine facility at urban high population density area	Sep 2024
7	Nurul Fatimah Binti Nazua AS757	Ultrasonic assisted desulfurization of organic sulfur of Jambi Province coal using potassium tert-butoxide (KOTBu) and peroxyacetic acid (PAA)	Jun 2023
8	Mohd Zaki Bin Sukor CEEH950	Fuel properties, combustion behavior and kinetics of hydrochar derived from hydrothermal carbonization of palm oil mill sludge	Mar 2023
9	Liyana Yasmin Binti Azhar CEEH750	Carbonates and sulfides ratio for determination of corrosion mechanism in marginal sour environment	Feb 2023
10	Dinna Geraldine Binti Ramlan CEEH950	Top-of-the-line corrosion inhibition mechanism of volatile corrosion inhibitor in water-hydrocarbon co-condensation environment	Feb 2023
11	Nur Faradila Binti Anuar EH950	Removal of antibiotics from aqueous environment by adsorption using palm biomass derived carbonaceous adsorbent	Oct 2021

Proposal defence (DRP) chairman (1)

No	Candidate · programme	Thesis / proposal title	Date
1	Nurul Fatimah Binti Nazua AS757	Ultrasonic assisted desulfurization of organic sulfur of Jambi Province coal	Jun 2023

CONSULTANCY & INDUSTRY ENGAGEMENT

98 consultancy projects worth RM 2,764,009 for about 57 industry and government clients (incl. Petronas Dagangan, Top Glove, Toray, Sarawak Energy, NIOSH, Department of Environment); 2 as project leader. Mainly CIMA safety reports, hazardous-area classification and risk assessment.

Type	Projects	Value
Professional Services	87	RM 2,148,463
Contract Research	4	RM 95,826
Knowledge Transfer Programme	4	RM 276,900
Training	3	RM 242,820
Total	98	RM 2,764,009

No	Project · client	Period / status	Role	Value
1	CIMAH Malay Sino Chloro Alkali Plant, Teluk Kalong Malay-Sino Chemical Industries Sdn Bhd	Feb 2026 – Feb 2027 Appointed	Consultant	RM 19,980

No	Project · client	Period / status	Role	Value
2	CIMAH GES Klang Terminal C3C4 LPG GES Klang Terminal Sdn Bhd	Feb 2026 – Feb 2027 Appointed	Consultant	RM 21,600
3	CIMAH Petronas Melaka MRC Fuel & LPG Terminal Petronas Melaka Fuel & LPG Terminal	Dec 2025 – Jan 2027 Appointed	Consultant	RM 37,368
4	CIMAH Petronas Bay Fuel & LPG Terminal Sepanggar Sabah Petronas Dagangan Berhad	Nov 2025 – Nov 2026 Appointed	Consultant	RM 50,328
5	CIMAH Petronas Kerteh Fuel & LPG Terminal Petronas Dagangan Berhad	Nov 2025 – Nov 2026 Appointed	Consultant	RM 37,368
6	CIMAH Petronas Pasir Gudang Fuel & LPG Terminal Petronas Dagangan Berhad	Nov 2025 – Nov 2026 Appointed	Consultant	RM 39,528
7	CIMAH Petronas Lumut Fuel Terminal Petronas Dagangan Berhad	Nov 2025 – Nov 2026 Appointed	Consultant	RM 37,368
8	CIMAH Westport Klang – IMO Substance Westports Malaysia Sdn Bhd	Oct 2025 – Oct 2026 Appointed	Consultant	RM 30,240
9	CIMAH Ancom Klang Ancom Crop Care Sdn Bhd	Oct 2025 – Oct 2026 Appointed	Consultant	RM 19,980
10	CIMAH Ancom Crop Care Chemicals Toxic Flammable Ancom Crop Care Sdn Bhd	Sep 2025 – Sep 2026 Appointed	Consultant	RM 21,060
11	CIMAH Flexitech Toxic Assessment Flexitech Sdn Bhd (F18B)	Aug 2025 – Aug 2026 Appointed	Consultant	RM 21,924
12	CIMAH Tomoe Ethylene Oxide Kulim Tomoe Malaysia Sdn Bhd	Aug 2025 – Aug 2026 Appointed	Consultant	RM 17,950
13	CIMAH Toray Toxic Flammable Assessment Penang Toray Plastics (Malaysia) Sdn Bhd	Aug 2025 – Aug 2026 Appointed	Consultant	RM 30,132
14	CIMAH Top Glove Toxic Assessment F2 (M02) Top Quality Glove Sdn Bhd (M02)	Aug 2025 – Aug 2026 Appointed	Consultant	RM 17,496
15	CIMAH Top Glove Toxic Assessment F9 Top Glove Sdn Bhd (M09)	Aug 2025 – Aug 2026 Appointed	Consultant	RM 17,496
16	CIMAH Coretech GMC Korea Toxic Flammable Assessment Coretech GMC Sdn Bhd	Aug 2025 – Aug 2026 Appointed	Consultant	RM 18,360
17	CIMAH Top Glove Toxic Assessment F35A TG Medical Sdn Bhd (F35A)	Aug 2025 – Aug 2026 Appointed	Consultant	RM 17,496
18	CIMAH Top Glove Toxic Assessment F13 Top Glove Sdn Bhd (F13)	Aug 2025 – Aug 2026 Appointed	Consultant	RM 17,496
19	CIMAH Top Glove Toxic Assessment F32 Top Quality Glove Sdn Bhd (F32)	Aug 2025 – Aug 2026 Appointed	Consultant	RM 17,496
20	CIMAH Top Glove Toxic Assessment F20 Top Glove Sdn Bhd (F19/20)	Jul 2025 – Jul 2026 Appointed	Consultant	RM 17,496
21	CIMAH Top Glove Toxic Assessment F12 Top Glove Sdn Bhd (F12)	Jul 2025 – Jul 2026 Appointed	Consultant	RM 16,416
22	CIMAH Top Glove Toxic Assessment F22 Top Glove Sdn Bhd (F22)	Jul 2025 – Jul 2026 Appointed	Consultant	RM 17,496
23	CIMAH Top Glove Toxic Assessment F25 GMP Medicare Sdn Bhd (F25)	Jul 2025 – Aug 2026 Appointed	Consultant	RM 17,496
24	CIMAH Terang Nusa Toxic Assessment F40 Terang Nusa (Malaysia) Sdn Bhd (F40)	Jul 2025 – Jul 2026 Appointed	Consultant	RM 17,496
25	CIMAH Top Glove Toxic Assessment F31 Top Quality Glove Sdn Bhd (F31)	Jul 2025 – Jul 2026 Appointed	Consultant	RM 17,496
26	CIMAH Top Glove Toxic Assessment F30 Top Glove Sdn Bhd (F30)	Jul 2025 – Jul 2026 Appointed	Consultant	RM 17,496
27	CIMAH Fuji Electric Kulim – H2O2, H2SO4 (Toxic Dev.) Fuji Electric (Malaysia) Sdn Bhd	Apr 2025 – Dec 2025 Completed	Consultant	RM 25,920
28	CIMAH SSTCM – H2O2 / TYTAN TNBT Storage Facility Sumisaujana TCM Chemicals Sdn Bhd	Apr 2025 – Mar 2026 Appointed	Consultant	RM 21,276
29	CIMAH AT&S Austria Kulim – Oxidizer and Toxic Chemicals AT&S Austria Technologie & Systemtechnik (Malaysia) Sdn Bhd	Jan 2025 – Aug 2025 Appointed	Consultant	RM 25,920
30	CIMAH Tan Sin Lian Industries (Latex Glove) Tan Sin Lian Industries Sdn Bhd	Aug 2024 – Sep 2025 Appointed	Consultant	RM 17,820
31	CIMAH Access World Pasir Gudang Port PM Access World (Malaysia) Sdn Bhd	Aug 2024 – Nov 2025 Appointed	Consultant	RM 21,600

No	Project · client	Period / status	Role	Value
32	CIMAH Fatty Chemical Penang Fatty Chemical (Malaysia) Sdn Bhd	Jun 2024 – Aug 2025 Appointed	Consultant	RM 29,376
33	CIMAH Hextar Kimia Risk Feasibility Study (Explosion Fire) Hextar Kimia Sdn Bhd	May 2024 – May 2025 Completed	Consultant	RM 19,332
34	CIMAH iSHARP Blue Archipelago Chlorine Facility iSHARP Sdn Bhd (Blue Archipelago Bhd)	Feb 2024 – Oct 2024 Completed	Consultant	RM 18,846
35	CIMAH First Solar Manufacturing Plant First Solar Malaysia Sdn Bhd	Feb 2024 – Dec 2024 Completed	Consultant	RM 23,220
36	Intel Electronic (TK EHS Consultancy) Feasibility Study on CIMAH (Toxic and Reactive Material at Processing and Storage Area) TK EHS Consultancy Services Sdn Bhd	Nov 2023 – Nov 2024 Completed	Consultant	RM 35,000
37	Chemstation Distribution Feasibility Study on Control of Major Hazard Installation (Highly Flammable Material Storage Area) Chemstation Distribution Sdn Bhd	Nov 2023 – Nov 2024 Completed	Consultant	RM 30,740
38	Sarawak Energy Berhad Feasibility Study on CIMAH (Explosive Material at Baleh Hydroelectric) Sarawak Energy Berhad	Aug 2023 – Jul 2024 Completed	Consultant	RM 24,500
39	Sime Darby Biodiesel Oils Feasibility Study on CIMAH (Methanol, Sodium Methoxide) Sime Darby Oils Biodiesel Sdn Bhd	Jul 2023 – Apr 2024 Completed	Consultant	RM 30,000
40	CIMAH Infineon 2023 Infineon Technologies (Kulim) Sdn Bhd	Feb 2023 – Aug 2023 Completed	Consultant	RM 17,500
41	Wellkinetics Sime Darby Oil Dust Hazard Analysis Wellkinetics Sdn Bhd	Jan 2023 – Sep 2023 Appointed	Consultant	RM 31,000
42	CIMAH Malay Sino 2022 Malay-Sino Chemical Industries Sdn Bhd	Aug 2022 – Feb 2023 Completed	Consultant	RM 19,080
43	CIMAH OSRAM 2022 Risk Study OSRAM Opto Semiconductors (Malaysia) Sdn Bhd	Jun 2022 – Jun 2023 Completed	Consultant	RM 60,000
44	CIMAH Eastern Steel 2022 Eastern Steel Sdn Bhd	Jun 2022 – Jun 2023 Completed	Consultant	RM 22,790
45	Basic Intensive Course on Understanding Legal Requirement and Abide to CIMAH DOSO Report, Regulation and Guidelines B. Braun Medical Industries Sdn Bhd	Jun 2022 – Jan 2023 Completed	Consultant	RM 7,600
46	CIMAH Tomoe 2022 Tomoe Malaysia Sdn Bhd	May 2022 – May 2023 Completed	Consultant	RM 16,536
47	CIMAH Coretech GMC Coretech GMC Sdn Bhd	Apr 2022 – Dec 2022 Completed	Consultant	RM 18,868
48	CIMAH SSTCM 2022 Teluk Kalong Sumisaujana TCM Chemicals Sdn Bhd	Apr 2022 – Dec 2022 Completed	Consultant	RM 16,006
49	CIMAH Yellow Tulip Onetexx Yellow Tulips Resources	Mar 2022 – Oct 2022 Completed	Consultant	RM 19,060
50	CIMAH Top Glove F10 2022 Top Glove Sdn Bhd (F10)	Mar 2022 – Dec 2022 Completed	Consultant	RM 10,600
51	CIMAH Top Glove F13 2022 Top Glove Sdn Bhd (F13)	Mar 2022 – Dec 2022 Completed	Consultant	RM 16,112
52	CIMAH Top Glove M09 2022 Top Glove Sdn Bhd (M09)	Mar 2022 – Dec 2022 Completed	Consultant	RM 16,112
53	CIMAH Top Glove F11 2022 Top Glove Sdn Bhd (F11)	Mar 2022 – Dec 2022 Completed	Consultant	RM 17,490
54	CIMAH Top Glove F14 2022 Top Glove Sdn Bhd (F14)	Mar 2022 – Dec 2022 Completed	Consultant	RM 14,469
55	CIMAH Top Glove M02 2022 Top Glove Sdn Bhd (M02)	Mar 2022 – Dec 2022 Completed	Consultant	RM 16,112
56	CIMAH Top Glove F31 2022 Top Glove Sdn Bhd (F31)	Mar 2022 – Dec 2022 Completed	Consultant	RM 17,490
57	CIMAH Top Glove F3 & F35A 2022 TG Medical Sdn Bhd	Mar 2022 – Dec 2022 Completed	Consultant	RM 30,150
58	CIMAH Toray 2022 Toray Plastics (Malaysia) Sdn Bhd	Feb 2022 – Dec 2022 Completed	Consultant	RM 34,588
59	CIMAH SSTCM 2022 Shah Alam Sumisaujana TCM Chemicals Sdn Bhd	Dec 2021 – Dec 2022 Completed	Consultant	RM 18,060

No	Project · client	Period / status	Role	Value
60	CIMAH Report Venator Sdn Bhd 2021 Venator Asia Sdn Bhd	Jun 2021 – Dec 2021 Completed	Consultant	RM 18,920
61	CIMAH Report Terang Nusa (M) Sdn Bhd Terang Nusa (Malaysia) Sdn Bhd (F37CD)	Jun 2021 – Dec 2021 Completed	Consultant	RM 20,416
62	CIMAH Report Purnabina Sdn Bhd Purnabina Sdn Bhd (F37AB, Top Glove member company)	Jun 2021 – Jan 2022 Completed	Consultant	RM 17,988
63	CIMAH Averex Technology Sdn Bhd Averex Technology Sdn Bhd	May 2021 – Dec 2021 Completed	Consultant	RM 18,600
64	HAC Top Synthetic Rubber Sdn Bhd, Banting Top Synthetic Rubber Sdn Bhd	Dec 2020 – Dec 2021 Completed	Consultant	RM 77,000
65	CIMAH Top Glove F32 Top Quality Glove Sdn Bhd (F32)	Dec 2020 – Dec 2021 Completed	Consultant	RM 28,000
66	CIMAH Top Glove F38 Kulim Sentienx Sdn Bhd (F38A1)	Dec 2020 – Dec 2021 Completed	Consultant	RM 20,550
67	CIMAH Top Glove F5C Ipoh Top Quality Glove Sdn Bhd (F5C)	Dec 2020 – Dec 2021 Completed	Consultant	RM 20,650
68	CIMAH Fatty Chemical (Malaysia) Sdn Bhd Fatty Chemical (Malaysia) Sdn Bhd	Dec 2020 – Dec 2021 Completed	Consultant	RM 34,000
69	CIMAH Silterra Malaysia Sdn Bhd Silterra Malaysia Sdn Bhd	Dec 2020 – Dec 2021 Completed	Consultant	RM 18,000
70	CIMAH Top Glove Flexitech F18 Flexitech Sdn Bhd (F18B)	Sep 2020 – Dec 2021 Completed	Consultant	RM 25,200
71	SGS HAC Assessment ADA Cosmetics International SGS (Malaysia) Sdn Bhd	Jun 2020 – Dec 2020 Completed	Consultant	RM 20,000
72	CIMAH Top Synthetic Rubber Plant Top Synthetic Rubber Sdn Bhd	Jun 2020 – Feb 2021 Appointed	Consultant	RM 45,000
73	CIMAH Kong Long Huat Westport Bulk Liquid Kong Long Huat Chemicals Sdn Bhd	Jun 2020 – Jan 2021 Completed	Consultant	RM 17,950
74	CIMAH Sun Everywhere Kulim Sun Everywhere Sdn Bhd (formerly Panasonic Energy)	Mar 2020 – Jul 2020 Completed	Consultant	RM 24,200
75	CIMAH iSHARP Blue Archipelago Bhd 2020 iSHARP Sdn Bhd (subsidiary of Blue Archipelago Bhd)	Mar 2020 – Dec 2020 Completed	Consultant	RM 18,000
76	Basic Intensive Course on Understanding Legal Requirement and Abide to CIMAH Report, Regulation and Guidelines (Theory, Assessment and Practical) Top Glove Sdn Bhd	Mar 2020 – Dec 2020 Appointed	Consultant	RM 107,820
77	CIMAH Infineon Kinetics System Malaysia Sdn Bhd for Infineon Kulim Hi-Tech	Feb 2020 – Jul 2020 Completed	Consultant	RM 16,900
78	Preparation of GAP Analysis for Hazardous Area Classification of Combustible Dusts Atmosphere – HAC Study (EPFM City Side and Sea Side Mill) SGS (Malaysia) Sdn Bhd for PT Eastern Pearl Flour Mills, Makassar, Indonesia	Feb 2020 – Aug 2020 Completed	Consultant	RM 40,000
79	Preparation of GAP Analysis for Hazardous Area Classification of Combustible Dusts Atmosphere – HAC Study (Grand Golden Mills, GGM I) SGS (Malaysia) Sdn Bhd for PT Grand Golden Mills, Banten, Indonesia	Feb 2020 – Sep 2020 Completed	Consultant	RM 32,200
80	Consultancy Services for Preparation of FERA (Fire and Explosion Risk Assessment) Based on Site Survey, Including HAC Review, Audit of Work Practices, Procedures, Physical Conditions and H&S Management System SGS (Malaysia) Sdn Bhd for Fonterra Brands Malaysia	Feb 2020 – Sep 2020 Completed	Consultant	RM 14,200
81	Laboratory Test of Earth Enhancing Compounds (EEC) UPM Consultancy and Services	Aug 2019 – Nov 2019 Completed	Consultant	RM 45,750
82	CIMAH Report for Tomoe Malaysia Sdn Bhd Tomoe Malaysia Sdn Bhd	May 2019 – Nov 2019 Completed	Consultant	RM 17,000
83	Malay Sino Telok Kalong Kemaman CIMAH Report Malay-Sino Chemical, Teluk Kalong, Kemaman	Jan 2019 – Apr 2019 Completed	Consultant	RM 24,900
84	CIMAH Behn Meyer Chemical Sdn Bhd Behn Meyer Chemical (M) Sdn Bhd	Nov 2018 – Mar 2019 Completed	Consultant	RM 20,000
85	CIMAH Technical Safety Report for Venator (Huntsman P & A Asia Sdn Bhd) Venator (Huntsman P & A) Sdn Bhd	Mar 2018 – Jun 2018 Completed	Consultant	RM 25,546
86	CIMAH Technical Safety Report for Flexitech Top Glove Sdn Bhd Flexitech Sdn Bhd (Top Glove subsidiary)	Nov 2017 – Feb 2018 Completed	Consultant	RM 30,210
87	Course for Professional Consequences Quantitative Risk Assessor in the Installation of Major Hazardous Material in Industrial Plant Part 1 Multi Clients	Oct 2017 – Dec 2017 Completed	Consultant	RM 90,000

No	Project · client	Period / status	Role	Value
88	Understanding Legal Requirement and Abide to CIMA Report and Regulation Multi Clients	Oct 2017 – Oct 2017 Completed	Consultant	RM 45,000
89	Design an Integrated Biomass Gasification System for Co-Generation System and Power Generation UPM Holdings	May 2017 – Oct 2017 Terminated	Project Leader	RM 38,478
90	Development of Top of the Line Corrosion (TLC) Experimental Glass Cell Setup Daya Secadyme Sdn Bhd	May 2017 – May 2018 Completed	Consultant	RM 70,000
91	CIMAH SSTCM Chemical (M) S/B SSTCM Chemical (M) Sdn Bhd	Mar 2017 – Jun 2019 Completed	Consultant	RM 21,400
92	CIMAH Safety Report I-Sharp Sdn Bhd i-Sharp Sdn Bhd	Oct 2016 – Jan 2017 Completed	Consultant	RM 33,000
93	Pembangunan Kepakaran TMDL (Total Maximum Daily Load) Data-Data Punca Pencemaran di Sungai Langat Jabatan Alam Sekitar Malaysia	Aug 2016 – Aug 2016 Completed	Consultant	RM 6,000
94	Kajian Penaiktarafan dan Penjenamaan Semula R&D dan Pembangunan Standard Keselamatan dan Kesihatan Pekerjaan (KKP) National Institute of Occupational Safety and Health (NIOSH)	Apr 2016 – Sep 2017 Terminated	Project Leader	RM 30,000
95	Expert Services for AMPE2015 Computational Intelligence Resources	Aug 2015 – Dec 2015 Completed	Consultant	RM 5,000
96	Plant Operation Training Programme 2015 Schaefer Kalk (M) Sdn Bhd	Jan 2015 – Dec 2015 Completed	Consultant	RM 85,400
97	Plant Operators Training Programme 2 Emery Oleochemicals (M) Sdn Bhd	May 2014 – Dec 2014 Completed	Consultant	RM 74,500
98	Plant Operators Training Programme Emery Oleochemicals (M) Sdn Bhd	May 2013 – Dec 2014 Appointed	Consultant	RM 111,000

AWARDS & RECOGNITION

33 awards, including 13 gold medals at national and international innovation exhibitions (Geneva, London, ITEX) and the Obelisk World Invention Award (overall winner, British Invention Show 2008).

Research & innovation awards

Year	Award	Organisation / event
2024	Gold Award – OREGG: Organic Catalyst for Biodiesel Synthesis	Invention, Innovation & Design Exposition (iindex 2024), UiTM
2024	Silver Award – O-GEL: Revolutionary Sorbent for Oil Spill Clean-up and Pollutant Gas Capture	Invention, Innovation & Design Exposition (iindex 2024), UiTM
2024	Best Research Group Award – INPRES (Group Head)	DNA Penyelidikan @ KPK 2024, College of Engineering, UiTM
2024	Most Publications Award (overall)	DNA Penyelidikan @ KPK 2024, College of Engineering, UiTM
2022	Gold Medal	InTEX 2022
2017	Silver Medal	ITEX 2017
2016	Gold Medal	IID UiTM
2016	Gold Medal	ITEX 2016
2015	Gold Medal	IIDEX 2015, UiTM
2011	Bronze Medal	Malaysia Technology Expo 2011
2010	Gold Medal	IID, UiTM
2009	Gold Medal	British Invention Show, London
2009	Gold Medal	IID, UiTM
2008	Bronze Medal	ITEX 2008
2008	Vice Chancellor Award	Research Management Institute, UiTM
2008	Research Excellence Award 2008	Faculty of Chemical Engineering, UiTM
2008	Obelisk – The World Invention Award (Overall Winner)	British Invention Show 2008, London
2008	Gold Medal	British Invention Show 2008, London

Year	Award	Organisation / event
2008	Gold Medal	19th International Invention, Innovation & Technology Exhibition (ITEX 2008), Kuala Lumpur
2008	Silver Medal	Inventions, Innovation & Designs (IID) 2008, UiTM
2008	Gold Medal	Inventions, Innovation & Designs (IID) 2008, UiTM
2007	Silver Medal	Design, Research and Innovation Exhibition (PRPI) 2007, Universiti Putra Malaysia
2005	Excellent Scientist Award 2005	Ministry of Science, Technology and Innovation (MOSTI), Malaysia
2005	Gold Medal	33rd International Exhibition of New Techniques & Products, Geneva
2005	Excellent Innovation Award	Universiti Teknologi MARA
2005	Research Excellence Award	Universiti Teknologi MARA
2004	Gold Medal	Malaysia Public University Expo of Science, Technology & Innovation

Academic & service awards

Year	Award	Organisation / event
2024	Best MOOC Award (Science & Technology) – Process Modelling for Chemical Engineering	International e-Content Development (e-CONDEV), UiTM
2023	Anugerah Perkhidmatan Cemerlang (Excellent Service Award)	UiTM
2016	Anugerah Perkhidmatan Cemerlang (Excellent Service Award)	UiTM
2016	Pencapaian Cemerlang – Lecturer's Professionalism Monitoring (PRO-PENS)	UiTM
2014	Best Design Project Presentation Group	Faculty of Chemical Engineering, UiTM
2008	Anugerah Perkhidmatan Cemerlang (Excellent Service Award)	UiTM

PROFESSIONAL & SCHOLARLY SERVICE

Editorial board

- Malaysian Journal of Chemical Engineering and Technology (MJCET), 2017

Journal reviewer

- Energy (Q1): Experimental investigation of thermal characteristics of Kiwira coal waste with rice husk blends for gasification
- Fuel Processing Technology (Q1): Oxidative desulfurization of model diesel using a Fenton-like catalyst in ionic liquid
- Fuel Processing Technology (Q1): Co-pelletization of sewage sludge and biomass: thermogravimetric analysis and ash deposits
- Fuel Processing Technology (Q1): Interaction between coal and distillation residues of coal tar during co-pyrolysis
- Journal of Cleaner Production (Q1): Analysis of combined charcoal and torrefied biomass fuel production as alternative for residual biomass valorisation in the palm oil industry

Conference reviewer

- International Conference on Global Sustainability and Chemical Engineering (ICGSCE), 2014 and 2017
- Advanced Research Materials 2015
- International Conference on Advanced Mechanics, Power and Energy 2015 (AMPE2015)

Grant reviewer

- Research grant panel examiner – LESTARI, UiTM
- Research grant panel examiner – GIP, UiTM
- Research grant panel examiner – BESTARI, UiTM
- Research grant panel examiner – FRGS (Faculty, UiTM and MOHE)
- Research grant panel examiner – PRGS, UiTM

TEACHING & PROFESSIONAL TRAINING

Course taughts

Solid Waste Management (final year) · Waste Management in Petrochemical Industries (final year) · Process Safety · Chemical Process Principles 1 · Chemical Process Principles 2 · Mass and Energy Balance · Strength of Materials

Professional course developeds

Solid Waste Engineering · Waste Management in Petrochemical Industries · Waste Management in Polymer Industries · Waste Management in Oleochemical Industries · Introduction to Total Maximum Daily Load (TMDL) – Department of Environment (DOE) Malaysia · Plant Operator Training Programme: Unit Operation – Emery Oleochemicals Sdn Bhd · Plant Operator Training Programme 2: Unit Operation – Schaefer Kalk (M) Sdn Bhd

Professional course attendeds

OHS & Environmental Roles & Responsibilities · Risk Management · Health & Safety Representatives Training · Chemical Management · Code of Ethics / Regulations · Engineering Management Practice · Safety and Health at Work