



CURRICULUM VITAE



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EDUCATION BACKGROUND

1. PhD Combustion Engineering, University of Sheffield, UK (2005)
2. B. Eng (Chemical), Universiti Teknologi Malaysia (2000)

RESEARCH INTERESTS

1. Waste and Biomass Valorizations into **Bioenergy**, Biofuels and Bioproducts (biomass gasification, pyrolyses, combustion and anaerobic digestion)
2. **Environmental** pollution control and treatment (gas cleaning, sludge and wastewater treatment)
3. Chemical reactor **engineering** (fluidized bed technology, proses optimization)

PROFESSIONAL MEMBERSHIP

1. Professional Engineer (Peng), Board of Engineers Malaysia - PE18887
2. Chartered Member (CEng), Institute of Chemical Engineers (IChemE) - 99914377
3. Graduate Member and Co-opted member for Chemical Engineering Technical Division (CETD), Institute of Engineers Malaysia (IEM) – (2014-2016)
4. Associate member of Young Scientist Network-Academy of Sciences Malaysia (YSN-ASM)
5. Biochar Malaysia Association (BMA)
6. Regional director for the Society of Circular, Regenerative and Sustainable Systems (CRES)

EMPLOYMENT & ADMINISTRATION POSITION

Position	Duration
1. Head of Sustainable Process Engineering Research Centre (SPERC), UPM	2019-2021
2. Industrial intern , Pakar Management Sdn Bhd	2017
3. Research Coordinator , Dept. of Chemical and Environmental Engineering, Faculty of Engineering, UPM	2015-2017
4. Ahli Jawatankuasa Environmental Management system (EMS), UPM	2017
5. Ahli Jawatankuasa Kecil Kurikulum (JKKK), UPM (Undergraduate)	2013 to 2016
6. Academic Coordinator , Dept. of Chemical and Environmental Engineering, Faculty of Engineering, UPM	2012 to 2015
7. Associate professor , UPM	Apr 2012 to date
8. Postdoctoral/visiting scholar , Dept. of Chemical & Biomolecular Engineering, University of Melbourne, Australia	2008-2009
9. Senior lecturer , Dept. of Chemical and Environmental Engineering, UPM	Jun 2008 to March 2012
10. Lecturer , Dept. of Chemical and Environmental Engineering, UPM	March 2012 to May 2007
11. Tutor , Department of Chemical and Environmental Engineering, UPM	May 2005 to Apr 2005

RESEARCH & DEVELOPMENT PROJECTS

Project Leader/Investigator (PI)

Number of projects : 20 Amount (RM) = 2,000,600.00

No	Project Title	Period (year)	Source of fund	Amount (RM)
1	Biogas production from transfer station MSW	2005-2006	UPM	10,000
2	Agro-waste gasification to produce bio-fuel	2006-2008	SF/MOSTI	198,000
3	Fundamental study of physico-chemical characterization of incinerated biomass ashes	2007-2009	FRGS/ MOHE	80,000
4	Postdoctoral fellowship; Negative CO2 emissions: The role of biomass (university of Melbourne, Australia)	2009-2011	BRAIN GAIN	90,000
5	Performance Studies of Anaerobic Digestion of Biowaste for better Municipal Solid Waste Management in Malaysia	2009-2011	UPM/ PUTRA	160,000
6	Kinetic Studies Of CO2 Adsorption On carbonaceous Surfaces From Biomass-Derived Biochars	2010-2012	FRGS/ MOHE	40,000
7	Catalytic bubbling fluidized bed membrane gasifier (CFBMG) for Malaysian Biomass	2012-2013	PUTRA/ UPM	80,000
8	hydrogel biochar composite for CO2 sequestration	2012-2014	FRGS/ MOHE	98,000
9	Research fellowship for women in science (FWIS) ; Development of hydrogel biochar composite for CO2 capture	2012-2012	LOREAL	20,000
10	Mechanistic studies on biochar-based carbon for energy storage	2014	FRGS/ MOHE	121,000
11	Process Integration and Supply Chain Optimisation of a Sustainable Biorefinary	2014	LRGS/ MOHE	125,000
12	Fabrication of integrated biomass gasification and fischer tropesch for power (10kW) and fuel production	2014	PRGS/ MOHE	165,000
13	Applicator chamber design – simulation study on power and energy intensity distribution on high power microwave heating for biomass (PPRN)	Jan-15– Jun 2016	PPRN/ MOHE	25,000
14	Utilization of Renewable Durian Peels as Potential Biosorbent for Malaysia Industrial Wastewater Treatment	Apr-16– Mac 2019	PUTRA/ UPM	20,000
15	Carbon capture & utilisation in power plant (project 2): Simultaneous SOx-NOx removal using impregnated metal oxide	Jan-17- Dec 2019	PUTRA/ UPM	148,000
16	Understanding of Biomass and Energy-Food-Environmental-Water (BEFEW) nexus through biomass value chains multi-optimizations modelling	May-17- Oct 2019	NEWTON/ RCUK	505,600

17	Feasibility study of application of Ionic Liquids (Ils) for bio-product development from Microalgae & Lignocellulosic materials	Aug-17- Jan 2019	MATCHIN G / UPM	50,000
18	Microwave-derived EFB Biochar as Potential Solid Fuel for Power Generation	15-Feb- 18 -Apr 2019	GP- IPS/UPM	20,000
19	Optimization of Enzymatic Hydrolysis From microalgae and Bioactive Peptide Fractionation Using Ultrafiltration Membrane As Antioxidants	2-Apr-18- Jun 2020	GP- IPS/UPM	25,000
20	Gasification of Utilized Crops for Power Generation in Rural Area	Jan 2015- dec 2016	GP- IPS/UPM	20,000
				2,000,600

Project Member (Co- Investigator)

Number of Projects : 12 Amount (RM) = 1,757,800.00

No	Title	Period (year)	Sponsor/ Grant	Amount (RM)
1	Enhanced Pyrolysis Using Biomass Microwave Carbonizer (BMC) To Convert Palm Oil Biomass (Empty Fruit Bunch) Into Biochar As Alternative Fuel Source	2017- 2019	INOVASI/ UPM	426,800.00
2	Renewable energy production from agroindustry biomass using microwave technology	2007- 2009	SF/MOSTI	100,000
3	Novel pyrolysis technology in recovering renewable fuels & precious metals	2006- 2008	SF/MOSTI	128,000
4	Construction artificial consortia of microorganism using dielectrophoresis (DEP) for wastewater treatment	2007- 2009	SF/MOSTI	249,000
5	Pyrolyses & gasification process for hydrogen production	2007- 2008	UPM	80,000
6	Modelling microalgal gasification using Thermodynamic Equilibrium Approach	2015- 2017	FRGS/MOHE	57,000
7	An Integrated Thermochemical and fermentation system for conversion of Microalgal biomass for Production of biofuel	2015- 2017	UPM	140,000
8	Vermi-composting for solid waste recycling to promote green technology	2014- 2015	KTP grant /MBMB	300,000
9	Vermi-composting for solid waste recycling to promote green technology	2013- 2014	KTP grant /MPSJ	143,000
10	Applying New Methods Of Determining Output Frequency Response Function In The Analysis and Design Of Chemical Engineering Process	2018- 2020	GP/UPM	60,000
11	Renewable and Sustainable Biohydrogen Production From Attached-Biofilm Mixed Anaerobic Cultures With Biomass As Fermentation Feedstocks	2018- 2020	GP/UPM	60,000
12	A systems approach to synergistic utilisation of secondary organic streams (SYNERGORS) – university of Oxford, UK(travel grant)	Jan 2018- Jun 2021	UK Research & Innovation (UKRI)	14,000
				1,757,800

CONSULTATIONS PROJECTS

Project Leader : 7 (RM 273,470) ; Project Member : 5 (RM 148,340)

No	Project Title	Client	Amount (RM)	Year	Role
1	Waste Composition study for Jeddah landfill	Green Energy Sdn Bhd	20,000	2014	member
2	Kajian penaiktarafan dan penjenamaan semula R&D dan pembangunan standard keselamatan dan kesihatan pekerjaan (KKP)	National Institute of Occupational, Safety and Health (NIOSH)	6,000	2016	member
3	PPRN microwave carbonizer	Pakar management technology sdn bhd	25,000	2015-2016	Leader
4	Biochar Microwave Carbonizer (BMC) design for Biochar production as alternative solid fuels	Pakar Go green sdn bhd	9,000	2016-2017	Leader
5	Design, fabrication and training of 30KW gasifier system for power generation	crops for future research (CFFRC)	158,680	2014-2016	Leader
6	Design and testing of gasification system for eureka Synergy Sdn Bhd	Eureka Synergy Sdn Bhd	38,400	2016-2017	Leader
7	Rubber scrap RDF as potential solid fuel	Lembaga getah malaysia (LGM)	13,000	2015	Member
8	Characterization of Coal Bottom Ash and Adsorption Testing For CO2 Capture	Tenaga Nasional Berhad Reseach (TNBR)	9,540	2016	Leader
9	KAJIAN SIMULASI SISTEM MICROWAVE " BIOMASS MICRIOWAVE CARBONIZER (BMC)	Pakar Go green sdn bhd	17,940	Jan 2017- Dec 2017	member
10	Preparation of adsorbent for CO2 capture from coal fire power plant bottom ash	Tenaga Nasional Berhad Reseach (TNBR)	55,000	Jul 2018	member
11	Waste Characterisation for Tampin Transfer Station for EIA report	Asia Pacific Environmental Consultants Sdn Bhd	12476.20	Sept 2019 – Jun 2020	Leader
12	Laboratory Test of Earth Enhancing Compounds (EEC)	Tenaga Nasional Berhad Reseach (TNBR)	45,750	20.8.19 – 19.11.19	Leader
			390,806		

INTELLECTUAL PROPERTY

No.	Title	Date	File/Patent Reg. No.
1	Eco Enzyme for Wastewater Treatment	2018	LY2019000460
2	Hydrogel charsh(HC) as powerful adsorbent	10-Jul-05	LY2016002144
3	Production of Oil Palm Spatial Distribution Maps Via Computing Approach	2019	In progress

PUBLICATIONS

Cited Journals (PSAS)	97
Non-Cited Journals (PSAS)	15
Books	0
Chapter in a Book	4
Module/ Monograf	0
Proceedings	10
Paper presentations	69
Exhibitions	12
Others (popular writing)	2

JOURNALS

Year 2020

1. NA Nudri, RT Bachmann, **WAWAK Ghani**, DNK Sum, AA Azni (2020). Characterization of oil palm trunk biocoal and its suitability for solid fuel applications, *Biomass Conversion and Biorefinery* 10 (1), 45-55. (Q2:IF 2.326)
2. NSN Shaharum, HZM Shafri, **WAWAK Ghani**, S Samsatli, MMA Al-Habshi (2020). Oil palm mapping over Peninsular Malaysia using Google Earth Engine and machine learning algorithms, *Remote Sensing Applications: Society and Environment*, 100287 (Q2:IF 0.554)
3. Nowilin James Rubinsin, Wan Ramli Wan Daud, Siti Kartom Kamarudin, Mohd Shahbudin Masdar, Masli Irwan Rosli, Sheila Samsatli, John Frederick Tapia, **Wan Azlina Wan Ab Karim Ghani**, Kean Long Lim, Optimization of oil palm empty fruit bunches value chain in Peninsular Malaysia, *Food and Bioprocess Processing* 119, 179-194 (Q2 :IF 3.324)

Year 2019

1. MAA Hamzah, AB Alias, NRN Him, ZA Rashid, **W Ghani**, Characterization of food waste and empty fruit bunches (EFB) for anaerobic digestion application, *Journal of Physics: Conference Series* 1349 (1), 012132. (cited journals)
2. AA Azni, **WAWAK Ghani**, A Idris, MFZ Ja'afar, MAM Salleh, NS Ishak (2019). Microwave-assisted pyrolysis of EFB-derived biochar as potential renewable solid fuel for power generation: Biochar versus sub-bituminous coal, *Renewable Energy* 142, 123-129 9. (Q1)
3. NSN Shaharum, HZM Shafri, **WAWAK Ghani**, S Samsatli, HM Prince, Yusof B., Hamud A.M (2019), Mapping the spatial distribution and changes of oil palm land cover using an open source cloud-based mapping platform, *International Journal of Remote Sensing*, 40(19), 7549-7476 (Q2)
4. Md Said, Mohamad Syazarudin, **Wan Abdul Karim Ghani**, **Wan Azlina**, Tan Hong Boon, Siti Aslina Hussain, Denny Kok Sum Ng (2019), Thermochemical Conversion of Napier Grass for Production of Renewable Syngas, *Processes* 7 (10), 705, 2019(Q2)
5. Bing Shen How, Sue Lin Ngan, Boon Hooi Hong, Hon Loong Lam, Wendy Pei Qin Ng, Suzana Yusup, **Wan Azlina Wan Abd Karim Ghani**, Yasuki Kansha, Yi Heng Chan, Kin Wai Cheah, Muhammad Shahbaz, Haswin Kaur Gurdeep Singh, Ahmad Fadzil Ahmad Shuhaili, Jakaria Rambli (2019). An outlook of Malaysian biomass industry commercialisation: Perspectives and challenges, *Renewable and Sustainable Energy Reviews* 113, 109277 (Q1).
6. YH Chan, KW Cheah, BS How, ACM Loy, M Shahbaz, HKG Singh, **WAKG Wan Azlina**, J. Rambli (2019).An overview of biomass thermochemical conversion technologies in Malaysia, *Science of The Total Environment* 680, 105-123, (Q2)
7. R Khezri, **WAK Ghani**, **W Azlina**, S Masoudi Soltani, A Biak, D Radiah (2019). Computational Fluid Dynamics Simulation of Gas–Solid Hydrodynamics in a Bubbling Fluidized-Bed Reactor: Effects of Air Distributor, Viscous and Drag Models, *Processes* 7 (8), 524(cited -Q2)

8. NSN Shaharum, HZM Shafri, **WAWAK Ghani**, S Samsatli, B Yusuf(2019), Mapping the Distribution of Oil Palm using Landsat 8 Data by Comparing Machine Learning and Non-Machine Learning Algorithms, Adapting to Challenges, 123. (Q3)
9. John Frederick D Tapia, Sheila Samsatli, Stephen S Doliente, Elias Martinez-Hernandez, Wan **Azlina Binti Wan Ab Karim**, Kean Long Lim, Helmi Zulhaidi Mohd Shafri, Nur Shafira Nisa Binti Shaharum (2019). Design of biomass value chains that are synergistic with the food-energy-water nexus: Strategies and opportunities, Food and Bioproducts Processing, Volume 116, July 2019, Pages 170-185. (Q2)
10. **Wan Ab Karim Ghani**, W.A., Salleh, M.A.M., Adam, S.N.,Jaye, I.F.M., Martinez-Hernandez, E(2019). Sustainable bio-economy that delivers the environment–food–energy–water nexus objectives: The current status in Malaysia, Food and Bioproducts Processing Volume 118, November 2019, Pages 167-186. (Q2)
11. M Ngabura, SA Hussain, **WAWAK Ghani**, MS Jami, YP Tan (2019), Optimization and activation of renewable durian husk for biosorption of lead (II) from an aqueous medium, Journal of Chemical Technology & Biotechnology 94 (5), 1384-1396, 2019 (cited)
12. S Saleh, **WAWAK Ghani**, SK Loh (2019).Treated Coal Bottom Ash for Palm Oil Mill Effluent (POME) Decolourisation. Journal of Physical Science 30 (3). (Q3)
13. N Rasit, L Hwe Fern, **WAW Ab Karim Ghani** (2019), Production and Characterization of Eco Enzyme Produced from Tomato and Orange Wastes and Its Influence on the Aquaculture Sludge, International Journal of Civil Engineering and Technology 10 (3), 2019
14. NSN Shaharum, HZM Shafri, **W Ghani**, S Samsatli, B Yusuf (2019), The utilisation of cloud computing and remote sensing approach to assess environmental sustainability in Malaysia, IOP Conference Series: Earth and Environmental Science 230 (1), 012109, 2019
15. J Rambli, **WAKGW Azlina**, MAM Salleh, R Khezri (2019), Evaluation of Biochar from Sago (Metroxylon Spp.) as a Potential Solid Fuel, BioResources 14 (1), 1928-1940(Q2)
16. K Silas, **WAWAK Ghani**, TSY Choong, U Rashid (2019), Carbonaceous materials modified catalysts for simultaneous SO₂/NO_x removal from flue gas: A review Catalysis Reviews 61 (1), 134-161. (Q1)
17. R Khezri, **WAK Ghani**, **W Azlina**, A Biak, D Radiah, R Yunus, K Silas (2019). Experimental evaluation of napier grass gasification in an autothermal bubbling fluidized bed reactor, Energies 12 (8), 1517. (Q2).
18. MS Ahmad, MA Mehmood, H Luo, B Shen, M Latif, **WAWAK Ghani** (2019). Pyrolysis and thermogravimetric study to elucidate the bioenergy potential of novel feedstock produced on poor soils while keeping the environmental sustainability intact, Sustainability 11 (13), 3592(cited-Q2)
19. S Rezaei Motlagh, R Harun, A Biak, D Radiah, SA Hussain, **WAK Ghani**,(2019). Screening of suitable ionic liquids as green solvents for extraction of eicosapentaenoic acid (EPA) from microalgae biomass using COSMO-RS model, Molecules 24 (4), 713. (Q2)

Year 2018

1. K Silas, **WAWAK Ghani**, TSY Choong, U Rashid (2018), Activated carbon monolith Co₃O₄ based catalyst: Synthesis, characterization and adsorption studies, Environmental Technology & Innovation 12, 273-285.(cited, Q3)
2. K Silas, **WAWAK Ghani**, TSY Choong, U Rashid (2018), Breakthrough studies of Co₃O₄ supported activated carbon monolith for simultaneous SO₂/NO_x removal from flue gas,Fuel Processing Technology 180, 155-16.(cited, Q1)
3. N Fuad, R Omar, S Kamarudin, R Harun, A Idris, **WW Azlina** (2018), Effective use of tannin based natural biopolymer, AFlok-BP1 to harvest marine microalgae Nannochloropsis sp.,Journal of Environmental Chemical Engineering 6 (4), 4318-4328.(cited)

4. M Ngabura, SA Hussain, **WAWA Ghani**, MS Jami, YP Tan (2018), Utilization of renewable durian peels for biosorption of zinc from wastewater Journal of Environmental Chemical Engineering 6 (2), 2528-2539.(cited)
5. NH Meri, AB Alias, N Talib, ZA Rashid, **W Ghani** (2018), Comparison of H₂S adsorption by two hydrogel composite (HBC) derived by Empty Fruit Bunch (EFB) biochar and Coal Fly Ash (CFA), IOP Conference Series: Materials Science and Engineering 334 (1), 012038(cited)
6. M Javidi Gharacheh, M Khojastehpour, M Ebrahimi-Nik, **WAWAK Ghani** (2018), Theoretical and Experimental Study of Potato Shoot Gasification in Fluidized-and Fixed-Bed Gasifier, International Journal of Agricultural Management and Development, 8.(cited)
7. NSN Shaharum, HZM Shafri, **W Ghani**, S Samsatli, B Yusuf (2018), Image classification for mapping oil palm distribution via support vector machine using Scikit-learn module, International Archives of the Photogrammetry, Remote Sensing and Spatial mappinG.(cited)
8. H Madzaki, **WAWAK Ghani**, TCS Yaw, U Rashid, N Muda (2018), Carbon Dioxide Adsorption on Activated Carbon Hydrothermally Treated and Impregnated with Metal Oxides, Jurnal Kejuruteraan 30 (1), 31-38.(non-cited)
9. R Omar, A Idris, R Harun, S Kamaruddin, **W Wan, A Wan**, MKS Mazlina(2018), Comparison of Lipid Quality of Nannochloropsis sp. flocculated via Autoflocculation, AFlok-BP1 and Alum Mazlina, 5th International Symposium on Applied Engineering and Sciences (SAES2017)(non-cited)
10. NSN Shaharum, HZM Shafri, **W Ghani**, S Samsatli(2018), Mapping of the distribution of oil palm using Landsat 8 data by comparing machine learning and non-machine learning algorithms, Pertanika Journal of Tropical Agricultural Science.(cited-Q4)

Year 2017

1. TH Boon, A Raheem, **WAWAK Ghani**, SA Hussain, DNK Sum (2017), Thermogravimetric Study of Napier Grass in Inert and Oxidative Atmospheres Conditions, Journal of Physical Science 28, 155 (cited-Q3)
2. A Wahab, R Adawiyah, MA Yahya, KA Matori, **WAWAK Ghani** (2017), Effects of Sintering Temperature on the Mullite-Based Ceramics Fabricated from Rice Husk Ash, Applied Mechanics and Materials 873, 65-70(cited-Q4)
3. I Muhammad Nasir, M Ghazi, T Idaty, R Omar, **WA Wan Abd Karim Ghani** (2017), Anaerobic Batch Digestion of Cattle Manure under Various Oscillatory Flow Mixing., Pertanika Journal of Science & Technology 25 (1)(cited-Q4)
4. D Nuradila, **WAWAK Ghani**, AB Alias (2017), Biochar dan Pemangkin berasaskan tempurung kelapa sawit untuk penghasilan biodiesel, Malaysian Journal of Analytical Sciences 21 (1), 197-203(cited-Q3)
5. NH Meri, AB Alias, N Talib, ZA Rashid, **WAWAK Ghani** (2017), Effect of washing pre-treatment of empty fruit bunch hydrogel biochar composite properties as potential adsorbent, Chemical Engineering Transactions, 2017(cited)
6. NF Ahmad, AB Alias, N Talib, ZA Rashid, **WAWAK Ghani** (2017), Characterization of upgraded hydrogel biochar from blended rice husk with coal fly ash, AIP Conference Proceedings 1901 (1), 130018 (cited)
7. DRA Biak, MR Harun, R Omar, **WAWAK Ghani** (2017), Integrating Facilitative Teaching in Design Based Course, 7th World Engineering Education Forum (WEEF), 216-221(cited)
8. N Rasit, A Idris, **WAWAK Ghani** (2017), Enhancement strategy of methane production from anaerobic digestion start-up process of grease trap waste, Jurnal Teknologi, 79(7)(cited)
9. R Khezri, **WAWAK Ghani** (2017), Computational Modelling of Gas-Solid Hydrodynamics and Thermal Conduction in Gasification of Biomass in Fluidized-Bed Reactor, Chemical Engineering Transactions 56, 1879-1884.(cited)

Year 2016

1. N Khairuddin, LA Manaf, MA Hassan, N Halimoon, **WAWAK Ghani** (2016), High solid anaerobic co-digestion of household organic waste with cow manure for mass and energy recovery, Polish Journal of Environmental Studies 25 (4), 1549-54, 2016 (cited)
2. ML Sanyang, **WAWAK Ghani**, A Idris, MB Ahmad (2016), Hydrogel biochar composite for arsenic removal from wastewater, Desalination and Water Treatment 57 (8), 3674-3688 (cited – Q2)
3. **WAWAK Ghani**, PS Fernandez, MQ Halele, S Sobri, J Jasni (2016), Physical and Electrochemical Characterization of Palm Kernel Shell Biochar (PKSB) as Supercapacitor MATEC Web of Conferences, 62, 04003(cited)
4. R Khezri, **W Azlina**, HB Tan (2016), An experimental investigation of syngas composition from small-scale biomass gasification, International Journal of Biomass & Renewables 5 (1), 6-13, 2016 (non-cited)
5. S Saleh, KB Kamarudin, **WAWAK Ghani**, LS Kheang (2016), Removal of Organic Contaminant from Aqueous Solution Using Magnetic Biochar, Procedia Engineering 148, 228-235 (cited)
6. A Raheem, S Sivasangar, **WW Azlina**, YHT Yap, MK Danquah, R arun(2015).Thermogravimetric study of Chlorella vulgaris for syngas production. Algal Research 12, 52-59 (cited -Q2)

Year 2015

1. A Raheem, **WW Azlina**, YHT Yap, MK Danquah, R Harun (2015). Thermochemical conversion of microalgal biomass for biofuel production. Renewable and Sustainable Energy Reviews 49, 990-999.(cited -Q1)
2. N Rasit, A Idris, R Harun, **WAWAK Ghani** (2015). Effects of lipid inhibition on biogas production of anaerobic digestion from oily effluents and sludges: An overview. Renewable and Sustainable Energy Reviews 45, 351-358 (cited -Q1)
3. R Nazaitulshila, A Idris, R Harun, **W Wan Azlina** (2015). The Influence of Inoculum to Substrate Ratio on the Biochemical Methane Potential of Fat, Oil, and Grease in Batch Anaerobic Assays. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects 37.(cited-Q3)
4. A Raheem, S Sivasangar, **WW Azlina**, YHT Yap, MK Danquah, R Harun (2015). Algal Research.(cited-Q2)
5. **WAWAK Ghani**, NZ Rebitanim, MAM Salleh, AB Alias (2015). Carbon Dioxide Adsorption on Coconut Shell Biochar. Progress in Clean Energy, Volume 1, 683-693 (cited – Q2)
6. AMA Ahmed, A Salmiaton, TSY Choong, **WW Azlina** (2015). Review of kinetic and equilibrium concepts for biomass tar modeling by using Aspen Plus. Renewable and Sustainable Energy Reviews 52, 1623-1644 (cited – Q1)
7. J Rambli, **WAWAK Ghani**, MAM Salleh (2018), Characterization of Sago-based Biochar as Potential Feedstock for Solid Fuel,Journal of Energy and Safety Technology (JEST) 1 (2).(**non-cited**)
8. N Khairuddin, LA Manaf, N Halimoon, **WAWAK Ghani**, MA Hassan (2015). High Solid Anaerobic Co-digestion of Household Organic Waste with Cow Manure. Procedia Environmental Sciences 30, 174-179 (non-cited)

Year 2014

1. R Harun, JWS Yip, S Thiruvankadam, **WA Ghani**, T Cherrington, (2014), Algal biomass conversion to bioethanol-a step?by?step assessment, Biotechnology journal 9 (1), 73-86 . (IF =3.446)(Q1)

2. R Alipour Moghadam, S Yusup, **W Azlina**, S Nehzati, A Tavasoli(2014). Investigation on syngas production via biomass conversion through the integration of pyrolysis and air-steam gasification processes. *Energy Conversion and Management* 87, 670-675.(Q1)
3. **Wan Azlina Wan Ab Karim Ghani**, (2014). Sawdust-derived Biochar: Characterization and CO₂ Adsorption/desorption Study. *Journal of Applied Sciences*, 14: 1450-1454.(Q4)
4. Fakhru'l-Razi, A., Peyda, M., **Ab Karim Ghani, W.A.W.**, Abidin, Z.Z., Zakaria, M.P., Moeini, H.(2014) Modeling of crude oil biodegradation using two phase partitioning bioreactor, *Biotechnology Progress* 30 (4) , pp. 797(Q2)
5. ML Sanyang, **WAWAK Ghani**, A Idris, MB Ahmad (2014). Hydrogel biochar composite for arsenic removal from wastewater. *Desalination and Water Treatment*, 1-15.(Q2)

Year 2013

1. Ayaz Mohd, **W. A. Wan Ab Karim Ghani**, Nur Zalikha Rebitanim & Lamin Sanyang(2013). A Review: Carbon Dioxide Capture: Biomass-Derived-biochar and Its Applications. *Journal of Dispersion Science and Technology*. 34 (7), 974-984,(cited-Q2)
2. Rex, T.L. Ng, Denny, K.S. Ng, Douglas, H.S. Tay, **Wan Azlina W. A. K. Ghani** (2013), modelling and optimisation of biomass fluidised bed gasifier, *applied thermal energy*, 63, pp. 98-105. (cited)
3. **Wan Azlina Wan Ab Karim Ghani**, Ayaz Mohd, Dahlia Khalid Mahmoud, Nur Zalikha Rebitanim, Lamin Sanyang, Azil Bahari Alias(2013), methylene blue adsorption by sawdust derived biochar and its adsorption isotherms, accepted to be published in *International Journal of Engineering technology* (cited)
4. Dalia Khalid Mahmoud, Mohamad Amran Mohd Salleh **Wan Azlina Wan Abdul Karim**(2013), Highlight on empirical batch reactor design, *Journal of Purity, Utility Reaction and Environment*,1, 538-543.(non-cited)
5. **Wan Azlina Wan Ab Karim Ghani**, Ayaz Mohd, Dahlia Khalid Mahmoud, Nur Zalikha Rebitanim, Lamin Sanyang, Azil Bahari Alias(2013),methylene blue adsorption by sawdust derived biochar and its adsorption isotherms, *International Journal of Engineering technology*, 1(non-cited)

Year 2012

1. Ng, R.T.L.a, Ng, D.K.S.a , Tay, D.H.S.b, **Ghani, W.A.W.A.K**(2012). Modelling and optimisation of gasification for palm kernel shell (PKS) in a fluidized bed gasifier, *Chemical Engineering Transactions*,Volume 29, 2012, Pages 1123-1128(cited)
2. **Wan azlina Wan Ab. Karim Ghani**, Iffah farizan Rusli, ,Dayang radiah Awang Biak and azni Idris (2012), An application of theory planned behaviour to study the influencing factors of participation in source separation of food waste, *Waste management*. 33 (5), 1276-1281 (IF : 2.428)(Q1)
3. **Wan Azlina Wan Ab karim ghani**, ayaz Mohd, Gabriel daSilva, Robert T-bachman, Taufiq-Yap (2013), Biochar production from waste rubber-wood-sawdust and its potential use in C sequestration: Chemical and physical characterization, *Industrial Crops and Products*. 44, pp. 18-24.(IF : 2.469)(Q2)
4. **Wan Ab Karim Ghani**, Wan Azlina; Esfahani, Reza Moghadam; Mohd Salleh, Mohammad Amran; Ali, Salmiaton; (2012). "Hydrogen rich production from Malaysian Palm kernel shell by applying air gasification in fluidized bed reactor", *Journal of Energy and Fuels*, 26(2), pp. 1185-1191. (IF:2.721)(Q1)
5. Mohammed M.A.A., salimiaton A., **Wan Azlina, WAKG**, Mohammad Amran, M.S, Omar, R., Taufiq-yap, Y.H, fakhru'l razi, A(2012). Catalytic gasification of empty fruit bunch for enhanced production of hydrogen rich fuel gas, *pertanika journal of science and technology*, 20(1), p. 139-149. CIJ(Q4)
6. Mohammed M.A.A., salimiaton A., **Wan Azlina, WAKG**, Mohammad Amran, M.S (2012), Gasification of oil palm empty fruit bunches: A characterization and kinetic study, *Bioresource*

Technology, 110, p. 628-636, (IF: 4.365)(Q1)

7. Nurzalikha rebitanim, **Wan Azlina Wan ab karim ghani**, Nur akmal rebitanim, Mohamad Amran Mohd salleh (2012). Potential applications of waste from energy generation particularly biochar in malaysia, *Renewable and Sustainable energy reviews*, 21,pp.694-702.(IF.6.619)*(Q1)
8. **Wan Ab Karim Ghani, Wan Azlina**; Esfahani, Reza Moghadam; Mohd Salleh, Mohammad Amran; Ali, Salmiaton; (2012). Hydrogen rich production from Malaysian Palm kernel shell by applying air gasification in fluidized bed reactor", *Journal of Energy and Fuels*, 26(2), pp. 1185-1191. (IF:2.48)(Q1)
9. Azil Bahari Alias, Zulkifli Abdul Rashid, Norazah Abd rahman, Siti Shawaliah Idris, Khudzir Ismail, Mohd Azlan Mohd Ishak and **Wan Azlina Wan Ab Karim Ghani**(2012) Thermal behaviour study of senakin coal and Refuse Derived Fuel (RDF) blends during pyrolysis using Thermogravimetric Analysis, *Int. J. Environment and Waste Management*, Vol. 10, No. 4, 354-364. Cited in scopus
10. Siti Thaiyiba Shafie, Mohamad Amran Mohd. Salleh, Lau Lek Hang, Md.Mukhlesur Rahman, **Wan Azlina Wan Abdul Karim Ghani**(2012),Effect of pyrolysis temperature on the biochar nutrient and water retention capacity,*Journal of Purity, Utility Reaction and Environment*,1(non-cited)
11. Nur Zalikha Rebitanim, **Wan Azlina Wan Ab Karim Ghani**, Dalia Khalid Mahmoud, Nur Akmal Rebitanim, Mohamad Amran Mohd Salleh (2012), Adsorption of Methylene Blue by Agricultural Solid Waste of Pyrolyzed EFB biochar,*Journal of Purity, Utility Reaction and Environment*, (non-cited)
12. Rebitanim, N. Z., A. B. **Wan Abdul Karim Ghani**, W. A., Mahmoud, D. K., Rebitanim, N. A., and Mohd Salleh, M. A. (2012), Adsorption Capacity of Raw Empty Fruit Bunch Biomass onto Methylene Blue Dye in Aqueous Solution,*Journal of Purity, Utility Reaction and Environment* ,1(non-cited)
13. Mohamad Amran Mohd Salleh, Dalia Khalid Mahmoud, Norzeti Akhtar Binti Awang Abu, **Wan Azlina Wan Abdul Karim**, Azni b. Idris(2012), Methylene blue adsorption from aqueous solution by langsung (lansium domesticum) , *Journal of Purity, Utility Reaction and Environment* ,1(non-cited)
14. Dalia Khalid Mahmoud, Mohamed Amran Mohd Salleh, **Wan Azlina Wan Abdul Karim**(2012), Characterization and evaluation agricultural solid wastes as adsorbents: A review *Journal of Purity, Utility Reaction and Environment*,1(non-cited)

Year 2011

1. Mohammed, M.A.A., Salmiaton, **Wan Azlina, W.A.K.G**, Mohammad Amran, M.S. Fakhru'l-Razi, A. air gasification of empty fruit bunch for hydrogen-rich gas production in a fluidized bed reactor (2011). *Energy conversion and management*, 52(9), pp. 1555-1561.(IF:2.054)(Q1)
2. Mohammed, M.A.A., Salmiaton, **Wan Azlina, W.A.K.G**, Mohammad Amran, M.S. Fakhru'l-Razi, A, Taufiq-Yap, Y.H (2011). Hydrogen rich gas from oil palm biomass as a potential source of renewable energy in Malaysia, *renewable and sustainable energy reviews*, 15(2), pp. 1258-1270.(IF:4.567)(Q1)
3. Mohammed, M.A.A., Salmiaton, A, **Azlina, W.A.K.G**, Amran, M.S (2011). Gasification of empty fruit bunch for hydrogen fuel gas production. *Journal of applied science*, 11(13), pp. 2416-2420(cited)
4. Heidarpour, F., **Ghani, W.A.W.A.K**, Fakhru'l Razi, A., Sobri, S. Torabian, A., Heydarpour, V. Zargar, M. New trends on microbiological water treatment (2011). *Digest journal of nanomaterials and biostructures*, 6(2), pp. 791-802.(IF:1.75)(Q3)
5. Mohamad Amran Mohd Salleh, Dalia Khalid Mahmoud, **Wan Azlina Wan Abdul Karim** and Azni Idris(2011),Cationic and anionic dye adsorption by agricultural solid wastes: A comprehensive review, *Desalination*, 280,1-13,(IF:1.851)(Q2)

6. F. Heidapur, **W. A. Wan Ab Karim Ghani**, A. Fakhru'l Razi S. Sobri, M. zargar, M. R. Mozafari. Complete removal of pathogenic bacteria from drinking water using nano silver-coated cylindrical polypropylene filters, *Clean Technology Environmental Policy* (2011) 13:499-507.(IF:1.12)(Q3)
7. Dalia Khalid Mahmoud, Mohamad Amran Mohd Salleh, **Wan Azlina Wan Abdul Karim**, Azni Idris, Zurina Zainal Abidin (2011). Batch adsorption of basic dye using acid treated kenaf fibre char: Equilibrium, kinetic and thermodynamic studies. *Chemical Engineering Journal*. In Press, Accepted Manuscript, Available online 9 December 2011, (IF:3.074)(Q2)
8. **Wan Azlina Wan Ab Karim Ghani**, Reza Alipour Mohgadam Esfahani, Mohammad Amran Mohd Salleh, (2011). Hydrogen rich gas production from rice husk by applying air gasification in a fluidized bed gasifier. *Journal of Energy & Environment*.(cited)
9. T.G. Chuah, **W.A.W.A.K, Ghani**, R. Yunus and R.omar .(2006). Biomass as the Renewable Energy Sources in Malaysia, *International Journal of Green Energy*, Vol. 3 (3), (IF:0.733)(Q2)
10. Omar, R.,Harun, R.M., Mohd Ghazi, T. I., **Wan Azlina, W. A. K. G.**, Idris, A, Yunus, R. Anaerobic treatment of cattle manure for biogas production (2008) *AIChE 100-2008 AIChE Annual Meeting*, conference proceedings, p. 10 (cited in scopus)
11. M. A. Mohd Salleh, Nsamba Hussein Kisiki, H. M. Yusuf and **W. A. Wan Ab Karim Ghani** (2010), Gasification of Biochar from Empty Fruit Bunch in a Fluidized Bed Reactor, *Energies*, 3(7), 1344-1352,doi:10.3390/en3071344,(IF:1.311)(Q2)
12. **Wan Ab Karim Ghani, Wan Azlina**; Esfahani, Reza Moghadam; Mohd Salleh, Mohammad Amran; Ali, Salmiaton; (2012). Hydrogen rich production from Malaysian Palm kernel shell by applying air gasification in fluidized bed reactor", *Journal of Energy and Fuels*, 26(2), pp. 1185-1191. (IF:2.48)(Q1)
13. **Wan Azlina Wan Ab Karim Ghani**, Reza Alipour Mohgadam Esfahani, Mohammad Amran Mohd Salleh, Azil Bahari Alias (2011). Air gasification of Malaysia agricultural waste in a fluidized bed gasifier world review of science, technology and sustainable development (WRSTSD), 8, 100-113. *Cited in scopus*
14. **Wan Azlina Wan Ab Karim Ghani**, Reza Alipour Mohgadam Esfahani, Mohammad Amran Mohd Salleh,(2011). Hydrogen rich gas production from rice husk by applying air gasification in a fluidized bed gasifier *Journal of Energy & Environment*.2 (non-cited)

Year 2010

1. F. Heidapur, **W. A. Wan Ab Karim Ghani**, A. Fakhru'l Razi S. Sobri, M. zargar, M. R. Mozafari. Nanosilver-coated polypropylene water filter:I. manufacture by electron beam gun using a modified balzers 760 machine, *Digest journal of nanomaterials and Biostructures*,2010, 5(3),787-796.(IF:1.75)(Q3)
2. F. Heidapur, **W. A. Wan Ab Karim Ghani**, A. Fakhru'l Razi S. Sobri, M. zargar, M. R. mozafari. Nanosilver-coated polypropylene water filter:II. Evaluation of antimicrobial efficiency, *Digest journal of nanomaterials and Biostructures*, 2010, Vol. 5(3), p. 797-804.(IF:1.75)(Q3)
3. Mahmoud, D. K. Mohd Salleh, M. A. **Wan Abdul Karim**, W. A. (2012).Langmuir model application on solid-liquid adsorption using agricultural wastes: Environmental application review, *journal of Purity, Utility Reaction and Environment*,1.(non-cited)
4. **W. A. Wan Ab karim Ghani**, S. F. Abdullah, K.A. Matori, A. B. Alias and Gabriel da Silva (2010), Physico-chemical characterization of Malaysian biomass ashes. *Journal of the institutions of engineers, Malaysia*, 71(3), pp. 9-18 (non-cited)

year 2009

1. **W.A.W.A.K. Ghani**, A.B. Alias, R.M. Savory and K.R. Cliffe (2009), Co-combustion of Agricultural Waste with Coal in a 10 kW Fluidised Bed Combustor, *Journal of Waste*

Management, 29 (2), pp.767-773. (IF:2.443)(Q1)

2. **W.A.W.A.K. Ghani**, Moghadam, R.; Salleh, M.; Alias, A. (2009). Air Gasification of Agricultural Waste in a Fluidized Bed Gasifier: Hydrogen Production Performance. *Energies*, 2, 258-268.(IF:1.31)(Q2)
3. **W.A.W.A.K. Ghani** and Azni Idris, (2009). Preliminary study on biogas production from Municipal Solid waste (MSW) leachate, *Journal of Science and Technology*, 4, 374-380,*cited in scopus*
4. **W.A.W.A.K. Ghani**, A.B. Alias, R.M. Savory and K.R. Cliffe (2009), Co-combustion of Refuse derived fuel with Coal in a 10 kW Fluidised Bed Combustor, *Journal of Engineering Science and Technology*, 4(1), 122-131. *cited in scopus*
5. K.A. Matori, M.M. Haslinawati, Z.A. Wahab, H.A.A. Sidek, T.K. Ban, **W.A.W.A.K. Ghani**(2009), Producing Amorphous White Silica from Rice Husk, *MASAUM Journal of Basic and Applied Sciences*,1(3),512-515 *cited in scopus*
6. **W.A.W.A.K. Ghani**, A.B. Alias, R.M. Savory and K.R. Cliffe (2009), Co-combustion of Agricultural Waste with Coal in a 10 kW Fluidised Bed Combustor, *Journal of Waste Management*, 29 (2), pp.767-773. (IF:2.443)(Q1)
7. **W.A.W.A.K. Ghani**, Moghadam, R.; Salleh, M.; Alias, A. (2009). Air Gasification of Agricultural Waste in a Fluidized Bed Gasifier: Hydrogen Production Performance. *Energies*, 2, 258-268.(IF:1.31)(Q2)
8. **W.A.W.A.K. Ghani** and Azni Idris, (2009). Preliminary study on biogas production from Municipal Solid waste (MSW) leachate, *Journal of Science and Technology*, 4, 374-380,*cited in scopus*
9. **W.A.W.A.K. Ghani**, A.B. Alias, R.M. Savory and K.R. Cliffe (2009), Co-combustion of Refuse derived fuel with Coal in a 10 kW Fluidised Bed Combustor, *Journal of Engineering Science and Technology*, 4(1), 122-131. *cited in scopus*

Year 2008

1. R Omar, RM Harun, TI Mohd Ghazi, **W Wan Azlina**, A Idris, R Yunus (2008). Anaerobic treatment of cattle manure for biogas production, *Proceedings Philadelphia, Annual meeting of American Institute of Chemical.cited)*
2. **W. A. Wan Ab Karim Ghani**, M.S. firdaus Abdullah, C.J. Loung, C.J. Ho, K.A. Matori (2008).Characterization of vitrified Malaysian agrowaste ashes as potential recycling material. *International journal of engineering and technology*, 5(2), 111-117(*cited*)

Year 2007

1. **W.A.W.A.K, Ghani**, A.B. Alias, R.M. Savory and K.R. Cliffe (2007),Co-combustion of Rice Husk with Coal in a 10 kW Fluidised Bed Combustor, *Malaysian Journal of Chemical Engineering*,1, 153-161 (*cited*)

Year 2006

1. MAA Mohammed, A Salmiaton, **W Wan Azlina**, MSM Amran, M Ni (2006), Fixed-bed pyrolysis of *Cynara cardunculus* L. Product yields and compositions. *Journal of Applied Sciences* 11 (13), 1401-1412(*cited*)
2. TG Chuah, **AGK Wan Azlina**, Y Robiah, R Omar (2006). Biomass as the renewable energy sources in Malaysia: an overview, *International Journal of Green Energy* 3 (3), 323-346(*cited*)

chapter in a Book

1. Chapter in book 1.Wan Azlina Wan Ab Karim Ghani, Reza A. Moghadam, Mohammad Amran Mohd Salleh, Air Gasification of Malaysia Agricultural Waste in a Fluidized Bed Gasifier: Hydrogen Production Performance, In Majid Nayeripour and Mostafa Keshti(Ed.), Sustainable growth and applications in renewable energy sources: Applications (pp. 227-242).
2. Rijeka, Croatia: In-Tech combustion, In Majid Nayeripour and Mostafa Keshti(Ed.), New Developments in Renewable Energy, <http://dx.doi.org/10.5772/52566>, Rijeka, Croatia: In-Tech, ISBN 980-953-307-680-0
3. WAWAK Ghani, NZ Rebitanim, MAM Salleh, AB Alias (2015). Carbon Dioxide Adsorption on Coconut Shell Biochar. Progress in Clean Energy, Volume 1, 683-693
4. M.Y. LIEW, a salmiation, WAKG wan azlina & R yunus,(2013). Catalytic pyrolysis of waste chicken fats using zeolite catalyst, Development in sustainable chemical & bioprocess technology

Proceedings

1. Meri, N.H., Alias, A.B., Talib, N., Rashid, Z.A., Ghani, W.A.W.A.K.(2018) Comparison of H₂S adsorption by two hydrogel composite (HBC) derived by Empty Fruit Bunch (EFB) biochar and Coal Fly Ash (CFA) IOP Conference Series: Materials Science and Engineering
2. Shaharum, N.S.N., Shafri, H.Z.M., Ghani, W.A.W.A., Samsatli, S., Yusuf, B., Al-Habshi, M.M.A., Prince, H.M.(2018). Image classification for mapping oil palm distribution via support vector machine using scikit-learn module International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, pg.145
3. Biak, D.R.A., Harun, M.R., Omar, R., Ghani, W.A.W.A.K.(2018). Integrating Facilitative Teaching in Design Based Course Proceedings - 2017 7th World Engineering Education Forum, WEEF 2017- In Conjunction with: 7th Regional Conference on Engineering Education and Research in Higher Education 2017, RCEE and RHEd 2017, 1st International STEAM Education Conference, STEAMEC 2017 and 4th Innovative Practices in Higher Education Expo 2017, I-PHEX 2017, pg.221
4. Ahmad, N.F., Alias, A.B., Talib, N., Rashid, Z.A., Ghani, W.A.W.A.K.(2017). Characterization of upgraded hydrogel biochar from blended rice husk with coal fly ash, AIP Conference Proceedings
5. Ghani, W.A.W.A.K., Fernandez, P.S., Halele, M.Q., Sobri, S., Jasni, J.(2016). Physical and electrochemical characterization of Palm Kernel Shell Biochar (PKSB) as supercapacitor. MATEC Web of Conferences.
6. Saleh, S., Kamarudin, K.B., Ghani, W.A.W.A.K., Kheang, L.S.(2016). Removal of Organic Contaminant from Aqueous Solution Using Magnetic Biochar, Procedia Engineering, pg.235.
7. Sanyang, L., Ghani, W.A.W.A.K., Idris, A., Ahmad, M.B. (2014). Zinc removal from wastewater using hydrogel modified biochar Applied Mechanics and Materials, pg.846
8. Ng, R.T.L., Ng, D.K.S., Tay, D.H.S., Ghani, W.A.W.A.K.(2012). Modelling and optimisation of gasification for palm kernel shell (PKS) in a fluidized bed gasifier, CHISA 2012 - 20th International Congress of Chemical and Process Engineering and PRES 2012 - 15th Conference PRES
9. Ng, R.T.L., Ng, D.K.S., Tay, D.H.S., Ghani, W.A.W.A.K.(2012). Modelling and optimisation of gasification for palm kernel shell (PKS) in a fluidized bed gasifier, Chemical Engineering Transactions pg. 1128
10. Omar, R., Harun, R.M., Ghazi, T.I.M., Wan Azlina, W.A.K.G., Idris, A., Yunus, R.(2008) Anaerobic treatment of cattle manure for biogas production AIChE Annual Meeting, Conference Proceedings.

Oral presentation

1. W.A.W.A.K, Ghani, and K.R. Cliffe, Co-combustion of biomass with coal in a 10 kW Fluidised Bed Combustor, UK Chemical Engineering Symposium, UK, 2002.
2. W.A.W.A.K, Ghani, and K.R. Cliffe, Co-combustion of biomass with coal in a 10 kW Fluidised Bed Combustor, 1st International Conference & Exhibition of Thermal Treatment and resource utilization of wastes, Beijing, China,2005
3. W.A.W.A.K, Ghani, A.B. Alias, R.M. Savory and K.R. Cliffe, Co-combustion of biomass with Coal in a 10 kW Fluidised Bed Combustor, SOMCE 2006, UiTM, Shah Alam, Malaysia
4. Wan Azlina Wan Ab Karim Ghani, Nurhamizah Abdul Ghani, Azil Bahari Alias, Mohd Amran Mohd Salleh, Rozita Omar, Salmiaton Ali and Azni Idris, Characterization of agricultural waste as biofuels: significance and impact, (SOMCHE 2007), UPM, 12-14 December 2007
5. W. A. K. G, Wan Azlina, I. Azni, A. Noor Azlina, I. Nurul Hasila, Production of biogas from municipal solid waste (MSW) leachate, (SOMCHE 2007), UPM, 12-14 December 2007
6. Azil Bahari Alias, Zulkifli Abdul Rashid, Norazah Abd Rahman, Siti Shawaliah Idris, Khudzir Ismail, Mohd Azlan Mohd Ishak and Wan Azlina Wan Ab Karim Ghani, Thermogravimetric studies of the behaviour of sub-bituminous, wood and their blends, (SOMCHE 2007), UPM, 12-14 December 2007
7. Azil Bahari Alias, Zulkifli Abdul Rashid, Norazah Abd Rahman, Siti Shawaliah Idris, Khudzir Ismail, Mohd Azlan Mohd Ishak and Wan Azlina Wan Ab Karim Ghani, Pyrolysis characteristic and kinetics of coconut coir and shell mixtures with sub-bituminous coal using thermogravimetric analysis, ENCON 2007), Kuching, Sarawak, 27-28 December 2007
8. W.A. Wan Ab Karim Ghani, A.B. Alias, R.M. Savory, M.A.M. Salleh and K.R. Cliffe (2007), Co-combustion of agricultural residues with coal in a fluidized bed, ENCON 2007), Kuching, Sarawak, 27-28 December 2007
9. Mohd Syafik Firdaus, Wan Azlina and Kamirul Amin Matori, Characterization of vitrified Malaysian agrowaste ashes as potential recycling material, RSCE -SOMCHE 2008, December 2008
10. Reza Alipour Moghadam, Wan Azlina, Mohd Amran, Ahmad Tavassoli, Hydrogen-rich Gas Production from agricultural waste by Applying Air Gasification in Fluidized Bed Reactor, RSCE -SOMCHE 2008, December 2008
11. Norhafizah Abd. Halim, Azil Bahari Alias, Zulkifli Abdul Rashid, Norazah Abd Rahman, Siti Shawaliah Idris, Robert Mikhail Savory and Wan Azlina, A kinetic study of thermal behaviour of Senakin Coal and Malaysian Solid waste (wood waste and RDF) and their blends during pyrolysis using thermogravimetric analysis, RSCE -SOMCHE 2008, December 2008
12. Heidarpour Farideh, Wan Azlina Wan Ab Karim Ghani, Aelkhani Hadi, The study of used quartz crystal recovery, RSCE -SOMCHE 2008, December 2008
13. W.A.W.A.K, Ghani, A.B. Alias, R.M. Savory and K.R. Cliffe, Co-combustion of biomass with Coal in a 10 kW Fluidised Bed Combustor, SOMCE 2006, UiTM, Shah Alam, Malaysia
14. Rozita Omar, A. Idris, K. Khalid, R. Yunus and W.A.K.G Wan Azlina, Characterization of empty fruit bunch (EFB) as Biofuel, (WEC 2007), Penang, Malaysia 5-9 August, 2007
15. Azil Bahari Alias, Zulkifli Abdul Rashid, Norazah Abd Rahman, Siti Shawaliah Idris, Khudzir Ismail, Mohd Azlan Mohd Ishak and Wan Azlina Wan Ab Karim Ghani, Thermal behaviour study of Senakin Coal and RDF blends during pyrolysis using thermogravimetric analysis, (WEC 2007), Penang, Malaysia 5-9 August, 2007
16. Mohd Syafik Firdaus, Wan Azlina and Kamirul Amin Matori, Stabilisation and Recycling of agricultural based residues as potential glass ceramic based application, Conference and Exhibition (IMTCE 2008), 24-27 August 2008

17. W.A.K.G. Wan Azlina, M. Alipour Reza, M.S. Mohamad Amran, An experimental investigation of Hydrogen production from Malaysia agricultural waste in a fluidized bed gasifier, Sustainable Engineering Technology Conference 2008, Korea, 24-27 August 2008
18. Omar, R., Harun, M. R., Idris, A., Mohd. Ghazi, T. I., Wan Abdul Karim Ghani, W. A., Yunus, R. and Mushidi, J. 2008. Anaerobic Treatment of Cattle Manure for Biogas Production, (AIChE), Annual Meeting, Philadelphia, U.S.A., November 2008.
19. W.A. Wan Ab karim Ghani, Mohd yafik Firdaus abdullah, chung jiang loung, chong jean ho and kamirul amin matori, characterization of vtrified malaysian agrowaste ashes as potential recycling material, WEC 2008, Kuching Sarawak
20. Reza Alipour Moghadam, Wan Azlina, Mohd Amran, Ahmad Tavassoli, Hydrogen-rich Gas Production from Rice Husk by Applying Air Gasification in Fluidized Bed Reactor, ISARET 2009, Hotel Residence, Kajang, 28-29 April 2009
21. M.A.A. Mohammad, A. salmiaton, W.A.K.G. Wan Azlina, M.S. Mohammad Amran, Gasification of Empty fruit bunch for hydrogen rich fuel gas production, ICCBE, 12-14 august, Kota Kinabalu, sabah, 2009
22. Wan Azlina Wan Ab Karim Ghani, Azni b. Idris, Nur Zalikha Rebitanim and Mohamad Amran Mohd Salleh, Towards CO₂ reduction: The role of biochar, National Symposium on Climate Change Adaptation, 16-17 November 2011, Hotel Pullman, Putrajaya
23. Dayang Radiah Awang Biak, Wan Azlina Wan Ab Karim Ghani, Siti Hawa Abdar and Azni Idris, Characterization of food waste as feedstock for anaerobic digestion for effective collection, ICCEIB - SOMChE 2011, Universiti Malaysia Pahang, Kuantan, 28th November to 1st December 2011
24. Nur Zalikha Rebitanim, Wan Azlina Wan Ab Karim Ghani, and Dahlia Khalid mahmoud, The kinetics and equilibrium studies on adsorption of methylene blue dye on EFB biochars, ICCEIB - SOMChE 2011, UNIVERSITI MALAYSIA PAHANG, KUANTAN, 28th November to 1st December 2011
25. Wan Azlina WAKG, Azni Idris and Dayang radiah Awang Biak. Characterization of food waste as feedstock for anaerobic digestion for effective collection, ICCEIB -SOMChE 2011, UNIVERSITI MALAYSIA PAHANG, KUANTAN, 28th November to 1st December 2011
26. Wan Azlina WAKG, Azni Idris, Mohamad Amran Mohd salleh, Towards CO₂ reduction: The role of biochar, national conference on climate change, 2011, PICC, putrajaya, Malaysia
27. Wan Azlina WAKG and Gabriel D. Silva, sawdust-derived biochar (SDB): characterization and CO₂ adsorption/desorption study, 4th international conference on chemical and bioprocess engineering (iccbpe) Sabah Malaysia, 21-23 november 2012
28. Liew Mei Yi, Salmiaton Ali and Wan Azlina Wan Ab karim Ghani, Catalytic pyrolysis of waste chicken fats using zeolite catalysts, 4th international conference on chemical and bioprocess engineering (iccbpe) Sabah Malaysia, 21-23 november 2012
29. Wan Azlina Wan Ab Karim Ghani, lamin sanyang, ayaz mohd, dahlia Khalid mahmoud, Hydrogel-Biochar Composite Utilization for the Removal of phenol from Wastewater, world research & innovation convention on engineering & technology (wricet) 2012, golden horses, Seri kembangan, Selangor, 3-6 december 2012
30. Lamin Sanyang, Wan azlina Wan ab Karim Ghani, Nahzatulain, palm kernel shell hydrogel-biochar composite utilization for the removal of methylene blue from wastewater, powering a sustainable future with green solutions (POCER), genting Highland, Malaysia, 28- Jun 2013.
31. Ismail, Tinia Idaty Mohd. Ghazi, Rozita Omar and Wan Azlina Wan Ab. Karim Ghani, Biochemical Methane Potential (BMP) tests to evaluate the biogas production from cattle manure, ICCEIB - SOMChE 2013, Universiti Malaysia Pahang, Kuantan
32. Ismail, Tinia Idaty Mohd. Ghazi, Rozita Omar and Wan Azlina Wan Ab. Karim Ghani (2013),

- Anaerobic batch digestion of cattle manure using a novel oscillatory flow bioreactor, ICCEIB - SOMChE 2013,Universiti Malaysia Pahang, Kuantan
33. Nor Azwady Abd Aziz, Azni Idris, Hishamuddin bin Omar, Muskhazli Bin Mustafa and Wan Azlina Wan Ab. Karim Ghani, Integrated Vermin-AD Technology in managing household waste in Pulau Tioman; Sruvey on material available for vermicomposting and analisis of nutrient plant content of thevermicompost,
 34. Wan Azlina wan ab karim ghani, Azil bahari Alias, mohamad amran mohd salleh, Azni idris (2014) Co2 adsorption/desorption study on coconut shell biochar, international conference on clean energy (ICCE 2014),8-12 june 2014, Istanbul, Turkey.
 35. Wan Azlina Wan Ab. Karim Ghani, Gabriel da Silva and Azil bahari alias (2014). Physico-chemical characterizations of sawdust-derived biochar as potential solid fuels . International Conference on Global Sustainability and Chemical Engineering (ICGSCE), 2014.Kuala Lumpur, Malaysia (in proceeding).
 36. Abdul Raheem, Wan Azlina W.A.K.G Taufiq Yap Y.H, Razif Harun (2014). Thermogravimetric properties of Chlorella vulgaris, the 27th International symposium on chemical engineering (ISCHE),2014, Kuala Lumpur, Malaysia(in proceeding)
 37. Wan Azlina Wan Ab Karim Ghani and azil bahari alias (2014). Biochar : production, characterization and potential application, world research and innovation convention on engineering and technology (wricet 2014).
 38. H.B.Tan, A.Raheem, W. Azlina (2015). Experimental Study on Napier Grass in a Fluidized Bed Reactor, The 7th International Conference on Sustainable Agriculture for Food, Energy and Industry in Regional and Global Context, ICSAFEI2015, 2015, Serdang,Selangor, Malaysia
 39. Wan Azlina Wan Ab Karim Ghani , Mohamad Amran Mohd Salleh, and Azil Bahari Alias (2015). Biochar Gasification Performance in Fluidized Bed Reactor, The 22nd Regional Symposium on Chemical Engineering: RSCE 2015, Bangkok, Thailand, September 24-25, 2015
 40. Nurdianah mustaffa, Chai Shuea Li, Teun Doevendans, Soh Aik Chin and Wan Azlina Wan Ab Karim Ghani (2015). Fluidised bed gasification of Oil Palm Frond (OPF) and Napier Grass(NG): A preliminary study. 3rd Postgraduate Colloquium for Environmental Research 2015, 24-26 august 2015.Kuching, Sarawak, Malaysia
 41. Dayang Nuradila, Azil bahari Alias and Wan Azlina Wan Ab Karim Ghani (2015), A palm kernel shell -derived biochar acid catalyst(pksbc) for biodiesel production, Symposium of Malaysian Chemical Engineering(SOMCHE 2015), 21-22 october 2015, Palm garden hotel, Putrajaya, Malaysia
 42. Wan Azlina Wan Ab Karim Ghani, Nur Fitriah Abdullah and Azil Bahari Alias (2015), Agricultural based biochar composite for effective carbon dioxide removal, The 7th International Conference on Sustainable Agriculture for Food, Energy and Industry in Regional and Global Context, ICSAFEI2015, 2015, Serdang,Selangor, Malaysia
 43. Muhammad Qayyum Halele, Sahfreeza Sobri,Jasronita Jasni, AzilBahari Alias,Wan Azlina Wan AbKarim Ghani (2015), Carbon Biomaterial: Does It Fit as Supercapacitor Electrodes? - A Review, The 7th International Conference on Sustainable Agriculture for Food, Energy and Industry in Regional and Global Context, ICSAFEI2015, 2015, Serdang,Selangor, Malaysia
 44. Ramin Khezri, Wan Azlina Wan Ab Ghani(2016), Computational modelling of gas-solid Hydrodynamics and Thermal Conduction in gasification of biomass in fluidized-bed reactor, 2016APCBEES Tokyo Conference, Hotel Sunroute Plaza Shijuku, JAPAN
 45. Nur Izzati Md Salleh, Wan Azlina Wan Ab Karim Ghani, Soh Kheang Loh(2016), Hydrogel-Biochar Composite for Adsorption of Ammonia from Aqueous Media,World Research & Innovation Convention on Engineering & Technology, MARRIOT, PUTRAJAYA
 46. Syahin Saleh, Wan Azlina Wan Abd Karim Ghani, and Loh Soh Kheang (2017).Treated Coal Bottom Ash for Palm Oil Mill Effluent (POME) Decolourization 5th International Symposium on Applied Engineering and Sciences (SAES 2017),UPM

47. Nur Izzati Md Saleh, Wan Azlina Wan Ab Karim Ghani, Razif Harun, and Siti Mazlina Mustapha Kamal(2017).Enzymatic Hydrolysis of *N.gaditana* sp bioactive peptide production,5th International Symposium on Applied Engineering and Sciences (SAES 2017), UPM
48. Wan Azlina Wan Ab Karim Ghani, Hazimah Madzaki, Thomas Choong Shean Yaw, and Noraziah Muda(2017). Carbon Dioxide Adsorption Using Activated Carbon Impregnated with Metal Oxides 4th Posgraduates Colloquium for Encironmental Research (POCER 2017). Green Tehcnologies: Innovations, Challenges and Prospects, NILAI, NEGERI SEMBILAN
49. Jakaria Rambli, Wan Azlina Wan Abd Karim Ghani, Mohamad Amran Mohd SallehBiochar Production from Sago (*Metoxylon* Spp) Using Batch Electrical Furnace Reactor 2017 6th Conference on Emerging Energy and Process Technology (concept 2017), JOHOR
50. Atiyah Ameenah A., Wan Azlina W.A.K.G., Mohamad Amran M.S., Mohamad Fakri Zaky Evaluation of Microwave-derived EFB Biochar As Potential Solid Fuel for Power Generation (2017),6th Conference on Emerging Energy and Process Technology (concept 2017),JOHOR
51. Wan Azlina Wan AB Karim Ghani,Sheila Samatli, KL Lim, Fred Tapia, Azhan Hassan,Ramin Khezri(2018), UNDERSTANDING BIOMASS- ENVIRONMENT- FOOD-ENERGY-WATER (BEFEW) NEXUS TOWARDS A SUSTAINABLE BIO-ECONOMY (ORAL PAPER), International Symposium on Technologies and Materials for Renewable Energy, Environment and Sustainability international International symposium on technologies & materials for renewable energy, environment & sustainability
52. Ramin Khezri, Wan Azlina Wan Ab Ghani, Dayang radiah awang biak & robiah yunus (2018), CFD Modelling of Gas-Solid Hydrodynamics in Fluidized-Bed Gasification: The Effects of Fluid Regime, Drag Models and Air Distributor, international conference on biomass-environmental-food-energy-water(befew) nexus,hotel bangi-putrajaya, Malaysia, 12-13/12/2018
53. Tan Hong Boon, Abdul Raheem, Wan Azlina Wan Abdul Karim Ghani, Siti Aslina Hussain, Denny Ng Kok Sum, mohamad syazaruddin md said(2018), Evaluation of napier grass as potential renewable energy resource in Malaysia2018 international conference on biomass-environmental-food-energy-water(befew) nexus, hotel bangi-putrajaya, Malaysia, 12-13/12/2018
54. najeh and wan azlina wan ab karim ghani (2018), Quantifying And Spatial Mapping Of Sarawak's Oil Palm Biomass Supply Potential,International conference on biomass-environmental-food-energy-water(befew) nexus, hotel bangi-putrajaya, Malaysia, 12-13/12/2018
55. "Rambli, J., Ghani, W.A.W.A.K., Salleh, M.A.M.(2018).Sago-Based Biochar Production and its Characteristics and Potential Application Solid Fuel Feedstock, international conference on biomass-environmental-food-energy-water(befew) nexus,hotel bangi-putrajaya, Malaysia, 12-13/12/2018
56. Mohammed H. Hussaini, Wan Azlina Wan AB Karim Ghani, Lam Hon Loong, Nik Nor Liyana Nik Ibrahim, Azil Bahari Alias (2018). UNDERSTANDING BIOMASS- ENVIRONMENT- FOOD-ENERGY-WATER (BEFEW) NEXUS IN BIOREFINERY USING P-GRAPH, Iternational conference on biomass-environmental-food-energy-water(befew) nexus, Hotel bangi-putrajaya, Malaysia, 12-13/12/2018
57. Muhammad Ariff Amir Hamza, Azil Bahari Alias, Nik Raikhan Nik Him, Zulkifli Abd Rashid, Wan Azlina Wan AB Karim Ghani(2018), Characterization of food waste and empty fruit bunch (EFB) for biogas production via anaerobic co-digestion, International conference on biomass-environmental-food-energy-water(befew) nexus international hotel bangi-putrajaya, Malaysia, 12-13/12/2018
58. Nor Hidayah Meri, Azil Bahari Alias, Norhayati Talib, Zulkifli Abdul Rashid, Wan Azlina Wan AB Karim Ghani, Breakthrough analysis of empty fruit bunch hydrogel biochar composite (EFB-HBC) in adsorption of hydrogen sulphide (H₂S): Effect of bed height, particle size and water presence (2018) international conference on biomass-environmental-food-energy-water(befew) nexus, hotel bangi-putrajaya, Malaysia, 12-13/12/2018
59. Shiva Rezei Motlagh, Mohd Rafiz Harun, Dayang Radiah Awang Biak, Siti Aslina Hussain, Wan Azlina Wan AB Karim Ghani(2018).Priliminary study on lipid extraction from nannochloropsis gadita microalgae using microwave assisted extraction with [EMIM]Cl, International conference on biomass-environmental-food-energy-water(befew) nexus, Hotel bangi-putrajaya, Malaysia, 12-13/12/2018

60. Nur Shafira Nisa, Helmi Zulhaidi Shafri, Wan Azlina Wan AB Karim Ghani, Sheila Samsatli, Ahmed Mohammed Hamud, Badronnisa Yusuf (2018). Using google earth engine cloud-based platform to map agricultural crops of Selangor. International conference on biomass-environmental-food-energy-water (BEFEW) nexus, hotel bangi-putrajaya, Malaysia, 12-13/12/2018
61. Nur Izzati Md Saleh, Wan Azlina Wan Ab Karim Ghani, Razif Harun, and Siti Mazlina Mustapha Kamal. Influence of degree hydrolysis and enzymatic hydrolysis conditions on antioxidant activity of microalgae protein hydrolysate, THE 6TH SYMPOSIUM ON APPLIED ENGINEERING AND science 2018, 15-16/12/2018, Kitakyushu, Japan
62. Ngabura, M., Hussain, S.A., Ghani, W.A.W.A.K., Jami, M.S., Tan, Y.P. (2018). Optimization and Activation of Renewable Durian Husk for Pb(II) from Wastewater, 5th international conference on biotechnology engineering international IIUM, Malaysia, 19-20/9/2018
63. Nadly aizat nurdi, robert thomas bachman, W.A.W.A.K., Ghani (2018), Performance Testing of 10 kW Integrated Mobile Gasifier for Sustainable Power and Biofuels Production 5th, conference on biotechnology engineering, IIUM, Malaysia, 19-20/9/2018
64. Wan Azlina Wan AB Karim Ghani (2015). A PALM KERNEL SHELL -DERIVED BIOCHAR ACID CATALYST (PKSBC) FOR BIODIESEL PRODUCTION, SOMCHE 2015, national, UPM, 22/10/2015
65. Nadly aizat nurdi, robert thomas bachman, W.A.W.A.K., Ghani. Characterization of Oil Palm Trunk Biocoal and its Feasibility for Solid Fuel Applications, INTERNATIONAL CONFERENCE ON SUSTAINABLE ENGINEERING & TECHNOLOGY, Melaka, Malaysia, 25/9/2018
66. Wan Azlina Wan AB Karim Ghani, Sheila Samatli, KL Lim, Fred Tapia, Azhan Hassan, Ramin Khezri. UNDERSTANDING BIOMASS- ENVIRONMENT- FOOD-ENERGY-WATER (BEFEW) NEXUS TOWARDS A SUSTAINABLE BIO-ECONOMY (ORAL PAPER POMREQ 2018 (NATIONAL SEMINAR ON PALM OIL MILLING, REFINING, ENVIRONMENT AND QUALITY), The Royale Chulan Hotel Kuala Lumpur, Malaysia, 27-28/11/2018
67. Kiman Silas, W.A. Wan Ab Karim Ghani, T. S. Y. Choong & Umer Rashid, Breakthrough studies of metal oxides supported activated carbon monolith in simultaneous SO₂/NO_x removal from flue gas, 31st Symposium of Malaysian Chemical Engineers hotel istana, Malaysia, 5-6 /12/2018
68. Shaharum, N.S.N., Shafri, H.Z.M., Ghani, W.A.W.A.K., Yusuf, B., Hamud, A.M (2018). IMAGE CLASSIFICATION FOR MAPPING OIL PALM DISTRIBUTION VIA SUPPORT VECTOR MACHINE USING SCIKIT-LEARN MODULE, 4th international conference on agricultural and food engineering, hotel everly, putrajaya, Malaysia, 7-9/11/2018
69. Nur Izzati Md Saleh, Wan Azlina Wan Ab Karim Ghani, Razif Harun, and Siti Mazlina Mustapha Kamal. (2018). Optimization of enzymatic hydrolysis for the production of antioxidative peptide from *Nannochloropsis gaditana* using Response Surface Methodology, 4th international conference on agricultural and food engineering, hotel everly, putrajaya, Malaysia, 7-9/11/2018

Other Equivalent Outcomes (Monograph/Module/Popular Writing & Article/Design etc)

No.	Name of Writer(s)	Category of Outcome	Year Published
1	wan azlina wan ab karim ghani	Popular writing	2009
2	Wan Azlina Wan Ab Karim Ghani, Reza A. Moghadam, Mohammad Amran Mohd Salleh,	Popular writing	2012

Other Presentation (Poster/Product/Exhibition/Showcase)

No	Name of Writer(s)	Title	Event/ seminar/ exhibition	Venue	Date
1	Syafik firdaus and wan azlina wan ab karim ghani	Stabilization and recycling of agricultural based residues as potential glass-ceramic based (leader)	PRPI 2007	UPM	2007
2	Bahareh sanaie and wan azlina wan ab karim ghani	Biological nitrogen removal (BNR) of raw leachate from transfer station)(Leader)	PRPI 2007	UPM	2007
3	Alireza mohadama, mohd amran mohd salleh, wan azlina wan ab karim ghani	Characterization of agrowaste for possible utilization in renewable energy production	PRPI 2007	UPM	2007
4	Shaari Mustapha & wan azlina	DispergCAL : Chemical Dispersion, Data Base and Simulation software(member)	PRPI 2008	UPM	2008
5	Syafik firdaus and wan azlina wan ab karim ghani	Stabilization and recycling of agricultural based residues as potential recycling material (Leader)	PRPI 2008	UPM	2008
6	Alireza mohadama, mohd amran mohd salleh, wan azlina wan ab karim ghani	Renewable fuel production from agrowaste via gasification	PRPI 2008	UPM	2008
7	Shaari Mustapha & wan azlina	Fire Retardancy of PU/clay Nanocomposites : Synergy with Moca and Clay based Fire Retardant (member)	PRPI 2008	UPM	2008
9	Wan azlina, azni idris, Rozita omar, salmiaton ali & mohd amran mohd salleh	Mobile gasifier	Research exhibition & networking day	Fakulti kejurute raan	2016
10	Nazatulshila rasis,	Eco Enzyme for Wastewater Treatment			2018
	Meri, N.H., Alias, A.B., Talib, N., Rashid, Z.A., Ghani, W.A.W.A.K.	Hydrogel charsh(HC) as powerful adsorbent	ITEX 2017	KLCC	2017
11	Shaharum, N.S.N., Shafri, H.Z.M., Ghani,W.A.W.A. K., Yusuf, B., Hamud, A.M	Image Classification for Mapping oil palm distribution via support vector machine using scikit learn module	INEX 2018	perlis	2018
12	Wan azlina, shafreeza sobri, SDAR	Biochar is new Green : supercapacitor	ICAN 2019	UPM	2019

TEACHING DUTIES

	Course	Code	Credit	Sem,	Teaching assessment
1	KEJURUTERAAN MATEMATIK 2	KKK 3012	3	2 05/06	4.46
2	KEJURUTERAAN MATEMATIK 2	KKK 3012	3	2 05/06	4.53
4	AMALI KEJURUTERAAN 1	KKA 3701	1	1 06/07	4.78
5	KEJURUTERAAN MINYAK DAN GAS	KKA 4410	3	1 06/07	4.53
6	KEJURUTERAAN MINYAK DAN GAS	KKA 4410	3	1 06/07	4.53
7	KEJURUTERAAN SISA PEPEJAL	KKA 4104	3	2 06/07	4.67
8	PROJEK TINJAUAN PROSES	KKA 3907	3	2 06/07	
9	PROJEK TINJAUAN PROSES	KKA 3907	3	2 06/07	
10	KAWALAN PROSES & INSTRUMENTASI	KKA 3313	3	1 07/08	4.34
11	KAWALAN PROSES & INSTRUMENTASI	KKA 3313	3	1 07/08	4.59
12	KEJURUTERAAN SISA PEPEJAL	KKA 4104	3	2 07/08	4.9
13	PEMBANGUNAN DAN PENGURUSAN PROJEK	KKA 3503	3	2 07/08	4.66
14	KEJURUTERAAN SISA PEPEJAL	KKA 4104	3	2 07/08	4.5
15	KAWALAN PROSES & INSTRUMENTASI	KKA 3313	3	1 08/09	
16	PRINSISP KEJURUTERAAN ALAM SEKITAR	KKA 5102	3	1/08/09	4.07
17	SOLID WASTE ENGINEERING (MASTER)	KKA 4104	3	2/08/09	4.5
18	SOLID WASTE ENGINEERING (BACHELOR)	KKA 4104	3	2/08/09	4.3
19	WATER & WASTEWATER ENGINEERING	ECH4502	3	1 11/12	4.3
20	AMALI KEJURUTERAAN 1	KKA 3701	1	1 11/12	4.3
21	PRINSISP KEJURUTERAAN ALAM SEKITAR	KKA 5102	3	1 11/12	
22	SOLID WASTE ENGINEERING (MASTER)	KKA 4104	3	2 11/12	4.5
23	SOLID WASTE ENGINEERING	KKA 4104	3	2 11/12	4.8
24	SOLID WASTE ENGINEERING & DESIGN	ECH5104	3	1 11/12	4.8
25	UNIT OPERATION II	ECH 3117	3	1 12/13	4.6
26	PRINSISP KEJURUTERAAN ALAM SEKITAR	KKA 5102	3	1 12/13	4.8
27	SOLID WASTE ENGINEERING (MASTER)	KKA 4104	3	1 12/13	4.8
28	SOLID WASTE ENGINEERING	KKA 4104	3	2 12/13	4.7
29	UNIT OPERATION II	ECH 3117	3	1 13/14	4.48
30	SOLID WASTE ENGINEERING & DESIGN	ECH5104	3	1 11/12	4.8
31	UNIT OPERATION II	ECH 3117	3	1 13/14	4.91
32	HEAT TRANSFER PROCESES	ECH 3113	3	2 13/14	4.9
33	SOLID WASTE ENGINEERING & DESIGN	ECH5104	3	2 13/14	4.8
34	UNIT OPERATION II	ECH 3110	3	1 14/15	4.58
35	SOLID WASTE ENGINEERING & DESIGN	ECH5104	3	1 14/15	4.87
36	HEAT TRANSFER PROCESSES	ECH 3113	3	2 14/15	4.6
37	UNIT OPERATION II	ECH 3110	3	1 15/16	4.72
38	SOLID WASTE ENGINEERING & DESIGN	ECH5104	3	1 15/16	4.59
39	UNIT OPERATION II	ECH 3110	3	2 15/16	4.67
40	UNIT OPERATION II	ECH 3110	3	2 15/16	4.76
41	MASS AND HEAT TRASFER PROCESSES	ECH 3113	3	1 16/17	4.75
42	UNIT OPERATIONS II	ECH 3110	3	2 16/17	4.72
43	UNIT OPERATIONS II	ECH 3110	3	1 17/18	4.62
44	MASS AND HEAT TRASFER PROCESSES	ECH 3113	3	2 17/18	4.56
41	SOLID WASTE ENGINEERING & DESIGN	ECH5104	3	2 16/17	4.8
42	UNIT OPERATIONS II	ECH 3110	3	2 16/17	4.43
43	UNIT OPERATIONS II	ECH 3110	3	1 17/18	4.79
44	SOLID WASTE ENGINEERING & DESIGN	ECH5104	3	2 17/18	4.46
45	MASS AND HEAT TRASFER PROCESSES	ECH 3113	4	1 18/19	4.53
46	SOLID WASTE ENGINEERING & DESIGN	ECH5104	3	1 18/19	4.78
	TOTAL CREDIT		136		

STUDENT SUPERVISIONS

Category	SUPERVISOR						EXAMINER					
	Current student			Graduate			Current student			Graduate		
	PhD	master	Total	Phd	master	Total	Phd	master	Total	Phd	master	Total
<i>chairman</i>	3	2	5	3	9	12	1	1	2	1	6	7
<i>Member</i>	4	0	4	8	9	17	6	1	7	7	19	26
Total	7	2	9	11	18	29	9	2	9	8	25	33

Supervisor (current student)

No	Programme	category	Name	Status	Sem. No
1	PhD	Chairman	Nur Izzati binti Md Saleh	Drop	8
2	PhD	Chairman	Nurfarahana binti Mohd Nasir	Continue	4
3	PhD	Chairman	Norliyana Farzana binti Zulkefli	Continue	2
4	PhD	member	Mohammed Ngabura	Thesis Submitted	14
5	PhD	member	Cik Jamla Farhan binti Yahya	Continue	5
6	PhD	member	Siti Fatimah binti Ismail	Probation	4
7	PhD	member	Nor Akhlisah binti Zulkipli	Continue	3
8	Master	Chairman	'atiyyah Ameenah binti Azni	Continue	6
9	master	Chairman	Mohd Nadly Aizat bin Mohd Nudri	Thesis Submitted	6

Supervisor (graduated student)

No	Prog ramme	category	Matrix No	Name	Senate date	Sem. No
1	Master	Member	GS46978	Siti Nur Atikah binti Mahamud	12/09/2019	6
2	Master	Member	GS49241	Nur Shafira Nisa binti Shaharum	12/09/2019	4
3	PhD	Chairman	GS26077	Nor Habsah binti Md Sabiani	12/09/2019	17
4	PhD	Chairman	GS48827	Kimam Silas	12/09/2019	5
5	Master	Chairman	GS46913	Jakaria bin Rambli	17/06/2019	6
6	Master	Chairman	GS44528	Syahin binti Mohammad Saleh	06/05/2019	8
7	PhD	Member	GS31497	Ahmed Abdulmajeed Mohammed Al-Ogaidi	06/05/2019	16
8	PhD	Member	GS36404	Nuruljannah binti Khairuddin	20/03/2019	10
9	PhD	Member	GS38847	Ahmed Shamil Abdulrahman	20/03/2019	10
10	Master	Chairman	GS44195	Hazimah binti Madzaki	20/03/2019	7
11	PhD	Chairman	GS36523	Ramin Khezri	04/10/2018	11
12	Master	Chairman	GS41970	Tan Hong Boon	17/05/2018	7
13	Master	Member	GS40861	Bawaanii a/p Shanmugarajah	12/10/2017	6
14	PhD	Member	GS33470	Ismail Muhammad Nasir	09/03/2017	10
15	PhD	Member	GS24160	Dalia Khalid Mahmoud	04/10/2016	14
16	PhD	Member	GS32220	Nazaitulshila binti Rasit	08/09/2016	9
17	Master	Member	GS38425	Abdul Raheem	11/02/2016	5
18	Master	Member	GS30960	Liew Mei Yi	09/10/2014	6
19	Master	Member	GS30625	Rabiatul Adawiyah binti Abdul Wahab	20/03/2014	5
20	Master	Chairman	GS31428	Muhammed Lamin Sanyang	09/01/2014	5
21	Master	Chairman	GS29046	Nur Zalikha binti Rebitanim	14/11/2013	6
22	PhD	Member	GS21020	Mazyar Peyda	11/07/2013	11
23	PhD	Member	GS20169	Mohammed Mahmoud Ahmad Al-Obaidi	21/02/2012	8
24	Master	Member	GS23305	Nsamba Hussein Kisiki	12/05/2011	5
25	Master	Member	GS19923	Seyed Shahabeddin Nehzati	12/05/2011	7
26	Master	Chairman	GS21510	Farideh Heidarpour	13/01/2011	5
27	Master	Chairman	GS21224	Alipour Moghadam Esfahani Reza	25/11/2010	6
28	Master	Chairman	GS16616	Bahareh Sanaie Movahed	10/12/2009	7
29	Master	Member	GS15117	Nor Fadilah binti Abd. Halim	11/09/2008	8

Supervision for visiting lecturer/post-doctoral

no	NAME	UNIVERSITY	Level	Year
1	Ayash Mohamad	India	international	2012
2	Motjaba Javidi	Iran	international	2015
3	Elhadi	Algeria	international	2016

Examiner (current student)

No	Prog ramme	category	Matrix No	Name	Senate date	Sem. No
1	PhD	Chairman	GS45638	Omale, Sunday Ogakwu	Thesis Submitted	9
2	PhD	Member	GS42927	Shehu Ibrahim Akinfalabi	Thesis Submitted	11
3	PhD	Member	GS46332	Musa Yahaya Pudza	Thesis Submitted	9
4	PhD	Member	GS42544	Rabia Daw Ali	Thesis Submitted	11
5	PhD	Member	GS44080	Sepehr Azizkhani	Drop	10
6	PhD	Member	GS45074	Nur Atiqah binti Mohamad Aziz	Continue	10
7	PhD	Member	GS49031	Mohammed Ali Musa	Drop	7
8	Master	Chairman	GS46607	Zulina bte Abd Maurad	Continue	8
9	Master	Member	GS48305	Norshafiqah binti Khairul Anuar	Continue	6

Examiner (graduated students)

No	Prog ramme	category	Matrix No	Name	Senate date	Sem. No
1	PhD	Member	GS42099	Nur Khaliesah binti Abdul Malik	12/03/2020	9
2	PhD	Member	GS45066	Nour A. T. Zghaibi	19/12/2019	9
3	PhD	Member	GS43216	Seyed Amirebrahim Emami Moghaddam	29/10/2019	10
4	PhD	Member	GS40990	Fatma Sabariah binti Alias	20/03/2019	9
5	Master	Chairman	GS40354	Farah Ezzah binti Ab. Latif	19/10/2018	6
6	PhD	Member	GS45136	Muhammad Salisu Khalil	04/10/2018	7
7	Master	Chairman	GS33801	Yoong Jun Hao	12/07/2018	11
8	PhD	Member	GS40365	Moh Yiing Chiee	08/03/2018	7
9	PhD	Member	GS32450	Halimatun Saadiah Hafid	08/06/2017	11
10	Master	Member	GS37250	Faten Hameed Kamil	07/02/2017	6
11	Master	Member	GS39435	Nur Salimah binti Mohd Rapeia	20/12/2016	6
12	Master	Member	GS34236	Mostafa Yusefi	10/03/2016	5
13	Master	Member	GS35252	Nika Alemahdi	08/10/2015	5
14	Master	Member	GS33786	Siti Nur Aesyah binti Abas	13/08/2015	6
15	Master	Member	GS30037	Nor Shazwani binti Daud	14/05/2015	8
16	Master	Chairman	GS31366	How Cai Kian	12/03/2015	7
17	Master	Member	GS29109	Nur Amelia Azreen bt Adnan	09/10/2014	7
18	Master	Member	GS26208	Fatin Nordalila binti Omar	11/09/2014	9
19	Master	Member	GS30333	Tengku Roslina binti Tuan Yusof	11/09/2014	6
20	Master	Member	GS31880	Mohd Azwan bin Jenol	14/08/2014	6
21	PhD	Chairman	GS23839	Nasrin Khodapanah	16/06/2014	10
22	Master	Chairman	GS31754	Amirkhani Hadi	03/04/2014	6
23	Master	Member	GS26209	Norhafiza binti Madehi	11/07/2013	7
24	Master	Chairman	GS30239	Ahmad Syafiq bin Ahmad Hazmi	11/04/2013	4
25	Master	Member	GS24337	Amir Syarifuddeen bin Mhd Adnan	11/04/2013	8
26	Master	Chairman	GS28780	Mohammed Yusuf	14/02/2013	4
27	Master	Member	GS24368	Siren anak Linggang	10/01/2013	7
28	Master	Member	GS23631	Heri Purwanto	15/05/2012	7
29	Master	Member	GS25662	Ismail Muhammad Nasir	19/03/2012	5

30	Master	Member	GS23108	Nur Mustika binti Mokhtar	21/02/2012	6
31	Master	Member	GS13754	Azali bin Awaludin	21/02/2008	8
32	Master	Member	GS15598	Rashmi G Walvekar	14/06/2007	4
33	Maste	Member	GS14064	Sumaiya bt Zainal Abidin @ Murad	14/09/2006	9

External Examiner

	name	organization	level	year
1	Nsamba Hussein Kisiki	UniKL	PhD	2013
2	Rusmi Alias	UITM	PhD	2014
3	muhammad shahbaz	UTP	PhD	2018
4	Mohamad Shahnor Bani	UITM	Master	2011
5	Mohd Shafiq Hakimi Mohd Shaid	UTM	Master	2018
6	Halim bin Ghafar	UITM	Master	2013
7	Fariha Liana Mohamad Rahim	UTM	Master	13/9/2015
8	Siti Norfariha Bt Mohd Nasir	USM	Master	9/9/2015
9	Siti Aisyah by Ishak	USM	Master	18/6/2015
10	Nurhashimah binti Hanafi	UTM	Master	Sep-15
11	Norfatihah bt Abdullah	USM	Master	Nov-16
12	HEPHIZIBAH David	UNITEN	Master	2016
13	Mohamad Zarqani yeop	UITM	Master	2018
14	nurfatin aimilia binti rozuki	UTM	master	16-Apr-19
15	adrian chun minh loy	UTP	master	Apr-19
16	dayang khairunnisa awg azni	UTM	master	Jul-19
17	Abdel	MJIT	PhD	2020

INDUSTRIES & COMMUNITY LINKAGES

Involvement in professional association/organization/body

No	Name of Association/Organization/Body	Role (President/Secretary/Committee Member/Ordinary Member)
1	Institute of Chemical Engineers (IChemE), 99914377	Ordinary Member
2	Board of Engineers Malaysia (BEM), 51718	Graduate Member
3	Institute of Engineers Malaysia (IEM), Chemical engineering technical division	co-opted member (CETD) 2014-2016
4	Young Scientist Network (YSN), Academy science Malaysia, 2016-2020	Co-chair (2019) and chair (2020) science Policy working group / Associate member
5	Biochar Malaysia Association (BMA), 2013-2014	Ordinary member
6	Technical committee for solid fuel -TC238, Malaysia representative (SIRIM)	technical experts
7	5th International Symposium on Applied Engineering and Sciences (SAES 2017)	AJK
8	2018 international biomass-environmental-food-energy -water (befew) nexus	Chairman
9	31st symposium of chemical engineers malaysia	AJK- publicity
10	Symposium of Chemical Engineers, (SOMCHE 2010)	AJK - technical
11	Postgraduate Chemical Engineers symposium (POCER 2016)	member
12	Postgraduate Chemical Engineers symposium (POCER 2013)	member
13	international symposium on technologies & materials for renewable energy, environment & sustainability , 6-7 feb 2019,faisalabad, pakistan	plenary speaker
14	ICBIOE 2018	invited speaker
15	POMREQ 2018 (NATIONAL SEMINAR ON PALM OIL MILLING, REFINING, ENVIRONMENT AND QUALITY)	invited speaker
16	2018 international biomass-environmental-food-energy -water (BEFEW) nexus	chairperson
17	31st symposium of chemical engineers Malaysia 2018 (SOMCHE 2018)	chairperson

Expert/advisory panel

No.	Task/Role	Organizations	Year
1	Technical Committee Panel for TC 238 Solid Biofuels	Standard Malaysia (SIRIM)	2012-date
2	Expert panel member for formulating National Policies on Science, technology & Innovation (NPSTI) study for ASM	Academy of sciences Malaysia (ASM)	2017
3	Evaluator panel for EIA report review	Dept. of Environmental (DOE)	2019-2020
4	Technical advisory panel for project evaluation	Ministry of Housing & Local government (MHLG)	2019-2020
5	Invited panel for Biasiswa Agung	Jabatan Perkhidmatan Awam (JPA)	2019
6	Invited panel for Skim Latihan Persekutuan	Jabatan Perkhidmatan Awam (JPA)	2019
7	Chemical engineering technical division (CETD)	Institute of Engineers Malaysia (IEM),	2014-2016
8	Co-chair Science Policy & Governance Working group of Young Scientist Network (YSN)	Academy of sciences Malaysia (ASM)	2019
9	Chair Science Policy & Governance Working group of Young Scientist Network (YSN)	Academy of sciences Malaysia (ASM)	2020

Speaker for training / workshops

	INVITED SPEAKERS/TRAINERS	Date	Organizer
1	Speaker for pengurusan dan rekabentuk landfill	2008	Pakar management sdn bhd
2	Speaker for training on industrial wastewater treatment	2011	pakar management sdn bhd
3	Speaker for environmental pollution management	2017	Pakar management sdn bhd
4	Speaker for seven keys for successful international researcher	2012	Persada ray
5	Industrial internship at pakar management sdn bhd	2017	Pakar management sdn bhd
6	Trainer for gasifier training	6.11.17	Crops for future sdn bhd
7	Trainer for 2-days course on algal biotechnology	29.2.16	UPM/TNBR
8	Training on sludge and wastewater treatment	2019	Cambridge training Sdn Bhd

Industrial/ community engagements

No	Name of Activity/Project/ Program	Organizer	Venue	Date
1	Hari Transformasi Serdang Bandar Hijau	Majlis perbandaran subang jaya (MPSJ)	Tasek Serdang	15.11.15
2	PROGRAM GLOBAL-I-LEAD STEM	UPM	UPM	22/11/17
3	Pelaksanaan Program Pengukuhan STEM Murid Sekolah Orang Asli (STEM-MOA)	Islamic Relief Malaysia (IRM)	SK Buluh Nipis	16-31/62018
4	bBochar is the new green (student supervision)	SDAR	UPM	2016-2018
5	Hari Transformasi Serdang Bandar Hijau	MPSJ	Tasek Serdang	15/11/2015
6	Formulating National Policies on Science, technology & Innovation (NPSTI) : for Academy Science Malaysia	ASM	ASM,	2017
7	Science outreach workshop in conjunction with Kuala Lumpur Science & Exhibition Fair (KLESF)	MESTECC	MIECC serdang	2018
8	Invited judge panel for Research Day evaluation Politeknik Kuala Selangor, Kuala Selangor	Politeknik Kuala Selangor	Politeknik Kuala Selangor	2017
9	Invited speaker for women in engineering forum organized by Institute Energies Malaysia (IEM) women division	IEM	UNMC	2015
10	Pertandingan asean 7th asean plus three junior science oddyssey (apt-jso-7)	MESTECC	UPM	May-18
11	Pembangunan modul IBSE STEM untuk sekolah rendah by science education working group for academy science Malaysia (ASM)	ASM	ASM	2018
12	Riau AgriAqua, Community development Cooperation program by UPM and EMP (Indonesia)	UPM & EMP	Acheh	2019
13	Demonstration biocompost derived fro blended biochar food-waste	UPM	UPM	2019

	Networking	level	year
1	MOA with university of Bath, UK , UKM, UTP & UNMC	international & national	2017-2019
2	MOU with oxford university	international	2019-2021
4	MOA with Institute of Technology petronas (IPTSB), UTP	national	2018-2019
5	NDA Indah Water Konsortium	national	2016
6	Consultation agreement with crops for future research centre	National	2016

AWARDS & RECOGNITIONS

No	Name of Awards/stewardship	Conferring Body	Category	YEAR AWARD ED	ROLE
1	Loreal Fellowship Awards 2012	Loreal Sdn Bhd (UNESCO)	NATIONAL	2012	PROJECT LEADER
2	Bronze Medal Award, PRPI 2007(Stabilization and recycling of agricultural based residues as potential glass-ceramic based	UPM	UPM	2007	PROJECT LEADER
3	Bronze Medal Award, PRPI 2007(Biological nitrogen removal (BNR) of raw leachate from transfer station	UPM	UPM	2007	PROJECT LEADER
4	Silver Medal Award , PRPI 2007(Characterization of agrowaste for possible utilization in renewable energy production (UPM	UPM	2007	PROJECT LEADER
5	Silver Medal Award , PRPI 2008(DispergCAL : Chemical Dispersion, Data Base and Simulation Software	UPM	UPM	2008	MEMBER
6	Silver Medal Award , PRPI 2008(Stabilization and recycling of agricultural based residues as potential recycling material	UPM	UPM	2008	PROJECT LEADER
7	Gold Medal Award , PRPI 2008(Renewable fuel production from agrowaste via gasification(Leader)	UPM	UPM	2008	PROJECT LEADER
8	Gold Medal Award , PRPI 2008 (Fire Retardancy of PU/clay Nanocomposites : Synergy with Moca and Clay based Fire Retardant (member)	UPM	UPM	2008	MEMBER
9	Best overall "Knowledge Transfer Programme" project	MARS	NATIONAL	2017	MEMBER
10	Asia-Pacific University - Community Engagement Network (APUCEN) International Youth Volunteer Award (Environment Category)	APUCEN SUMMIT	INTERNATIONAL	2017	MEMBER
11	outstanding women in engineering award	international engineering (India)	international	2018	PROJECT LEADER
12	Knowledge achievement for Nations and Society (KANS) award	Mustapha Foundation (Iran)	international	2018	PROJECT LEADER
13	Silver award MPI exhibition (Eco Enzyme for Wastewater Treatment)	UMT	National	2018	member
14	Silver award ITEX 2018 (Hydrogel charsh(HC) as powerful adsorbent)	ITEX 2017	International	2018	member
15	Silver award IIDEA 2018 ; IMAGE CLASSIFICATION FOR MAPPING OIL PALM DISTRIBUTION VIA SUPPORT VECTOR MACHINE USING SCIKIT-LEARN MODULE	I-IDEA 2018	International	2018	Member
16	Anugerah penerima geran antarabangsa UPM	UPM	UPM	2018	Project leader
17	Biochar Microwave carbonizer (BMC)	I-TEX 2019	International	2019	member

	Services awards	PERINGKAT	TAHUN	BILANGAN
1	Anugerah Perkhidmatan Cemerlang Universiti	Universiti	2006, 2010, 2013, 2016	4
2	Sijil Perkhidmatan Cemerlang Universiti	universiti	2006-2018	12
3	Sijil cemerlang pengajaran	Universiti	2006-2018	12

ANUGERAH JINM					
1	BIOCHAR as new Green, Projek berimpak tinggi 2017	Fasilitator	2017	Sekolah Dato Abdul razak(SDAR)	national
2	biochar is new green : supercapacitor, projek berimpak tinggi 2018	Fasilitator	2019	Sekolah Dato Abdul razak(SDAR)	national
3	STEM-Orang Asli , projek berimpak tinggi 2018	Fasilitator	2018	Islamic relief malaysia (IRM)	national
4	GLOBAL I LEAD STEM	Fasilitator	2017	UPM- MRSM Kota Putra	national
5	GISC-STEM 2018, Projek berimpak tinggi 2018	Fasilitator	2018	UPM- sri Ayesha	national
6	Anugerah khas khidmat bakti bukan pelajar SDAR 2016	Fasilitator	22/10/16	Sekolah dato abdul razak	National
7	Anugerah khas khidmat bakti bukan pelajar SDAR 2018	Fasilitator	13/10/2018	Sekolah dato abdul razak	National
8	GISC-STEM 2019, Projek berimpak tinggi 2018 & anugerah Khas (environment)	Fasilitator	2019	UPM- SM sains Faris Perta	national

Recognitions

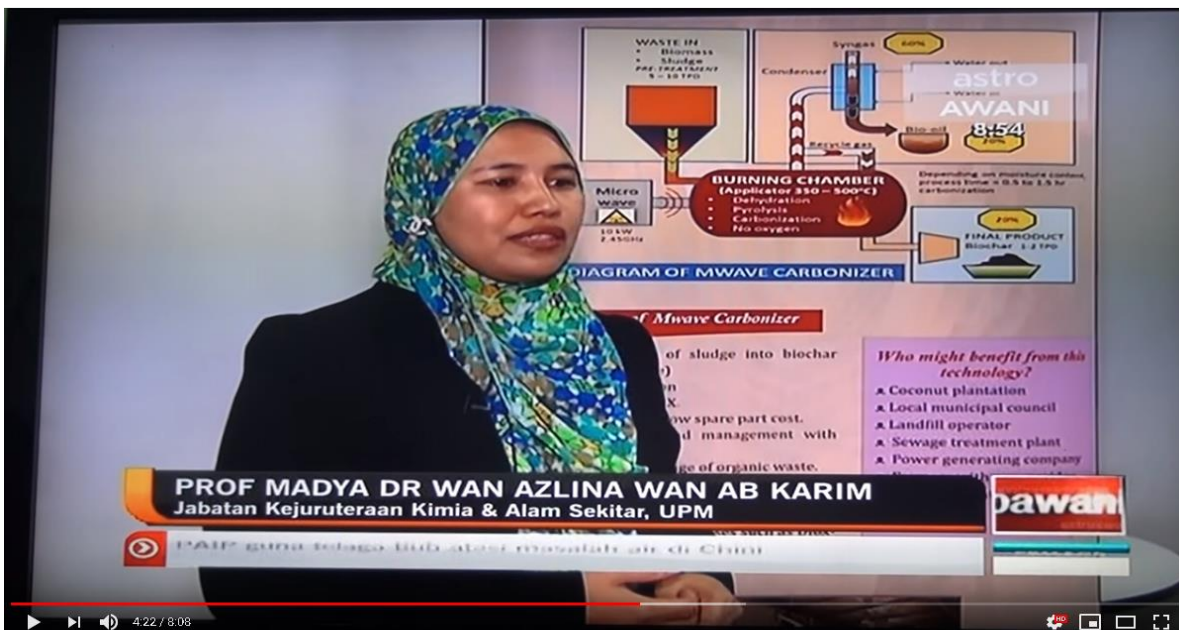
	journal reviewer	category	year
1	International Conference on Environmental Forensics 2018 (iENFORCE2018)	non-cited	2018
2	Journal of Cleaner Production	cited	2018
3	Modern Environmental Science and Engineering (ISSN 2333-2581)	cited	2018
4	waste and biomass valorization	cited	2018
5	International Journal of Hydrogen Energy	cited	2018
6	Journal of Cleaner production	cited	2018
7	Journal of Chemical Engineering	cited	2018
8	Waste management	cited	2018

	External assessor		
1	External assessor for UITM (assoc. prof.- Dr. Ahmad rafizan)	UITM	1
2	External assessor for UKM (assoc. prof – Dr Shahbudin)	UKM	1
3	External assessor for UIA (assoc. prof.-Dr Sarina Sulaiman	UIA	1

ACKNOWLEDGMENTS IN MEDIA



Loreal fellowship for women in science (FWIS), Harian metro 2 october 2012



Kajian simulasi Biochar Microwave Carbonizer(BMC) , Astro awani, 13 april 2016



Inovasi Hasil Arang Hijau, Harian Metro, 12 April 2017

kans award coverage



Iran TV for Knowledge and Notion in Science Award (KANS) for outstanding muslim scientist

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