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A. PERSONAL DETAILS

UMK JOIN DATE	03-May-2010
DATE OF APPOINTMENT FOR CURRENT POSITION	18-Apr-2017
DATE OF CONFIRMATION FOR CURRENT POSITION	14-Aug-2019
EDUCATION(S)	• **()** INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM • **(2017) UNIVERSITI TEKNOLOGI MALAYSIA** IJAZAH DOKTOR FALSAFAH KIMIA • **(2009) UNIVERSITI KEBANGSAAN MALAYSIA** IJAZAH SARJANA FIZIK GUNAAN SAINS NUKLEAR • **(2006) UNIVERSITI KEBANGSAAN MALAYSIA** IJAZAH SARJANA MUDA FIZIK GUNAAN SAINS NUKLEAR • **(2001) SEKOLAH MENENGAH UGAMA (ARAB) MAAHAD MUHAMMADI LELAKI** SPM
GROUP OF EXPERTISE	• Computational Linguistic in Machine Learning (F0708010902) • High Energy Physics (F0702010515) • Nano Structured Materials (F0708030101) • Nanomanufacturing (F0708030102) • Nuclear Properties and Data (F0702030101) • Other Biomaterials N.E.C (F0708070799) • Polymer-based Composites (F0708070902) • Radiation Protection and Dosimetry (F0702030209) • Soft Matters (F0702020107)
AWARD(S)	• Award Name: **Anugerah Perkhidmatan Cemerlang (APC) 2019 (2020)** Awarded by: Universiti Malaysia Kelantan • Award Name: **Anugerah Gemilang Universiti 2018 - Penerbitan Harapan (2019)** Awarded by: Universiti Malaysia Kelantan
WORKING EXPERIENCE(S)	• Pegawai Sains | Akademi Sains Malaysia 01-Aug-2006 - 31-Dec-2006
PROFESSIONAL MEMBERSHIP(S)	• LEMBAGA TEKNOLOGIS MALAYSIA | MEMBER | NATIONAL 04-Mar-2026 - 04-Mar-2027 • INSITUT KIMIA MALAYSIA | MEMBER | NATIONAL 31-Dec-2025 - 31-Dec-2026 • LEMBAGA TEKNOLOGIS MALAYSIA | MEMBER | NATIONAL 13-Feb-2025 - 13-Feb-2026 • INSITUT KIMIA MALAYSIA | MEMBER | NATIONAL 31-Dec-2024 - 31-Dec-4048 • LEMBAGA TEKNOLOGIS MALAYSIA | MEMBER | NATIONAL 04-Mar-2024 - 04-Mar-2025

B. TEACHING-LEARNING ACTIVITIES

COURSES TAUGHT	• BFT1083 - BASIC MATHEMATICS • BFT1103 - BASIC PHYSICS • BIT3153 - BIO PRODUCT DEVELOPMENT • EFT1053 - CALCULUS • EFT1063 - ALGEBRA • EFT1103 - BASIC PHYSICS • EME2273 - MATERIAL AGRO TECHNOLOGY • EME3263 - MATERIALS IN MEDICINE • EMT2082 - BIOMATERIALS RESOURCES • EMT3202 - MEMBRANE TECHNOLOGY • EMT3243 - RESEARCH PROJECT I • EMT3323 - ADVANCES IN MATERIALS TECHNOLOGY • EMT4198 - INDUSTRIAL TRAINING • EMT4253 - RESEARCH PROJECT II • EWT3163 - RESEARCH PROJECT I • EWT4183 - RESEARCH PROJECT II • JFT10503 - FUNDAMENTALS OF TECHNOLOGY • JFT20302 - STUDENT IN ENTERPRISE PROGRAMME • JMT21302 - MATERIALS DESIGN I

C. RESEARCH AND DEVELOPMENT

1. Chang-In T., Praksong K., Senusi N.A.M., Nor Hakimin Abdullah, Boonrasri S., Suchat S.. (2026-07). Antimicrobial biofunctional natural rubber nanocomposites reinforced with a synergistic hybrid filler for medical glove applications. South African Journal of Chemical Engineering , Vol. 57 . https://doi.org/10.1016/j.sajce.2026.100914
2. Senusi N.A.M., Ahmad Zul Izzi Fauzi, An'amt Mohamed Noor, Shukri N.M., Razab M.K.A.A., Makhtar M.F., Ismardi A., Nor Hakimin Abdullah. (2026-06). Preparation and Characterization of PVA/Cellulose Nanocrystals/¿-Poly-L-Lysine Biocomposites for Post-Harvest Preservation of Chillies. Malaysian Journal of Microscopy , Vol. 22 (1) , pp. 23-35.
3. Johnsi M., Dhivya S., Deephika B., Balasubramanian N., Nor Hakimin Abdullah, Nurul Akmar Che Zaudin. (2025-12). Correction: Boosting the performance of PVA/LiClO4 based biopolymer electrolyte using Coffea Arabica waste in Li-ion conducting battery system (Emergent Materials, (2025), 10.1007/s42247-025-01217-2). Emergent Materials , Vol. 8(8) , pp. 8029. https://doi.org/10.1007/s42247-025-01285-4
4. Nur Adriana Mohd Nor Azam, Chong Hui Min, Abdorreza Mohammadi Nafchi, Nor Hakimin Abdullah, Wan Nazwanie Wan Abdullah. (2025-08-25). Extraction and Physicochemical Characterization of Microcrystalline Cellulose from Oil Palm Empty Fruit Bunches. Malaysian Journal of Chemistry , Vol. 27(4) , pp. 95-104. https://doi.org/10.55373/mjchem.v27i4.95
5. Suchat, Sunisa, Praksong, Kanokwan, Muangprathub, Jirapond, Srisawat, Theera, Nor Hakimin Abdullah, Boonrasri, Siwarote. (2025). Agricultural performance of biomaterials mulching based on nitrosamine-free natural rubber latex. Green Materials , Vol. 13(3) , pp. 183 - 195. https://doi.org/10.1680/jgrma.24.00021
6. Hadzuan F.H.M., Adam N., Nawi N.M., Abdullah, N. H., Noor A.M., Sunaiwi R., Shari N.A.S., Rusli H.M., Mazlan N.A.M.C., Razab M.K.A.A.. (2025). I Radionuclide Isolation using Graphene Oxide and Coconut Shell Activated Carbon for Alternative Radioactive Wastewater Management in RAI Therapy. Journal of Applied Bioanalysis , Vol. 11(3) , pp. 159 - 173. https://doi.org/10.53555/jab.v11i3.231
7. Ismardi, Abrar, Aprilio Gunawan, Luthfi, Winarsih, Suci, Jatmika, Jumaeda, Viktoria Manurung, Robeth, Wahyudhin Fathona, Indra, Suhendi, Asep, Abdullah, N. H., Maulida, Sabrina, Alifannisa Putri, Fadya, Wahyu Prihadni, Imaniar, Nur Fariz, Bachtiar. (2024). Detection of highly sensitive Escherichia coli (E. coli) bacteria using an electrochemical sensor based on zinc oxide/polyvinyl alcohol nanocomposite. Microchemical Journal , Vol. 207 . https://doi.org/10.1016/j.microc.2024.112044
8. Ismardi A., Lestari V.P., Abdullah, N. H., Fathona I.W., Gunawan T.D.. (2023). ZnO Nanostructure Synthesized by Hydrothermal Method for Butane Gas Sensor. International Journal on Advanced Science, Engineering and Information Technology , Vol. 13(3) , pp. 816-821. https://doi.org/10.18517/ijaseit.13.3.18419
9. Mohammad Khairul Azhar Abdul Razab, Nawi, Norazlina Mat, Hadzuan, Fara Hana Mohd, Abdullah, N. H., Muhamad, Maimanah, Sunaiwi, Rosidah, Ibrahim, Fathirah, Farah Amanina Mohd, Noor A.M.. (2022-04). Fluorine-18 Fluorodeoxyglucose Isolation Using Graphene Oxide for Alternative Radiopharmaceutical Spillage Decontamination in PET Scan. Sustainability (Switzerland) , Vol. 14 (8) . https://doi.org/10.3390/su14084492
10. Shohaimi N.A.M., Harun N.S.C., Tajudin H.S.,, Abu Bakar W.A.W., Shukri N.M., Abdullah, N. H., Ab Halim A.Z.. (2022). Catalytic Neutralization Of Acidic Petroleum Crude Oil Utilizing 2-Methylimidazole With Addition Of Cu/Ce (10:90)/Al2o3 Catalyst [Peneutralan Pemangkin Minyak Mentah Petroleum Berasid Menggunakan 2-Metilimidazol dengan Tambahan Mangkin Cu/Ce(10:90)/Al2O3]. Malaysian Journal of Analytical Sciences , Vol. 26 (1) , pp. 152 - 163.
11. Shohaimi, Norshahidatul Akmar Mohd, Harun, Noraini Safar Che, Tajudin, Hisyam Saufi, Abu Bakar, Wan Azelee Wan, Shukri, Nurasmat Mohd, Abdullah, Nor Hakimin, Ab Halim, Ahmad Zamani. (2022). Catalytic Neutralization of Acidic Petroleum Crude Oil Utilizing 2-Methylimidazole with Addition of Cu/Ce(10:90)/Al2O3 Catalyst [Peneutralan Pemangkin Minyak Mentah Petroleum Berasid Menggunakan 2-Metilimidazol dengan Tambahan Mangkin Cu/Ce(10:90)/Al2O3]. Malaysian Journal of Analytical Sciences , Vol. 26 (1) , pp. 152 - 163.
12. Shari, NAS, Razab, MKAA, Noor A.M., Mocktar, NA, Ghani, RSM, Aziz, MZA, Abdullah, NH. (2022). Internal bonding microstructures characterisation between plant nanocellulose and concrete mortar mixtures for indoor Radon-222 gas emanation reduction. Construction and Building Materials , Vol. 350 , pp. 128841. https://doi.org/10.1016/j.conbuildmat.2022.128841
13. Harun N.S.C., Shohaimi N.A.M., Daud S., Abdullah, N. H., Shukri N.M., Halim A.Z.A., Abdullah W.N.W.. (2022). The Treatment of Acidic Petroleum Crude Oil Assisted by Ca/Al2O3 Catalyst. Malaysian Journal of Chemistry , Vol. 24(2) , pp. 70-78.

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Sains Malaysiana , Vol. 50 (11) , pp. 3263 - 3273. https://doi.org/10.17576/jsm-2021-5011-10 17. Lazim, AM, Sharlina, MSE, Azfaralariff, A, Yaacob, WA, Lim, SJ, Fazry, S, Mohamed, M, Abdullah, NH. (2021-09). Structure, physicochemical and toxicity properties of underused malaysian native Tuber's starch (Dioscorea Pentaphylla). Journal of King Saud University - Science , Vol. 33(6) . https://doi.org/10.1016/j.jksus.2021.101501 18. Abdullah, NH, Mohamed, M, Shohaimi, NAM, Lazim, AM, Halim, AZA, Shukri, NM, Razab, MKAA. (2021-08). Enhancing the decolorization of methylene blue using a low-cost super-absorbent aided by response surface methodology. MOLECULES , Vol. 26 (15) , pp. 1 - 14. https://doi.org/10.3390/molecules26154430 19. Harun N.S.C., Shohaimi N.A.M., Halim A.Z.A., Nor Hakimin Abdullah, Shukri N.M.. (2021-06). The application of K /Al2O3with ethanolic 2-metylimidazole for the extraction of naphthenic acid from crude oil. 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International Journal of Electroactive Materials , Vol. 13 , pp. 45-51. 25. Nur Fadhlin Syakina Zailani, Mohamad Bashree Abu Bakar, Nik Alnur Auli Nik Yusuf, Nor Hakimin Abdullah, Hafsat Ronke Saliu. (2025-06-30). Effect of Banana Peel and Titanium Dioxide Hybrid Fillers on Natural Weathering Degradation of Unsaturated Polyester Resin Biocomposites. Malaysian Journal of Bioengineering and Technology (MJBeT) , Vol. 2(2) , pp. 99-105. https://doi.org/10.70464/mjbet.v2i2.1617 26. Arlina Ali, Hidayani Jaafar, Nadiah Ameram, Muhammad Azwadi Sulaiman, Nor Hakimin Abdullah, Nik Alnur Auli Nik Yusuf. (2025-03). Effect of Structural, Optical, and Antibacterial Properties of Various Zinc Oxide Morphologies. Malaysian Journal of Bioengineering and Technology (MJBeT) , Vol. 2(1) , pp. 29-35. https://doi.org /10.70464/mjbet.v2i1.1545 27. Ahmad Zul Izzi Bin Fauzi, Muhammad Iqbal Ahmad, Lim,Kar Keng, Jaaffar, Amar Hisham, Azfi Zaidi Mohammad Sofi, Nor Hakimin Abdullah, Sarizam Mamat. (2024-12-20). 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Sharumitha Murugan, Nor Hakimin Abdullah, Andi Hermawan, Nurul Akmar Che Zaudin, Norshahidatul Akmar Mohd Shohaimi, Ahmad Zamani Ab Halim, Nurasmat Mohd Shukri, Abrar Ismardi. (2024). Preparation and Characterization of Polyvinyl Alcohol (PVA) / Cellulose Nanocrystal (CNC) / Zinc Oxide (ZnO) Nanocomposites. The International Journal of Electroactive Materials , Vol. 12 , pp. 50-55. 31. Nur Aiman Mohamad Senusi, Mohd Firdaus Makhtar, Sharumitha Murugan, Nor Hakimin Abdullah. (2023). A Brief Review on the Application of Bio-Nanocomposites for Fresh Food Coating. International Journal of Electroactive Materials , Vol. 11 , pp. 44-53. 32. Nik Alnur Auli Nik Yusuf, Mahani Yusoff, Nor Hakimin Abdullah, Nadiah Ameran, Nur Sakinah Mohamed Tamat, Arlina Ali, Mohamad Bashree Abu Bakar, Nik Nurul Anis Nik Yusoff, Norfadhilah Ibrahim. (2023). Impact of Titanium Dioxide with Industrial Food Waste on Bio-polymer Matrix of Banana Peel from Agricultural Waste: A review. International of Electroactive Materials , Vol. 11 , pp. 54-59.
	1. Nor Hakimin Abdullah, Razab M.K.A.A., Shukri N.M., Arlina Ali, Andi Hermawan, Ismardi A.. (2025-02-25). Effect of cellulose nanocrystals (CNC)/ZnO as hybrid filler in polyvinyl alcohol (PVA) matrix for food packaging application. In AIP Conference Proceedings . American Institute of Physics. https://doi.org/10.1063/5.0258533 2. Misran N.I.A., Salleh N.F.M., Abdullah W.N.W., Shohaimi N.A.M., Nor Hakimin Abdullah, Halim A.Z.A., Shukri N. M.. (2025-02-25). Adsorptive removal of lead, cadmium and arsenic ions from shortfin scad fish, Decapterus Macrosoma using banana trunk and tea waste. In AIP Conference Proceedings . American Institute of Physics. https://doi.org/10.1063/5.0258539 3. Razab M.K.A.A., Aziz S.A.A., Ali N.K.Y., Juaini N.S.M., Zakaria N.I., Haris N.A., Samsudin N.C., Rusli H.M., Nor Hakimin Abdullah, An'amt Mohamed Noor, Zulhisyam Abdul Kari, Guru A.. (2025-02-25). Detection of UV-C (200 nm to 280 nm) using GaN photodiode detector for UV robot performance. In AIP Conference Proceedings . American Institute of Physics. https://doi.org/10.1063/5.0258938

PROCEEDING(S)

4. Senusi N.A.M., Abdullah W.N.W., Shukri N.M., Razab M.K.A.A., Ismardi A., Nor Hakimin Abdullah. (2025). Optimization of the Processing Parameters On The Tensile Strength of Polyvinyl Alcohol/Cellulose Nanocrystals Biocomposites for Potential Food Packaging Application. In Journal of Physics: Conference Series . Institute of Physics. https://doi.org/10.1088/1742-6596/2942/1/012040
5. Senusi N.A.M., Ulaganathan R.K., Shohaim N.A.M., Halim A.Z.A., Shukri N.M., Amin M.A.M., Ismardi A., Abdullah, N. H.. (2024-03). Effect of extracted microcrystalline cellulose on PVA/microcrystalline cellulose biocomposite. In AIP Conference Proceedings . American Institute of Physics. https://doi.org/10.1063/5.0149317
6. Nik Alnur Auli Nik Yusuf, Mahani Yusoff, Nor Hakimin Abdullah, Nadiah Ameram, Sakinah Mamat, Arlina Ali, Mohamad Bashree Abu Bakar. (2024). The preliminary study of applications waste banana peel and egg shell filler as agricultural waste for paper applications. In BIO Web of Conferences . EDP Sciences.
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9. Ismardi, A., Nasir, M., Khoiri, M., Abdullah, N. H., Gunawan, L. A., Rafsanjani, M. F. A., Mayundri, A. S. F., Gunawan, T. D.. (2023). Optical Properties of TiO2 Doped ZnO-PVA Nanocomposites. In Journal of Physics: Conference Series . Institute of Physics. https://doi.org/10.1088/1742-6596/2622/1/012018
10. Fairuz F.S.M., Shukri N.M., Abdullah W.N.W., Salleh N.F.M., Muslim N.Z.M., Shohaimi N.S.A.M., Abdullah, N. H., Halim A.Z.A.. (2022-06-09). A study on adsorption technique for removal of Pb2+from an aqueous solution by using different types of soil. In 2021 International Conference on Bioengineering and Technology, IConBET2021 . American Institute of Physics Inc.. https://doi.org/10.1063/5.0078586
11. Hamzah N.S.A., Shukri N.M., Abdullah W.N.W., Salleh N.F.M., Muslim N.Z.M., Fairuz F.S.M., Shohaimi N.A.M., Abdullah, N. H., Halim A.Z.A.. (2022-06-09). Detoxification of heavy metals from E. affinis using chelation technique. In 2021 International Conference on Bioengineering and Technology, IConBET2021 . American Institute of Physics Inc.. https://doi.org/10.1063/5.0078581
12. Rosdi N.A.M., Bakar M.B.A, Mohamed, M, Abdullah, N. H., Mohd, S. H.. (2022). Effect of cellulose nano crystal and graphene nano platelets on thermal properties of unsaturated polyester resin reinforced kenaf fibre biocomposites. In AIP Conference Proceedings . American Institute of Physics Inc.. https://doi.org/10.1063/5.0078578
13. Che Zaudin, N. A., Sulaiman, Nurul Syahida, Ting, Teo Chai, Ramle, S.F.M., Abdullah, N. H., Boon, J. G.. (2022). Development and Characterization of N anoemulsion Containing Essential Oil of Piper betle as the Active Ingredient Via Low Energy Emulsification Method. In AIP Conference Proceedings . AIP Conference Proceedings. https://doi.org/10.1063/5.0078522
14. Ting, Teo Chai, Abdullah, N. H., Ramle, S.F.M., Sofi, A. Z. M., Zaudin N.A.C.. (2022). Development of Piper betle nanoemulgel formulation for effective droplet size reduction and excellent stability. In AIP Conference Proceedings . American Institute of Physics Inc. https://doi.org/10.1063/5.0078521
15. Razab M.K.A.A., Nawi N.M., Khaizul A.T., Samsuddin N.Y., Shukri S.I., Azhar M.A., Aziz I.A., Noor A.M., Abdullah, N. H., Kari, Z.A.. (2022). Kinetic study of 131I extraction using oil palm kernel shell activated carbon for clinical nuclear waste management. In AIP Conference Proceedings . American Institute of Physics Inc.. https://doi.org/10.1063/5.0078758
16. Shohaimi N.A.M., Hassan S.N.A., Shukri N.M., Abdullah, N. H., Halim A.Z.A.. (2022). Nickel doped calcium heterogeneous catalyst for extraction of naphthenic acid from crude petroleum oil. In AIP Conference Proceedings . American Institute of Physics Inc.. https://doi.org/10.1063/5.0078635
17. Ramli, Hasna Hanis, Sofi, A. Z. M., Sobri, S.A., Adli, H.K., Zaudin N.A.C., Abdullah, N. H., Noor A.M., Hermawan, A., Wong, K.N.S.S., Ibrahim M.A.H., Mamat, S., Yusoff A.H.. (2022). An analysis of organic compost from food waste: A case under tropical climate conditions at Kelantan, Malaysia. In AIP Conference Proceedings . American Institute of Physics Inc.. https://doi.org/10.1063/5.0079080
18. Abdullah, N. H., Mokhtar, W. N. A. W., Razab, M. K. A. A., Noor A.M., Zaudin N.A.C., Rasat, M.S.M., Amin M.F. M., Ismardi, A. (2022). Effect of cellulose nanocrystals (CNC) on thermal properties of polyvinyl alcohol (PVA) /CNC biocomposites. In AIP Conference Proceedings . American Institute of Physics Inc.. https://doi.org/10.1063/5.0078572
19. Harun, Noraini Safar Che, Shohaimi, Norshahidatul Akmar Mohd, Daud, Shaari, Abdullah, Nor Hakimin, Shukri, Nurasmat Mohd, Halim, Ahmad Zamani Ab. (2022). The effectiveness of K/Al2O3 and Ca/Al2O3 heterogeneous catalysts in the extraction of naphthenic acid from petroleum crude oil. In AIP Conference Proceedings . American Institute of Physics Inc.. https://doi.org/doi.org/10.1063/5.0078633
20. Mohamad Senusi N.A., Ulaganathan R.K., Mohd Shohaimi N.A., Ab Halim A.Z., Mohd Shukri N., Mohd Amin M. A., Ismardi A., Abdullah, N. H.. (2022). Effect of CNT/CNC hybrid nanofiller on PVA/CNT/CNC nanocomposite. , pp. 3087 - 3091. Elsevier Ltd. https://doi.org/10.1016/j.matpr.2022.08.008
21. Ulaganathan R.K, Senusi N.A.M., Noor A.M., Abdullah W.N.W., Amin M.A.M.., Razab M.K.A., AIsmardi A., Abdullah, N. H.. (2022). Preparation and characterization of cellulose nanocrystals (CNC) reinforced polyvinyl alcohol (PVA) bio- nanocomposite. In AIP Conference Proceedings . American Institute of Physics Inc.. https://doi.org/978-073544193-4
22. Zin F.A.M., Noor A.M., Budi S., Razab M.K.A.A., Wei L.S., Abdullah, N. H., Jamaludin, M. H.. (2022). Graphene oxide silver alginate and graphene oxide silver cellulose nanofibril nanocomposite: Comparison of antibacterial activity. In AIP Conference Proceedings . American Institute of Physics Inc.. https://doi.org/10.1063/5.0079408
23. Abdullah A., Mohd Rosdi N.A., Abu Bakar M.B., Mohd S.H., Abdullah, N. H., Mohamed, M. (2022). Effect of Graphene on Mechanical and Morphological Properties of Coconut Shell reinforced Unsaturated Polyester Composite. In Key Engineering Materials , pp. 33-38. Trans Tech Publications Ltd. https://doi.org/10.4028/p-51to4o
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CHAPTER(S)	1. Lum Wei Chen, Teo Pao Ter, Nur Sakinah Mohamed Tamat, Mohd Ezwan Selamat, Mohd Hazim Mohamad Amini, Nor Hakimin Abdullah, Jun Z.. (2026). Nonwoody Lignin for Construction Applications. In Nonwoody Plant Lignin for Advanced Applications (pp. 221-239). Springer Science and Business Media Deutschland GmbH. https://doi.org/10.1007/978-981-95-7568-8_10 2. M.N. An'Amt, Mohd Zin, F. A., Sajab , M. S., Razab, M. K. A. A., Abdullah, N. H.. (2023). Chapter 17: Graphene-based Nanocomposites for Cholesterol Detection. In Graphene-based Nanocomposites for Cholesterol Detection (pp. 489-512). Royal Society of Chemistry. https://doi.org/10.1039/9781837671847 3. Mokhtar, Wan Nur Aini Wan, Shohaimi, Norshahidatul Akmar Mohd, Toemen, Susilawati, Abdullah, Wan Nazwanie Wan, Rosid, Salmiah Jamal Mat, Abdullah, Nor Hakimin, Rosid, Sarina Mat. (2022). Deep eutectic solvents in desulfurization of fuel oil. In CURRENT DEVELOPMENTS IN BIOTECHNOLOGY AND BIOENGINEERING (pp. 345 - 371). Elsevier. 4. Nor Hakimin Abdullah, Pao Ter Teo, Sarizam Mamat, Mazlan Mohamed. (2021). Chapter 6: APPLICATION OF WEBLOG AS THE DIGITAL EXPERIMENTAL LOGBOOK (E-PORTFOLIO) FOR SCIENCE AND TECHNOLOGY STUDENTS. In Eclecticnous Approach In Learning (pp. 33-38). UMK Press. 5. Teo Pao Ter, Muhammad Najmi Mohd Masri, Mardawani Mohamad, Nor Hakimin Abdullah, Arlina Ali, Tan Tse Guan, Noor Azlina Ibrahim, Sarizam Mamat, Mahani Yusoff, Mohamad Bashree Abu Bakar, Siti Koriah Zakaria. (2021). Chapter 5: New-norm of materials technology's online live lecture assisted with structured mind-mapping. In Synchronous@real-time online interaction (pp. 27-30). UMK Press. 6. Nor Hakimin Abdullah, Teo Pao Ter. (2021). Chapter 5: An excellent hybrid platform for e-portfolio and e-assessment for science & technology student using wakelet. In Nurturing New Norms In E-Assessment (pp. 37-42). UMK Press. 7. Pao Ter Teo, Muhammad Najmi Mohd Masri, Mardawani Mohamad, Nor Hakimin Abdullah, Arlina Ali, Tan, Tse Guan, Noor Azlina Ibrahim, Sarizam Mamat, Mahani Yusoff, Siti Koriah Zakaria. (2021). Chapter 4: ROAD TO F.R.C: IMPLEMENTATION OF `JOB INTERVIEW APPROACH¿ AS HIEPS COLLABORATIVE LEARNING STRATEGY FOR MODERN MATERIALS TECHNOLOGY¿S LECTURE. In Eclecticnous Approach In Learning (pp. 21-26). UMK Press. 8. Nor Hakimin Abdullah, Nurul Intan Nadirah Mohd Idris, Mohamad Azwani Shah Mat Lazim. (2020-12-11). Chapter 8. Optimization of Methyl Orange Dye Removal by Activated Carbon of Oil Palm Trunk (OPT) Using Response Surface Methodology. In Bio-Waste as Potential Activated Carbon in Remediating Dye Solution . NOVA SCIENCE PUBLISHER. 9. Muhammad Zharif Jasni, Nor Hakimin Abdullah, Mohamad Faiz Mohd Amin. (2020-12-11). Chapter 7. Methyl Orange Removal Using Corncob Activated Carbon. In Bio-Waste as Potential Activated Carbon in Remediating Dye Solution (pp. 103-120). NOVA SCIENCE PUBLISHER.
OTHER(S)	1. Wan Suriyani Faliq Adeeba Wan Ibrahim, Muhammad Azwadi Sulaiman, Sarizam Mamat, Nor Hakimin Abdullah, Nur Sakinah Mohamed Tamat, Boon, Jia Geng, Asanah Radhi, Noor Azlina Ibrahim, Mahani Yusoff, Sitti Fatimah Mhd Ramle, Rosmawani Mohammad, Teo Pao Ter, Ainihayati Abdul Rahim. (2024-05). Refleksi FBKT 2023. Penerbitan Korporat UMK Bahagian Penerbitan dan Pengurusan Laman Web Pusat Komunikasi Korporat Pejabat Naib Canselor Universiti Malaysia Kelantan 16100 Bachok Kelantan Darul Naim.

RESEARCH(S)	1. 3D PRINTING OF UV-CURABLE POLYURETHANE INCORPORATED WITH GRAPHENE OXIDE-AG NANOCOMPOSITE FILM | MEMBER | UMKRS | 2020 2. CHARACTERIZATION OF MICROSTRUCTURES AT COARSE GRAINED HEAT AFFECTED ZONE (CGHAZ) OF LOW ALLOY CARBON STEEL | MEMBER | FRGS-RACER | 2022 3. DEVELOPMENT OF FLEXIBLE AND ANTIMICROBIAL NATURAL RUBBER BIO-NANOCOMPOSITES FOR POTENTIAL BIOMEDICAL DEVICES APPLICATION | HEAD | UMK-MATCH | 2023 4. DEVELOPMENT OF TILAPIA POND SMART WATER QUALITY MONITORING SYSTEM BASED ON INTERNET OF THINGS (LOT) | MEMBER | SGJP | 2017 5. EVALUATION OF THE EFFICACY OF TARGETED MISTING DISINFECTIONS IN DISINFECTION TUNNEL SET UP | MEMBER | UMK-FUND | 2020 6. EXTRACTION OF NANOCELLULOSE FROM AGRICULTURAL WASTE DEVELOPMENT OF ORGANIC BIODEGRADABLE PLASTIC | HEAD | UMK-MATCH | 2022 7. EFFECT OF HYDROGEL ON THE INTERFACIAL TENSION AND STABILITY OF NANOEMULSION FOR NANOEMULGEL FORMATION | MEMBER | FRGS-RACER | 2022 8. EFFECT OF POLYANILINE @GRAPHENE OXIDE NANOCOMPOSITE FOR ENHANCED ACTIVITY FOR RADIONUCLIDE EXTRACTION FROM CLINICAL WASTE WATER | MEMBER | SGPPU | 2015 9. ELUCIDATION OF THE INTERFACIAL BONDING AND DISPERSION STATE OF CELLULOSE NANOCRYSTALS AND CARBON NANOTUBE AS FUNCTIONAL HYBRID NANOFILLERS FOR POLYVINYL ALCOHOL (PVA) NANOCOMPOSITES | HEAD | FRGS | 2020 10. ELUCIDATION OF THE INTERFACIAL BONDING AND DISPERSION STATE OF CELLULOSE NANOCRYSTALS AND CARBON NANOTUBE AS FUNCTIONAL HYBRID NANOFILLERS FOR POLYVINYL ALCOHOL (PVA) NANOCOMPOSITES | HEAD | FRGSBANJIR | 2022 11. EXTRACTION OF NANOCELLULOSE FROM AGRICULTURAL WASTE FOR THE DEVELOPMENT OF ORGANIC BIODEGRADABLE PLASTIC | HEAD | UMK-MATCH | 2020 12. EXTRACTION OF NANOCELLULOSE FROM AGRICULTURAL WASTE DEVELOPMENT OF ORGANIC BIODEGRADABLE PLACTIC | HEAD | SGPPU | 2015 13. INTERFACIAL BONDING MECHANISM AND ELECTROSTATIC INTERACTION OF CELLULOSE NANOCRYSTALS/ ¿-POLYLYSINE AS HYBRID NANOFILLERS FOR POLY (VINYL ALCOHOL) NANOCOMPOSITES | HEAD | FRGS | 2023 14. PREPARATION AND CHARACTERIZATION OF NANOEMULSIONS CONTAINING ESSENTIAL OIL PIPER BETLE AS THE ACTIVE INGREDIENT VIA LOW ENERGY EMULSIFICATION METHOD. | MEMBER | SGJP | 2017 15. RAPID MICROWAVE SYNTHESIS OF REDUCED GRAPHENE OXIDE UNIFORMLY DECORATED WITH SILVER NANOPARTICLES FOR OPTICAL DETECTION OF MERCURY IONS | MEMBER | UMK-FUND | 2020 16. REMOVAL OF ORGANIC CONTAMINANT FROM AQUEOUS SOLUTION BY USING BIO-ADSORBENT POUCH | HEAD | SGJP | 2017 17. SILVER-GRAPHENE OXIDE HYDROGEL AS NOVEL BACTERIDICAL FILTER FOR AQUALCULTURE DISINFECTION | MEMBER | SGPL-MYRA | 2016 18. STUDY OF ZNO CONCENTRATION ON PVA-ZNO NANOCOMPOSITE FOR POTENTIAL OPTICAL SENSOR APPLICATION | HEAD | UMK-MATCH | 2020 19. STUDY OF ZNO CONCENTRATION ON PVA-ZNO NANOCOMPOSITE FOR POTENTIAL OPTICAL SENSOR APPLICATION | HEAD | UMK-MATCH | 2021 20. STUDY OF ZNO CONCENTRATION ON PVA-ZNO NANOCOMPOSITE FOR POTENTIAL OPTICAL SENSOR APPLICATION | HEAD | UMK-MATCH | 2023
SUPERVISION	• **ANTIBACTERIAL SIMULATION OF HYBRID WASTE BANANA AQUEOUS PEEL FOR COATING APPLICATIONS** | CO SUPERVISOR FOR A PHD'S STUDENT • **DEVELOPMENT AND CHARACTERIZATION OF NANOEMULGEL CONTAINING PIPER BETLE ESSENTIAL OIL AS ACTIVE INGREDIENT FOR POTENTIAL TOPICAL DRUG DELIVERY** | CO SUPERVISOR FOR A MASTER'S STUDENT • **EFFECT OF HYBRID NANOFILLER ON POLYVINYL ALCOHOL (PVA) NANOCOMPOSITE FOR FRESH FISH PACKAGING APPLICATIONS** | MAIN SUPERVISOR FOR A MASTER'S STUDENT • **GRAPHENE OXIDE METAL/ METAL OXIDE BASED NANOCOMPOSITE AND ITS APPLICATIONS** | CO SUPERVISOR FOR A PHD'S STUDENT • **GRAPHENE OXIDE SILVER ALGINATE THIN FILM FOR ANTIBACTERIAL** | MAIN SUPERVISOR FOR A MASTER'S STUDENT • **Isolation of ¿-Glucan Exopolysaccharide-Producing Bacterial Strains from Antarctic Marine Sediment and Evaluation of the ¿-Glucans¿ Wound Healing Properties** | CO SUPERVISOR FOR A PHD'S STUDENT • **MECHANICAL, PHYSICAL AND THERMAL PROPERTIES OF KENAF FIBRE MAT/CELLULOSE NANO CRYSTAL/ GRAPHENE NANO PLATELETS REINFORCED UNSATURATED POLYESTER RESIN BIOCOMPOSITES** | CO SUPERVISOR FOR A MASTER'S STUDENT • **PREPARATION AND CHARACTERIZATION OF CELLULOSE NANOCRYSTALS/ E-POLYLYSINE AS HYBRID NANOFILLERS IN POLY (VINYL ALCOHOL) NANOCOMPOSITES FOR POTENTIAL FOOD COATING APPLICATION** | MAIN SUPERVISOR FOR A PHD'S STUDENT • **PREPARATION AND CHARACTERIZATION OF CELLULOSE NANOCRYTALS/E-POLYLYSINE AS HYBRID NANOFILLERS IN POLY (VINYL ALCOHOL) NANOCOMPOSITES FOR POTENTIAL FOOD PACKAGING APPLICATION** | MAIN SUPERVISOR FOR A PHD'S STUDENT • **SINGLE CELL ENCAPSULATION OF AZADIRACHTA INDICA EXTRACT VIA PICKERING EMULSION FOR BIOPESTICIDE APPLICATIONS** | CO SUPERVISOR FOR A MASTER'S STUDENT • **STUDY OF ZNO CONCENTRATION ON PVA/CELLULOSE CRYSTAL/ZNO NANOCOMPOSITE FOR POTENTIAL OPTICAL SENSOR APPLICATION.** | MAIN SUPERVISOR FOR A MASTER'S STUDENT
	• Product Name: Waste to Wealth; A Novel Biodegradable Composites from Agriculture Waste for Drug Delivery Award: GOLD Role: Head Exhibition Name: National Innovation and Invention Competition 2022 (NIICE 2022) • Product Name: Double auger type powder filling machine (serve motor) with stainless steel Award: GOLD

RESEARCH AWARD (S)	Role: Member Exhibition Name: CRI2019 • Product Name: Fast Powder Filling Machine Using Twin Hopper Award: GOLD Role: Member Exhibition Name: Malaysia Technology Expo 2022 (MTE 2022) • Product Name: B-CUTLER 462: A NOVEL BIODEGRADABLE COMPOSITE FROM AGRICULTURE WASTE FOR BIODEGRADABLE CUTLERY Award: GOLD Role: Head Exhibition Name: Virtual Innovation Competition 2023 • Product Name: Silver Graphene Oxide Thin Film Award: GOLD Role: Member Exhibition Name: CRI2019 • Product Name: B-CUTLER 462: A NOVEL BIODEGRADABLE COMPOSITE FROM AGRICULTURE WASTE FOR BIODEGRADABLE CUTLERY Award: GOLD Role: Head Exhibition Name: Malaysia Technology Expo SDG 2023 (MTE-SDG 2023) • Product Name: Sublimation Printing Machine Award: GOLD Role: Member Exhibition Name: iComPEX 2020 • Product Name: B-CAPS 462: INNOVATIVE PLANT-BASED BIOCAPSULES FROM AGRICULTURE WASTE FOR DRUG DELIVERY Award: GOLD Role: Head Exhibition Name: iRISE 2023 • Product Name: WASTE TO WEALTH; A NOVEL BIODEGRADABLE COMPOSITES FROM AGRICULTURE WASTE FOR DRUG DELIVERY (BIOCELLZ- 462) Award: GOLD Role: Head Exhibition Name: CITREX 2021 • Product Name: B-CAPS 462: INNOVATIVE PLANT-BASED BIOCAPSULES FROM AGRICULTURE WASTE FOR DRUG DELIVERY Award: GOLD Role: Head Exhibition Name: INTERNATIONAL RESEARCH AND INNOVATIVE TECHNOLOGY COMPETITION 2023 (i-RITEC2023) • Product Name: WASTE TO WEALTH; A NOVEL BIODEGRADABLE COMPOSITES FROM AGRICULTURE WASTE FOR DRUG DELIVERY Award: GOLD Role: Head Exhibition Name: ECRI 2021 • Product Name: WASTE TO WEALTH; A NOVEL BIODEGRADABLE COMPOSITES FROM AGRICULTURE WASTE FOR DRUG DELIVERY Award: GOLD Role: Head Exhibition Name: VIC 2021 • Product Name: CELLULOSE ACETATE FROM ETLINGERA COCCINEA FOR DYE REMOVAL AND FILLER APPLICATIONS Award: GOLD Role: Member Exhibition Name: WIC 2021 • Product Name: B-Cutler 462; A Novel Biocomposites from Agriculture Waste for Biodegradable Cutlery Award: GOLD Role: Head Exhibition Name: PERTANDINGAN REKACIPTA INOVASI INTERNASIONAL & NASIONAL 2022 • Product Name: B-CUTLER 462: A NOVEL BIOCOMPOSITES FROM AGRICULTURE WASTE FOR BIODEGRADABLE CUTLERY Award: GOLD Role: Head Exhibition Name: CRI2022 • Product Name: B-CAPS 462; A NOVEL PLANT-BASED CAPSULES FROM AGRICULTURE WASTE FOR ORAL DRUG DELIVERY Award: GOLD Role: Head Exhibition Name: PECIPTA 2022 • Product Name: B-CUTLER 462: A NOVEL BIOCOMPOSITES FROM AGRICULTURE WASTE FOR BIODEGRADABLE CUTLERY Award: SPECIAL Role: Head Exhibition Name: CRI2022 • Product Name: WASTE TO WEALTH; A NOVEL BIODEGRADABLE COMPOSITES FROM AGRICULTURE WASTE FOR DRUG DELIVERY Award: SPECIAL Role: Head Exhibition Name: VIC 2021 • Product Name: WASTE TO WEALTH; A NOVEL BIODEGRADABLE COMPOSITES FROM AGRICULTURE WASTE FOR DRUG DELIVERY (BIOCELLZ- 462) Award: SPECIAL Role: Head Exhibition Name: CITREX 2021

	• Product Name: B-CAPS 462: INNOVATIVE PLANT-BASED BIOCAPSULES FROM AGRICULTURE WASTE FOR DRUG DELIVERY Award: SPECIAL Role: Head Exhibition Name: INTERNATIONAL RESEARCH AND INNOVATIVE TECHNOLOGY COMPETITION 2023 (i-RITEC2023) • Product Name: B-CUTLER 462: A NOVEL BIODEGRADABLE COMPOSITE FROM AGRICULTURE WASTE FOR BIODEGRADABLE CUTLERY Award: SPECIAL Role: Head Exhibition Name: Virtual Innovation Competition 2023 • Product Name: B-CUTLER 462: A NOVEL BIODEGRADABLE COMPOSITE FROM AGRICULTURE WASTE FOR BIODEGRADABLE CUTLERY Award: SPECIAL Role: Head Exhibition Name: Malaysia Technology Expo SDG 2023 (MTE-SDG 2023) • Product Name: EXPLORING GAMIFIED PROJECT-BASED LEARNING (GPBL) FOR ENHANCING STUDENT LEARNING OUTCOMES Award: SILVER Role: Head Exhibition Name: The International Teaching and Learning Innovation Carnival (iTeLIC) 2023 • Product Name: Double auger type powder filling machine (serve motor) with stainless steel Award: SILVER Role: Member Exhibition Name: Pi-Envex 2020 • Product Name: Waste to Wealth; A Novel Biodegradable Plastics from Agriculture Waste (BioCellz-462) Award: SILVER Role: HEAD Exhibition Name: CRI 2020 • Product Name: Particle Board From Waste Expanded Polystyrene (EPS) Award: SILVER Role: Member Exhibition Name: ECRI 2021 • Product Name: CATEX - CATALYTIC EXTRACTION OF ACIDIC PETROLEUM CRUDE OIL Award: SILVER Role: Member Exhibition Name: KIMIA INVENSI DAN INOVASI MALAYSIA 2022 • Product Name: Waste to Wealth; A Novel Biodegradable Composites from Agriculture Waste for Drug Delivery Award: SILVER Role: Member Exhibition Name: Virtual Research and Innovation Exhibition UniMAP (EREKA 2022) • Product Name: Natural Nanopesticide Formulation Award: BRONZE Role: Member Exhibition Name: CRI2019 • Product Name: Seagac-462 Nano filter for Water Purification Award: BRONZE Role: Head Exhibition Name: CRI2019

D. CONSULTATION

CONSULTATION(S)	

E. COMMUNITY SERVICES

COMMUNITY SERVICES	