

CURRICULUM VITAE



Mohamed Azwan bin Mohamed Zawawi

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Education

1. M.S. Water Resources Engineering, 2001, Universiti Putra Malaysia
2. B. S. Agricultural Engineering, 1998, Universiti Putra Malaysia.

Areas of Interest

1. Groundwater, Water Resources Engineering

Professional Qualification/ Membership/ Affiliation

1. Member, Malaysian Society of Agricultural Engineers (MSAE)
2. Member, American Society of Agricultural and Biological Engineers (ASABE)

Appointments

Position	Duration
1. Assistant Head of Lab, Soil and Water Conservation Lab, Department of Biological and Agricultural Engineering, Faculty of Engineering, UPM	February 2018 to 2021
2. Lecturer, Department of Biological and Agricultural Engineering, Faculty of Engineering UPM	2014 to date
3. “ <i>Jawatankuasa Pepandu Perjawatan Akademik dan Kurikulum</i> ”	June 2015 to Dec. 2016
4. Coordinator (Soil and Water Resource), Department of Biological and Agricultural Engineering, Faculty of Engineering, UPM	June 2015 to Dec. 2016
5. Coordinator of Soil and Water Engineering (With thesis programme), Department of Biological and Agricultural Engineering, Faculty of Engineering, UPM	June 2015 to Dec. 2016
6. Head of Lab, Soil and Water Conservation Lab, Department of Biological and Agricultural Engineering, Faculty of Engineering, UPM	2015 to 2016
7. HEPA Coordinator, Department of Biological and Agricultural Engineering, Faculty of Engineering UPM	2007 – 2008



8. Vice President, Sport and Social Club, Faculty of Engineering, UPM 2003 - 2005
9. Tutor, Department of Biological and Agricultural Engineering, Faculty of Engineering, UPM August 2000– December 2001

Publications

Journals

1. Assessment of nutrient leaching in flooded paddy rice field experiment using Hydrus-1D (2018) Abdikani Abdullahi Mo'allim, Md Rowshon Kamal*, Hadi Hamaaziz Muhammed, Mohd Amin Mohd Soom, Mohamed Azwan b. Mohamed Zawawi, Aimrun Wayayok and Hasfalina bt. Che Man. *MDPI Open Access Journals, Water* 2018, 10, 785.
2. An assessment of the vertical movement of water in a flooded paddy rice field experiment using Hydrus-1D (2018) Abdikani Abdullahi Mo'allim, Md Rowshon Kamal*, Hadi Hamaaziz Muhammed, Nasehir Khan E. M. Yahaya, Mohamed Azwan b. Mohamed Zawawi, Hasfalina bt. Che Man and Aimrun Wayayok. *MDPI Open Access Journals, Water* 2018, 10, 783.
3. Development of geological structure of Selangor basin using borehole lithology information (2017) Nur Hidayu Abu Hassan, Mo hamed Azwan Mohamed Zawawi and Nur Sabrina Nor Jaeman. *Journal of Advanced Research in Applied Sciences and Engineering Technology* 7, Issue 1 (2017) 32-42
4. Application of geophysical technique in investigation of groundwater quality at Melaka Tengah, Malacca (2016) N. F. Yusof*, M. A. Mohamed Zawawi¹, H. Juahir and N.Z. Karim. *Journal of Advanced Research Design* ISSN (online): 2462-1943 | Vol. 24, No. 1. Pages 1-12.
5. 2-D resistivity imaging in Taiping, Perak, Malaysia (2016) A. I. Rosli*, M. A. Mohamed Zawawi, H. Juahir, N. Z. Karim and N. F. Yusof. *Journal of Advanced Research in Applied Mechanics*. ISSN (online): 2289-7895. Vol. 25, No. 1, Pages 1-9.
6. Assessment of imazapic presence in surface water and groundwater in paddy field area (2016) Anis Zakiah Mazlan, Hazilia Hussain and Mohamed Azwan Mohamed Zawawi. *Jurnal Teknologi*, Vol 78 Vol. 78: 33 – 37
7. Analytical method development for imazapic herbicide using high performance liquid chromatography (2015) Anis Zakiah Mazlan, Hazilia Hussain, Mohamed Azwan Mohamed Zawawi and Mehdi Sameni. *Malaysian Journal of Analytical Sciences*, Vol 19 No 4 (2015): 715 – 721
8. Analysis of tubewell performance as an evaluation of the physical aquifer model being developed (2015) S. A Sulaiman, M. A. M. Zawawi and E. H. Mohamed. *Journal of Advanced Review on Scientific Research*. ISSN (online): 2289-7887 | Vol. 11, No.1. Pages 37-45, 2015
9. Development of 3D model view of potential groundwater aquifer for irrigation using geophysical technique (2015) Fathin Ayuni Azizan, Mohamed Azwan Mohamed Zawawi, Ahmad Fikri Abdullah. *Jurnal teknologi*. 76:15 (2015) 125–130
10. Detection of fractured aquifer using combination of resistivity and induced polarization analysis (2015) Mohamed Azwan Mohamed Zawawi, Noorellimia Mat Toridi, Aimrun Wayayok. *Jurnal Teknologi*. 76:15 (2015) 119–124

11. Evaluation of methane oxidizer bacteria in the rice soil in Malaysia (2014) Pardis Fazli, Hasfalina Che Man, Mohamed Azwan, Umi Kalsom Md Shah, Nor Aini Abdul Rahman, Azni Idris. *International Journal of Enhanced Research in Science Technology & Engineering*. Vol. 3 Issue 3, Pages 360-367.
12. Effects of Soil Moisture Content on Groundwater Electrical Resistivity Values in Irrigation Paddy Scheme, Tanjong Karang, Malaysia. (2014) Nurmala Sari, Mohamed Azwan Mohamed Zawawi, Prastowo Prastowo, Yuli Suharnoto. *International Journal on Advanced Science, Engineering and Information Technology*. Vol. 4, No. 5, Pages 38-42.
13. Performance Evaluation and Characteristics of Selected Tube Wells in the Coastal Alluvium Aquifer, Selangor. (2014) Fauzie, M. J., Azwan, M.M. Z., Hasfalina, C. M., Thamer Ahmad Mohammad. *Pertanika J. Sci. & Technology*. 22 (1): 213 – 225.
14. Improving Irrigation Water Delivery Performance of a Large-Scale Rice Irrigation Scheme. (2014) Rowshon, M.K., Mojid, M.A., Amin, M.S.M., Yazid, M. and Azwan, M.Z. *J. of Irrigation of Irrigation and Drainage Engineering, American Society of Civil Engineering (ASCE)*, Accepted 12 March 2014 (IF: 1.126, ISI)
15. Assessment of Groundwater Pollution Potential Using GIS and Modified Drastic Model in Selangor, Malaysia (2013) – Hanim Farhana Abd Rahman, Mohamed Azwan Mohamed Zawawi and Ezuldin. (*IEM Journal*) Vol. 74, No. 2
16. Temporal Patterns and Source Apportionment of Nitrate-Nitrogen Leaching in a Paddy Field at Kelantan, Malaysia. (2013) - H, Hazilia; M.Y., Kamil; M.R., Firuz; A.L., Puziah; J., Hafizan; M.M.Z., Azwan. (*Pakistan Journal of Biological Sciences*) 16 (22): 1524-1530.
17. Performance of Shallow Tube Well on Groundwater Irrigation in Tropical Lowland Rice Cultivation Area. (2013) - M.J., Fauzie; MMZ, Azwan; Hasfalina; K.Suzilawati. (*Sains Malaysiana*) 42(8)(2013): 1101–1108.
18. Determination of Water Requirement in A Paddy Field At Seberang Perak Rice Cultivation Area. (2010) – Mohamed Azwan Mohamed Zawawi, Saari Mustaffa and Zuzana Puasa. (*IEM Journal*) – Vol. No. 71, Page 32
19. Nitrate Nitrogen Concentration Variation in Groundwater Flow in A Paddy Field. (2010) – Mohamed Azwan Mohamed Zawawi, Mohd Kamil Yusoff, Hazilia Hussain and Suhani Nasir. (*IEM Journal*) – Vol. No. 71, Page 2
20. Simulation of Phosphorus Movement in Unconfined Aquifer by Means of Visual MODFLOW (2010) – Seyed Reza Saghravani, Saari Mustapha, Shaharin Ibrahim, Mohamed Azwan Mohamed Zawawi and Elias Randjbaran (*Journal of Computer Science*) - Vol. No. 6, Page 446-449
21. Simulation of Phosphorus Migration in Unconfined Aquifer: Universiti Putra Malaysia. (2009) - Seyed Reza Saghravani, Saari Mustapha, Shaharin Ibrahim, Mohd. Kamil Yusoff, Mohamed Azwan Mohamed Zawawi and Seyed Fazlolah Saghravani. (*Journal of Environmental Hydrology*) - Vol. No. 17, Page 32

Conference Proceedings

1. Potential Dermal Exposure Assessment of Farmers to Herbicide Imazapic in an Agriculture Area (2016) Anis Zakiah Mazlan, Hazilia Hussain and Mohamed Azwan Mohamed Zawawi. *Procedia - Social and Behavioral Sciences* 234 (2016) 144 – 153

2. Effects of Soil Moisture Content on Groundwater Electrical Resistivity Values in Irrigation Paddy Scheme, Tanjong karang, Malaysia. (2014) Nurmala Sari, Mohamed Azwan Mohamed Zawawi, Gilles Belaud, Prastowo, Yuli Suharnoto. 2nd International Conference Sustainable Agriculture, Food and Energy (SAFE2014, Bali, Indonesia.)
3. Assessment of seawater intrusion in Langat basin, Malaysia. (2012) - Mohammed S. Nusari¹; Mohd A. M. Soom²; Thamer A. Mohammad³; Abdul H. Ghazali³; Aimrun Wayayok²; Mohamed A. M. Zawawi. Proceedings of the ICE - Water Management
4. Effect of cultivation system on the methane emission from rice soil. (2012) Fazli P., Hasfalina C. M., M. Azwan, Azni I., Umi Kalsom M. Shah, Aimrun W. World Research and Innovation Convention on Engineering and Technology Kuala Lumpur, Malaysia.
5. Drawdown Prediction from Pumping Well on Shallow Alluvial Aquifer at Paddy Cultivation Area. (2011) - M.J., Fauzie; MMZ, Azwan; Hasfalina. AYRC X³ 2011 AKEPT'S 1ST Annual Young Researchers International Conference and Exhibition.
6. Automatic Irrigation System in Rice Cultivation Area. (2011) - MMZ, Azwan, RRI, Izzati. The 3rd International Agriculture Students Symposium.
7. Groundwater Flow and Variation of Nitrate Concentration Using GIS in A Paddy. (2008)- H, Hazilia; MMZ, Azwan. Fifth National Public Health Conference. (Poster Presentation)

Research Grants

No	Project Title	Amount (RM)	Year	Source of Fund
1.	Hydrogeological implication framework for sustainable groundwater extraction	20,000	2016-2018	Putra IPS Grant
2.	A Conjunctive Use Model for Effective paddy Irrigation Management	135,000	2015-2017	Putra IPB Grant
3.	Development and Application of Climate-Smart DSS for On-Farm Real-Time Irrigation Scheduling and Water Allocation Strategies in Paddy	98,000	2013-2015	Putra Grant
4.	Methane-oxidizer bacteria (MOB) Characterization in Paddy Soil As Methane Sequester for Green Environment		2011-2013	FRGS
5.	In Situ Treatment Using Green Polymers to Enhance Sweep Efficiency of Groundwater Contaminants	30,000	2011-2013	RUGS (UPM)
6.	Evaluation of Pumping Test techniques for Application to Malaysian Aquifers	78,000	2011-2013	RUGS (UPM)
7.	The Use of Shallow Groundwater as Source of Irrigation in Rice Cultivation Area	30,000	2009-2011	RUGS (UPM)

Awards/Recognition

No	Name of awards	Title	Award Authority	Award Type	Year
1	Academic Award	Certificate of Excellent Service	University Putra Malaysia (UPM)	National	2007
2	Academic Award	Certificate of Excellent Service	University Putra Malaysia (UPM)	National	2008
3	Service Award	Certificate of Excellent Laboratory Service	University Putra Malaysia (UPM)	National	2011
4	Academic Awards	Certificate of Excellent Service	University Putra Malaysia (UPM)	National	2011
5	Academic award	Certificate of Excellent Service	University Putra Malaysia (UPM)	National	2012

Professional Services

	Role	Title	Year
1.	Modeller	Groundwater Modeling Study at Arabian Petrochemical Company, Saudi Arabia.	2018
2.	Modeller	The Feasibility Study of Safe Withdrawal of Groundwater Pumping for Sustainable Groundwater Supply at Tg. Mas, Kelantan	2018
3.	Consultant	Groundwater exploration study using Inverse Polarization method with Wenner-Schlumberger array at Institute of Sustainable Agrotechnology (INSAT), Universiti Malaysia Perlis, Sg. Chuchuh Campus, Padang Besar. Perlis.	2017
4.	Consultant	Kajian struktur geologi di Setiawangsa, Kuala Lumpur	2017
5.	Consultant	Laporan ujian resistivity di keratan cerun Kg. Chennah, Jelebu. Negeri Sembilan.	2017
6.	Consultant	Groundwater exploration study using inverse polarization method with pole-dipole array at Risda Keratong, 1, 2 & 3, Pahang.	2017
7.	Consultant	Groundwater exploration study using inverse polarization method with Wenner-Schlumberger array at RISDA Durian Mas, Terengganu.	2017
8.	Consultant	Analysis of FELDA Cerol, Terengganu geo-structure from Inverse Polarization/Wenner-Schlumberger resistivity data.	2017

9.	Consultant	Groundwater exploration study using inverse polarization method with Wenner-Schlumberger and Pole-Dipole electrode array at Tioman Island, Pahang Darul Makmur.	2017
10.	Consultant	Groundwater exploration study using inverse polarization method with Wenner-Schlumberger electrode array at Kamunting Industrial Park, Bukit Jana and Air Kuning, Taiping, Perak Darul Ridzuan	2016
11.	Consultant		
12.	Consultant	Groundwater exploration study using Inverse Polarization method with Wenner-Schlumberger electrode array at Pulau Gadong, Malacca.	2016
13.	Consultant	Groundwater exploration study using Inverse Polarization method at Pengerang, Johor Darul Takzim.	2016
14.	Presenter	An Overview of Future Irrigation for Oil Palm	2016
15.	Consultant	Development of Monitoring Wells for Groundwater Quality Study at Kualiti Alam Sdn. Bhd., Bukit Pelandok, Negeri Sembilan.	2016
16.	Consultant	Groundwater Potential Study Using 2-D Geoelectrical Resistivity Imaging at UEM Edgenta Bhd., Taiping, Perak	2016
17.	Modeller	Analysis of Groundwater Flow Direction at Kualiti Alam Sdn. Bhd., Bukit Pelandok, Negeri Sembilan.	2015
15.	Trainer	<i>“Kursus PDCA Teknikal Sistem Pengairan Tapak Semaian.”</i>	2015
16.	Supervisor	International Student Practical Training Committee Member	2015
17.	Tech. committee member	3rd International Conference in Agricultural and Food Engineering. CAFE2016	2015
18.	Log.committee member	PAWEES-INWEPF Joint International Conference, UPM	2015
19.	Consultant	Groundwater Potential Study at Bukit Sawak, Mukim Bohor, Langkawi, Kedah.	2015
20.	Consultant	Geophysical Study at Sg. Penchala, KL	2015
21.	Consultant	Development of Safe Withdrawal of Groundwater Pumping for Sustainable Groundwater Supply at Lumut, Perak	2015
22.	Paper reviewer	2nd International Conference in Agricultural and Food Engineering. CAFE2014	2014
23.	Consultant	Gw Potential Study Using 2-D Geoelectrical Resistivity Imaging at Nestle Sdn. Bhd. Petaling Jaya	2014
24.	Consultant	Gw Potential Study Using 2-D Geoelectrical Resistivity Imaging at Nestle Sdn. Bhd. Shah Alam	2014



25.	Consultant	Biostrach Waterwell Drilling and Development	2014
26.	Consultant	<i>“Kajian Potensi dan Explorasi Air Bawah Tanah di Mukim Keru, Tampin, Negeri Sembilan”</i>	2014
27.	Consultant	Development of Tube Well at Runchang Aquifer	2014
28.	Consultant	Slug Test and Aquifer Characteristic Study at Nuclear Agency of Malaysia	2014
29.	Supervisor	International Students Practical training. (Oman)	2013
30.	Trainer	<i>“Kursus Pengendalian dan Penyelenggaraan Pam Air di Ladang”</i>	2013
31.	Modeller	Groundwater Modeling Study for Bio-remediation project at Jubail Area, Saudi Arabia.	2012
32.	Research expertise	Microbial Stability in Recirculating Aquaculture System with and without Microalgae	2012
33.	Modeller	Groundwater modeling study for proposed sand mining operation at Bestari Jaya, Kuala Selangor, Selangor.	2012
34.	Technical paper reviewer	Review of journal paper for CAFEi	2012
35.	Consultant	Groundwater Table Analysis & Well Cleaning	2011
36.	Research expertise	Modelling and Optimisation of Nitrogen Transformation In Paddy Field	2011
37.	Technical paper reviewer	Review of journal paper (Federation of Engineering Institutions of Islamic Countries)	2011
38.	Consultant	<i>“Pengendalian dan Penyelenggaraan Jentera Pertanian”</i>	2011
39.	Driller	Development of Tube Well	2010
40.	Research expertise	Lightning Protection System Using Earth Conductor and Enhancement Materials	2010
41.	Trainer	International Students Practical Training (Oman)	2009
42.	Consultant	Water Intake Facilities –Irrigation and Drainage Manual for Malaysia	2008
43.	Consultant	Development of Geospatial Work for Aquilaria Research Project at MINT Tech Park Forest	2007
44.	Consultant	<i>“Penyediaan Pelan Mekanisasi dan Automasi Nasional (Lembaga Pertubuhan Peladang, Malaysia)”</i>	2007
45.	Consultant		2006



Analysis of Soil and Infrastructure of paddy Plot at MARDI Serdang, Selangor

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| 46. | Consultant | EIA of the Proposed Dredging and Relocation of Sediment from Ringlet Lake, Cameron Highlands, Pahang | 2003 |
| 47. | Modeller | <i>“Penilaian Impak Alam Sekitar. Cadangan Projek Bekalan Air Tanah di Olak Lempit dan Ladang Brooklands, Teluk Datok, Selangor.”</i> | 2000 |

Student Supervision

Main Supervisor (M.Sc students)

No.	Name	Title	Status
1.	Muhammad Aidil Hakim bin Mhd Ramzam	A Feasibility Study of Riverbank Filtration Application as Water Intake Using Electrical Resistivity Tomography	On-Going
2.	Norfaezah bt Makzin	A Sustainable Use of Groundwater as Water Source at Bukit Merah, Semanggol, Perak.	On-Going
3.	Nur Hidayu binti Abu Hassan	Evaluation of Groundwater Potential Aquifer for Irrigation Purposes in Selangor River Basin	On-Going
4.	Nor Farhani bt Yusof	Evaluation of Fractured Hard Rock Potential Aquifer by Using Different Geophysical Techniques	On-Going
5.	Mohd Shahril bin Mislan	Hydrogeology And Geophysical Study for The Implication of The Groundwater Abstraction on The Ground Stability, Safe Well Discharges and Land Subsidence Effect at The YTY Industries Group.	On-Going
6.	Sabrina bt Ariffin	Evaluation of Groundwater Pollution Risk Based from Agricultural Activities Using DRASTIC Model and GIS	Thesis Submitted
7.	Shazelia Ashikin bt Sulaiman	Utilization of Artificial Aquifer Physical Model to Aid Technical Learning of Groundwater Hydrology	Graduated
8.	Fathin Ayuni bt. Azizan	Investigation of Groundwater Aquifer at Sawah Sempadan Using Geophysical Technique	Graduated
9.	Hanim Farhana bt. Abd. Rahman	Adaptation of DRASTIC Model for Groundwater Pollution Potential in Selangor, Malaysia	Graduated

Main Supervisor (Bac. Eng, students)



As major supervisor to more than 61 B.E. students projects

