

CURRICULUM VITAE

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CURRICULUM VITAE 2011

- Name** : Wan Zuhairi Wan Yaacob
- Date and place of birth** : 15. 01. 1970 ; Dungun, Terengganu
- Gender** : Male
- Nationality** : Malaysian
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- Current Post** : Associate Professor (DS54)
- Educational Background** :

Year	Higher Institutions/Colleges
1997-2000	Cardiff University, United Kingdom
1995-1996	Cardiff University, United Kingdom
1990-1994	Universiti Kebangsaan Malaysia
1988-1999	Mara Junior Science College (MRSM), Kedah
1985-1987	Mara Junior Science College (MRSM), Perlis

Academic Qualifications :

Year	Degree / Discipline / University	Title of Thesis
1994	BSc (II Upper) in Geology Universiti Kebangsaan Malaysia	Geological mapping of Marudi, Sarawak <i>(Research funding provided by Sarawak Shell Bhd)</i>
1997	MSc in Environmental Geology Cardiff University, United Kingdom	The history and current activity of the Bournville landslide, South Wales, United Kingdom. <i>(This project was jointly supervised by Mr. Howard Siddle from Sir Halcrow Company UK)</i>
2000	PhD in Environmental Geology Cardiff University, United Kingdom <i>Geoenvironmental Research Centre</i>	An Investigation of the attenuation characteristics of natural clay soils in South Wales and potential use as engineered clay liner

2007	Sabbatical at Civil Engineering Department of Cambridge University	Dissolution model of DNAPL in porous saturated soil (working under supervision of Prof Kenichi Soga)
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Awards and Recognition :

Year	Awards Received
2009	Core University Program visiting scientist to Kyoto University, Japan (JSPS-VCC)
2009	Excellent Service Award, UKM
2007	Fellowship from MOSTI to Cambridge University, United Kingdom
2006	Core University Program visiting scientist to Kyoto University, Japan (JSPS-VCC)
2006	Outstanding Teacher Award, UKM
2004	Excellent Service Award, UKM
1996-2000	S.L.A.B. Scholarship for MSc & Doctoral study in United Kingdom

Career History :

2008-Present	Associate Professor
2008	Senior lecturer at Faculty of Science and Technology, UKM
2000-2005	Lecturer at the Programme of Geology, Faculty of Science and Technology, UKM
1995-2000	Study leave to United Kingdom
1994-1995	Tutor

TEACHING & SUPERVISION

List of courses (workshop & short course)

Year	Courses
2002	Bridging Programme for Laboratory Technician at Universiti Putra Malaysia (E0002)
2005	Clean Water Supply and Quality Research Course Year 2005
2006	Laboratory Assistant Course (<i>Intermediate</i>) at UKM Basic Fieldwork KLKM214
2007	National Soil Erosion Research Centre Colloquium. Lecture on Geological Mapping and Landslide Risk Assessment. 21st June 2007

List of teaching courses (Further information in <http://www.ukm.my/zuhairi>)

UNDERGRADUATE COURSE:

- Environmental Geochemistry
- Engineering Geology
- Geoscience
- Geological fieldwork and mapping III
- Geodynamic and Environmental Geology
- Computer and information technology
- Geotechnique I
- Scientific communication skills
- Hydrology and Environmental Geochemistry
- Environmental issues, EIA and environmental evaluation
- Environmental Geology
- Crystal and crystal chemistry
- Geoenvironmental and development
- Physical Geology
- Soil Mechanics

MSC COURSES

1. Master of Science in Industrial Minerals
STAG6113: Mineral Resources
2. Master of Science in Petroleum Geoscience
STAG6442: Environmental Risk Assessment in Petroleum Industry
3. Master of Science in Engineering Geology
STAG6083: Hydrogeology
4. Master of Science in Environmental and Engineering Geophysics
STAG6362: Hydrogeology & Contaminant Transport

POSTGRADUATE AND UNDERGRADUATE SUPERVISION

Level	Number of students	Completed
BSc	49	45
MSc	23	20
PhD	7	2

RESEARCH AND DEVELOPMENT ACTIVITIES

No.	Title	Status	Sponsor
Research			
1	Geological mapping of Marudi, Sarawak	Completed	Sawarak Shell Bhd
2	The history and current activity of the Bournville landslide, South Wales, United Kingdom. This project was jointly supervised by Howard Siddle from Sir Halcrow Campany UK	Completed	Malaysian Government (Young Lecturer Scheme Scholarship)
3	An Investigation of the attenuation characteristics of natural clay soils in South Wales and potential use as engineered clay liner	Completed	Malaysian Government (Young Lecturer Scheme Scholarship)
4	Sorption tests on heavy metals by soil samples from Kuala Lumpur and Selangor (S/27/2000)	Project Head Completed (April 2004)	Fundamental Research UKM
5	Fate and Behavior of Contaminants in soils and groundwater from contaminated landfill sites in Selangor area.(08-02-02-0008-EA178)	Project Head Completed	IRPA
6	The effect of leachate on the permeability values of weathered granitic rocks	Project Head Completed	Fundamental Research UKM
7	Rock mass characterization and Quantification for long term cut rock slope stability assessment (UKM-ST-02-FRGS00069-2006)	Co Researcher On-going	FRGS
8	Imaging subsurface contaminants of Hydrocarbon-contaminated sites (06-01-02-SF0276)	Co Researcher On- going	MOSTI (E-Science Fund)
9	A study of contaminants migration in soils using small scale geotechnical centrifuge (06-01-02-SF0153)	Project Head Completed	MOSTI (E-Science Fund)
10	Adsorption and Dissolution of Dense Non Aqueous Phase Liquid (DNAPL) in Saturated Subsurface Systems FRGS/1/10/SG/UKM/02/12 (ST)	Project Head On-going	Skim Geran Penyelidikan Fundamental (FRGS)
11	Development of New Zero Valent Iron for Arsenic Removal from Contaminated Water FRGS/1/10/SG/UKM/02/11	Project Head On-going	Skim Geran Penyelidikan Fundamental (FRGS)

Consultation			
1	Mineral Development Plan for Pahang State, Malaysia	Completed	Pahang State Development Corporation
2	Working group on the remediation of contaminated land (WG/Z/10-2) Development of Soil Remediation Standard for Malaysia	On-going	SIRIM Bhd
3	Tsunami Modeling and Impact Studies for The North-West Coast of Peninsular Malaysia	Completed	Innovation Bureau and Consultation, University Technology Malaysia (UTM).
4	Groundwater Contamination at Landfill Sites in Selangor, Malaysia	Completed	National Hydraulic Research Institute (NAHRIM)
5	Mineral Development Plan for Johor State, Malaysia	Completed	Johor State Development Corporation
6	National Landfill Restoration (NLR) Project in Malaysia	On-going	STREC Sdn Bhd
7	Detailed Environmental Impact Assessment for Tin Mine Project in Melaka	On-going	Uni-Technologies Sdn Bhd UTM
8	Detailed Environmental Impact Assessment for Sanitary Landfill Site in Sg. Udang, Melaka	On-going	Jabatan Sisa Pepejal Negara
9	Hydrogeological Study of Raub Gold Mine in Pahang.	Completed	Selangor State Government

LIST OF PUBLICATIONS

JOURNALS

1. Yong R.N., **WZW Yaacob**, Bentley, SP, Harris, C, and Tan BK 2001. Partitioning of heavy metals on soil samples from column tests. **Engineering Geology**; 60: 307-322
2. **Wan Zuhairi W.Y.** 2001 Soils suitability for landfill liner material based on their physico-chemical properties: A case study from South Wales, United Kingdom. **Majalah Geologi Indonesia: Special Edition**, Vol 16: 105-123.
3. **Wan Zuhairi, W.Y.** 2003. Aerial Photography Interpretation of the Bournville Landslide in South Wales, United Kingdom. **Sains Malaysiana**, Vol. 32: 33-41.
4. **Wan Zuhairi W.Y.** 2003. Sorption capacity on lead, copper and zinc by clay soils from South Wales, United Kingdom. **Journal of Environmental Geology**, 45(2): 236 - 242.
5. **Wan Zuhairi WY & Tan BK.** 2003. Soils suitability for landfill liner material: a case study from South Wales, United Kingdom. **Warta Geologi.** 29 (1): 7-13.
6. **Wan Zuhairi, W.Y.** 2003. Heavy Metal Sorption Capabilities of some Soil Samples from Active Landfill Sites in Selangor. **Bulletin of The Geological Society of Malaysia**, 46: 295-297.
7. **Wan Zuhairi, W.Y.** and Anne Chong Shik Fong. 2003. Mekanisma Pembantuan Tabii ke atas Logam Berat Pb oleh tanah Formasi Kenny Hill di kawasan Air Hitam, Puchong, Selangor. **Bulletin of The Geological Society of Malaysia**, 46: 373-376.
8. **Wan Zuhairi, W.Y.** and B K Tan. 2003. Migration of Heavy Metals through Compacted Soil Columns. **Bulletin of The Geological Society of Malaysia**, 46: 47-50.
9. B.E. Abdel Rahem, **Wan Zuhairi W.Y.**, Abdul Rahim Samsuddin and Abdul Ghani Rafek. 2003. Geo-Environmental Sampling: How good is a good practice?. **Bulletin of The Geological Society of Malaysia**, 46: 443-446.
10. Abdul Rahim Samsuddin, Umar Hamzah, **Wan Zuhairi W.Y.**, Bahaa Eldin El Wali and Loh Yean Sze. 2003. Application of geophysical method to delineate contamination in waste disposal site of Ampar Tenang, Dengkil, Selangor **Bulletin of The Geological Society of Malaysia**, 46: 287-290.
11. **Wan Zuhairi, W.Y.**, Abdul Rahim Samsudin, Mohd Ramziemran, & Chan Yik Loon. 2004. Natural Sorption Capacity of Heavy Metals: Granitic residual soil

- from Broga and marine clay from Sg. Besar Selangor. **Bulletin of The Geological Society of Malaysia**, 48: 13-16.
12. Nurita Ridwan, **Wan Zuhairi W.Y.**, Abdul Rahim Samsudin & BK Tan. 2004. Kesesuaian tanah di sekitar Selangor sebagai bahan pelapik semulajadi. **Bulletin of The Geological Society of Malaysia**, 48: 17-19.
 13. Wan Zuhairi WY & Tan, BK 2004. Natural attenuation mechanisms of heavy metals in compacted soils: Case study from South Wales, United Kingdom. 35(2):61-65.
 14. Nurita Ridwan, **Wan Zuhairi W.Y.** & Abdul Rahim Samsudin. 2005. The retention capabilities of soils at Batang Berjuntai and Ampar Tenang as natural clay liners for landfill systems using leaching column and selective sequential extraction analysis. **Bulletin of The Geological Society of Malaysia**, 51: 47-57.
 15. Suzana Ismail, **Wan Zuhairi W.Y.** dan Abdul Rahim Samsudin. 2005. Sifat kimia tanah serta keupayaan penjerapan logam berat oleh tanah di sekitar Negeri Selangor. **Bulletin of The Geological Society of Malaysia**, 51: 59-62.
 16. Norlailatul Zuraidah Mohd Radzuan, **Wan Zuhairi W.Y.**, Abdul Rahim Samsudin & Abdul Ghani Rafek. 2005. Characteristics of leachate at the Air Hitam Sanitary Landfill in Puchong, Selangor. **Bulletin of The Geological Society of Malaysia**, 51: 41-46.
 17. Abdul Rahim Samsudin, Bahaa ElDin ElWali, **Wan Zuhairi WY**, & Umar Hamzah. 2006. Mapping of contamination plumes at municipal solid waste using geoelectric imaging technique: Case study Case study in Malaysia. **Journal of Spatial Hydrology (JOSH)**. Vol 6, No. 2: 13-22.
 18. **Wan Zuhairi W.Y.** and Abdul Rahim S. 2007. Sorption parameters of Pb and Cu on Natural Clay Soils from Selangor, Malaysia. **Journal Sains Malaysiana** 36 (2): 149-157
 19. Vasileos Antoniadis, John McKinley, and **Wan Zuhairi WY**. 2007. Single Element and Competitive Metal Mobility Measured with Column Infiltration and Batch Tests. **Journal of Environmental Quality**: 36: 53-60
 20. Esmail Al Sabahi, Abdul Rahim samsudin, **Wan Zuhairi WY**, & Umar Hamzah. 2008 2D Electrical Resistivity Investigation at Ampar Tenang Landfill Site, Selangor, Malaysia. **Journal Sains Malaysiana**. 37 (1): 33-37.
 21. **Wan Zuhairi W.Y.** and Abdul Rahim S. 2007. Sorption parameters of Pb and Cu on Natural Clay Soils from Selangor, Malaysia. **Journal Sains Malaysiana** 36 (2): 149-157.

22. E. A. R. Bahaa-Eldin; I. Yusoff; S. Abdul Rahim; **W.Y. Wan Zuhairi**, M.R. Abdul Ghani. 2008. Heavy metals contamination of soil beneath a waste disposal site at Dengkil Selangor, Malaysia. **Journal of Soil and Sediment Contamination**. 15(5): 449-466.
23. **Wan Zuhairi W.Y.**, Abdul Rahim S & Tan B.K. 2008. The Sorption Distribution of Lead and Copper on the Selected Soil Samples from Selangor. **Bulletin of the Geological Society of Malaysia**. 54: 21-25.
24. Esmail Al Sabahi, Abdul Rahim S, **Wan Zuhairi WY**, Fares AlShaebi, & Fadhl Al Nozaily. 2008. The Evaluation of Groundwater Al-Sayyadah area Yemen. **Ibb University Reseacher-Biannual Refereed Science Journal**, Issue no. 19, 45-48.
25. Esmail Al-Sabahi, Abdul Rahim S, Wan Zuhairi WY & Umar Hamzah. 2008. 2D Electrical Resistivity Investigation at Ampar Tenang Landfill Site in Selangor. **Journal Sains Malaysiana** 37 (1): 33-37.
26. Esmail Al Sabahi, Abdul Rahim S, **Wan Zuhairi WY**, Fares AlShaebi, & Fadhl Al Nozaily 2009. The Characteristics of Leachate and Groundwater Pollution at Municipal Solid Waste Landfill Yemen. **American Journal of Applied Science**. 6(4):772-783.
27. Esmail Al Sabahi, Abdul Rahim S, **Wan Zuhairi WY**, Fares AlShaebi, & Fadhl Al Nozaily. 2009. Assessment of Groundwater and Surface Water Pollution at Mitm Area Yemen. **American Journal of Environmental Science**. 5(3): 230-240.
28. Esmail Al Sabahi, Abdul Rahim S, **Wan Zuhairi WY**, Fadhl Al Nozaily & Fares AlShaebi, 2009. A Study of Surface Water and Groundwater Pollution in Ibb City, Yemen. *Electronic Journal of Geotechnical Engineering*. 14 (F): 1-12
29. Ahmad Farid, **Wan Zuhairi W.Y.**, Mohd Raihan Taha & Abdul Rahim S. 2009. Groundwater and Soil Vulnerability in the Langat Basin Malaysia. *European Journal of Scientific Research*. No. 4: 628-635.
30. Fares Yahya Al-Shaebi, **Wan Zuhairi WY**, Abdul Rahim Samsudin & Esmail AlSabahi. Risk Assessment at Abandoned Tin Mine in Sungai Lembing, Pahang, Malaysia. *The Electronic Journal of Geotechnical Engineering*. 14 (E): 1-9.
31. Fares Yahya Al-Shaebi, **Wan Zuhairi WY**, & Abdul Rahim Samsudin. 2009. Sorption on Zero Valent Iron for Arsenic Removal. *European Journal of Scientific Research*. 33(2):214-219.
32. **Wan Zuhairi WY**, Nur Syuhadah MP & Hazwani AM. 2009. Acid Mine Drainage and Heavy metals Contamination at Abandoned and Active Mine Sites in Pahang. *Geological Society of Malaysia. Bulletin* 55: 15-20.

33. Esmail Al Sabahi, Abdul Rahim S, **Wan Zuhairi WY** & Fadhl Al Nozaily. 2009. Assessment of Groundwater Pollution at Municipal Solid Waste of Ibb Landfill in Yemen. Geological Society of Malaysia. Bulletin 55: 21-26.
34. Bahaa El-Din, I.Yusoff, A.R. Samsudin, **Wan Zuhairi W.Y.** and AGM Rafek 2010. Deterioration of groundwater quality in the vicinity of an active open-tipping site in West Malaysia. Hydrogeology Journal, 18(4): 997-1006
35. Fares Yahya Alshaebi, **Wan Zuhairi Wan Yaacob**, Abdul Rahim Samsudin 2010. Removal of Arsenic from Contaminated Water by Selected Geological Natural Materials. Australian Journal of Basic and Applied Sciences, 4(9): 4413-4422.
36. E.A. Rahim Bahaa Eldin, I.Yusoff, S. Abdul Rahim, **W.Y. Wan Zuhairi**, M.R. Abdul Ghani 2010. Tracing Subsurface Migration of Contaminants from an Aandoned Municipal Landfill. Environmental Earth Science. Online First, 21 October 2010.
37. Muhammad Mukhlisin, Ilyias Idris, **Wan Zuhairi Wan Yaacob**, Ahmad ElShafie & Raihan Taha 2011. Soil slope deformation behavior in relation to soil water interaction based on centrifuge physical modeling. International Journal of the Physical Sciences 6(13): 3126-3133.
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PAPERS IN PROCEEDINGS

1. Yong, R.N, Tan, B.K., Bentley, S.P., Thomas, H.R., Williams, K.P. and **WZW Yaacob**. 1997. Attenuation Characteristics of Natural Clay Materials in South Wales and their use as Landfill Liners. In: Yong, R.N and Thomas, H.R (Eds.), *Contaminated Ground-Fate of Pollutants and Remediation*. Thomas Telford London, pp. 161-172.
2. Yong, R.N., Tan, B.K., Bentley, S.P., Williams, K.P., Thomas, H.R., **WZW Yaacob**, and Hashm, AA. 1998. Assessment of Attenuation Capability of Two Clay Soils via Leaching Column Tests. In: Pinto, S.S. (Ed.), *Proceedings of the Third International Congress on Environmental Geotechnics. Lisbon Portugal* , pp. 503-508.
3. Yong R.N., Bentley S.P., Thomas, H.R., BK Tan and **WZW Yaacob**. 1998. The Attenuation Characteristics of Natural Clay Materials in South Wales and their Potential use as Engineer Clay barriers. In: Moore, D. and Hungr, O. (Eds.),

- Proceedings 8 th International Congress International Association for Engineering Geology and the environment*. Balkema, Rotterdam , 4: 2499-2504.
4. Yong, R.N., Bentley, S.P., Harris, C., and **WZW Yaacob**. 1999. Selective Sequential Extraction on Estuarine Alluvium Soils. In: Yong, R.N and Thomas, H.R. (Eds.), *Geoenvironmental Engineering Ground Contamination: Pollutant Management and Remediation*. Thomas Telford London , pp. 118-126.
 5. Yong, R.N., Bentley, S.P., Harris, C., and **WZW Yaacob**. 1999. The Retention Capabilities of Three Estuarine Alluvial. In: Cossu, R., Christensen, T.H., and Stegmann, R. (Eds.), *Seventh International Waste Management and Landfill Symposium. Sardinia , Italy ,. 4: 203-210*.
 6. **W. Zuhairi. W.Y .**, Tan, B.K. and Yong, R.N. 2001. Leaching Column Tests on Three Estuarine Alluvial Soils from South Wales, United Kingdom. In Ho & Li (Eds.) *Geotechnical Engineering, 14th Southeast Asian Geotechnical Conference. 10-14 December 2001, Hong Kong*. Pp: 991-994.
 7. **W. Zuhairi , W.Y .** 2001. Soils Suitability for Landfill Liner Material Based on Their Physico-Chemical Properties: A Case Study from South Wales, United Kingdom . *30 th IAGI Annual Conference & GEOSEA2001*. Yogyakarta , Indonesia. pp. 143-145.
 8. **W. Zuhairi , W.Y .** 2001. An Investigation of the History and Current Activity of Bournville Landslide, South Wales , UK . *GSM-IEM Forum. Engineering Geology and Geotechnics of Slopes*. University of Malaya , Kuala Lumpur .
 9. **W. Zuhairi, W.Y .** and Mohd Raihan Taha. 2001. Sorption of Lead, Copper and Zinc by Various Clay Soils. *Proceeding of the Sixth Geotechnical Engineering Conference GEOTROPIKA 2001*, 5-7 November, Kuching , Malaysia , Pp 45-56
 10. **W. Zuhairi , W.Y .** 2001. Natural Attenuation Processes (NAPs) of Clay Soils: A Case Study from South Wales, United Kingdom. *Proceedings National Seminar on Environmental Management: Current Development and Future Planning, UKM Bangi*, Pp. 370 – 378.
 11. **W. Zuhairi , W.Y .** 2002. Mass Balance Calculations on Heavy Metals from Leaching Column and Selective Sequential Extraction experiments. *Prosiding Seminar Kimia Bersama UKM-ITB ke 5*. Pp 663-672.
 12. **W. Zuhairi , W.Y .** 2002. Fate and Behaviour of Heavy Metals in Clay Soils Underneath the Landfill Sites. *Proceedings of Seminar on Appropriate Waste Management for Establishing Zero Discharge System*. October 24-25, 2002. Kyoto , Japan . Pp. 22 – 30.
 13. Abdul Rahim Samsudin dan **Wan Zuhairi Wan Yaacob**. 2003. Ketentuan dan Perlakuan Bahan Pencemaran dalam Tanah dan Air Bawah Tanah Dari Tapak Landfill di Kawasan Selangor (08-02-02-0008-EA178). *Prosiding Seminar IRPA RMK-8, Kategori EAR, Jilid I*: 208-211.
 14. Nurita Ridwan, **Wan Zuhairi Wan Yaacob** dan Abdul Rahim Samsudin. 2003. Kesesuaian Tanah Sebagai Sistem Pelapik Semulajadi Di Sekitar Tapak Pelupusan Sisa Pepejal Di Negeri Selangor. *Prosiding Seminar IRPA RMK-8, Kategori EAR, Jilid II*: 273-277.
 15. **Wan Zuhairi W.Y.**, B.K. Tan, & Yong RN. 2004. Soil suitability for liner material in sanitary landfills. *Proceedings of the Malaysian Geotechnical Conference 2004*, pp 597-603.

16. Abdul Rahim Samsudin, Bahaa El Din ElWali, Umar Hamzah, **Wan Zuhairi WY**, Abdul Ghani Rafek, Loke MH, and Esmail Al Sabahi. 2004. DC Resistivity Imaging Investigation of Leachates Plumes at Domestic Waste Disposal Sites, Selangor, Malaysia. *Proceedings of the 7th SEGJ International Symposium (November 2004, Sendai, Japan)*. Pp. 509-512.
17. Abdul Rahim Samsudin, Umar Hamzah & **Wan Zuhairi WY**. 2004. Geoelectrical resistivity imaging of domestic waste disposal sites: Malaysian case study. In Viana da Fonseca & Mayne (eds.). *Proceedings ISC-2 on Geotechnical and Geophysical Site Characterization*. Pp 571-574.
18. Samsudin AR, Rahim BEA, **Wan Zuhairi WY**, Rafek AG. 2004. Resistivity imaging and polluted soil analyses of a covered landfill site at Bukit Kemuning, Shah Alam, Selangor, Malaysia. *Proceedings of the Malaysia-Japan Symposium on Geohazards and Geoenvironment Engineering Recent Advances*. 221-224
19. **Wan Zuhairi WY** & Samsudin AR. 2004. Sorption of heavy metals by two natural soils from Selangor, Malaysia. *Proceedings of the Malaysia-Japan Symposium on Geohazards and Geoenvironment Engineering Recent Advances*. 225-228.
20. Samsudin, A.R., **Wan Yaacob, W.Z.** Rafek, A.G., Abdul Rahim, B.E. 2004. Assessment of soil contamination beneath a municipal solid waste disposal site in Dengkil, Selangor, Proceedings of Brownfield 2004, International Conference on Remediation of Contaminated Land: Focus on Asia, Kuala Lumpur. 8-10 June 2004.
21. Abdul Rahim Samsudin, **Wan Zuhairi WY**, Umar Hamzah, & Bahaa ElDin ElWali. 2005. Geoelectrical resistivity mapping of the subsurface contamination underneath the solid waste disposal sites: Malaysian case studies. *Proceedings of 2nd Regional Symposium on Environment and Natural Resources, Kuala Lumpur, Malaysia*. **1**: 14-21.
22. Nurita Ridwan, **Wan Zuhairi WY**, & Abdul Rahim Samsudin. 2005. The retention capabilities of soils as natural clay liner for landfill system. *Proceedings of 2nd Regional Symposium on Environment and Natural Resources, Kuala Lumpur, Malaysia*. **1**: 145-155.
23. Abdul Rahim Samsudin, Bahaa Eldin Elwali, **Wan Zuhairi Wan Yaacob** and Abdul Ghani Rafek. 2005. Heavy metals migration beneath unlined waste disposal site at Dengkil, Selangor, Malaysia. *Proceedings of the 6th ITB-UKM Joint Seminar on Chemistry. Denpasar, Bali, Indonesia*. Pp: 170-176.
24. **Wan Zuhairi Wan Yaacob** and Abdul Rahim Samsudin. 2005. The effect of sorption competition between heavy metals in soils. *Proceedings of the 6th ITB-UKM Joint Seminar on Chemistry. Denpasar, Bali, Indonesia*. Pp: 976-981.
25. Bahaa eldin Elwali, Abdul Rahim Samsudin, **Wan Zuhairi, W.Y.** & Abdul Ghani Rafek. 2005. Detection of contamination plumes beneath waste disposal sites using 2D electrical resistivity imaging technique. Prosiding Kolokium Siswazah Kelima. 383-385.
26. **Wan Zuhairi W.Y.** and C.Y. Liew. 2007. Heavy metals adsorption by weathered volcanic rocks from Pahang, Malaysia. *Proceedings of the 2nd Malaysia-Japan Symposium on Geohazards and Geoenvironmental Engineering*. 193-199.

27. Mohd Raihan Taha, Ahmad Fariz, **Wan Zuhairi W.Y.**, & Abdul Rahim S. 2008. Perspective on Soil and Groundwater Contamination in Malaysia. Proceedings of the Eight Japan-Korea-France Joint Seminar on Geoenvironmental Engineering. Kyoto Japan. Pp. 239-246.
28. Esmail Al Sabahi, Abdul Rahim S, **Wan Zuhairi WY**, and Fadhl Al Nozaily. 2008. The Characteristics of Leachate from a Municipal Solid Waste Landfill of IBB City, Yemen. 3rd Regional Symposium on Environment and Natural Resources. pp. 608-620.
29. Fares Yahya Alshaebi, **Wan Zuhairi WY**, Abdul Rahim Samsudin and Esmail Alsabahi. 2008. The potential use of basaltic and granitic soil for heavy metals sorption materials. 3rd Regional Symposium on Environment and Natural Resources. Pp. 804-817.
30. Abdul Rahim S, **Wan Zuhairi WY**, Abdul Ghani R, and Bahaa El Din El Wali. 2008. Assessment of soil contamination beneath a municipal solid waste disposal site in Dengkil, Selangor. Blacksea International Environmental Symposium. August 25-29, 2008-Giresun Turkey. Pp. 290-296.
31. Abdul Rahim S, Umar Hamzah, & **Wan Zuhairi WY**. 2008. Delineation of leachate plumes at different municipal solid waste disposal sites in Malaysia using DC-Resistivity Imaging technique. Blacksea International Environmental Symposium. August 25-29, 2008-Giresun Turkey. Pp. 297-304.
32. Muchlis, **Wan Zuhairi WY**, Abdul Rahim Samsudin, Raihan Taha, and Zahari Ibarahim. 2008. Movement and Entrapment of Dense Non-Aqueous Phase Liquid in Heterogeneous Porous Medium. Seminar UNRI – UKM ke 5, 19 – 21 August 2008 Pekanbaru, Indonesia. Pp. 126-132.
33. **Wan Zuhairi WY**, Abdul Rahim S & Nurita R. 2008. The Retention Characteristics of Heavy Metals in Natural Soils using Soil Column Experiment. The 12th International Conference of International Association for Computer Methods and Advances in Geomechanics (IACMAG). 1-6 October, 2008. Goa, India. Pp: 2405-2411.
34. **Wan Zuhairi WY** & Syuhadah MP. 2008. Soils and Surface Water Contaminations From Abandoned Mine Site in Sungai Lembing, Pahang, Malaysia. Brownfield Asia 2008, Kuala Lumpur, Malaysia. (Paper published in CD)
35. Tuan Rosli Tuan Mohamed & **Wan Zuhairi WY**, 2009. Acid Mine Drainage Prediction Using Acid-Base Accounting Method at Mine Sites in Pahang. Proceedings of Mineral Symposium 2009 (SIMPOMIN 2009) 9-11th November 2009 Bukit Merah Resort, Perak.
36. Esmail Al Sabahi, Abdul Rahim S, **Wan Zuhairi W.Y.**, Fadhl Al Nozaily, Fares AlShaebi & Ali Mayas. 2009. Study of Soil Characterization and Pollution by Heavy Metals in Ibb City, Yemen. Proceedings of Waste Management Regional Conference 2009. Kuala Lumpur Malaysia. Pp: 107-113.
37. **Wan Zuhairi W.Y.**, Muchlis, Abdul Rahim S and Raihan Taha. 2009. Visualization of DNAPL Movement through Different Soil Heterogeneities. Proceedings of Waste Management Regional Conference 2009. Kuala Lumpur Malaysia. Pp: 216-219.

38. Fares Yahya Al Shaebi, **Wan Zuhairi W.Y.**, Abdul Rahim S, and Esmail Al Sabahi. 2009. Heavy Metals Contaminated Soil at Abandoned Tim Mine in Sungai Lembing Pahang. Proceedings of Waste Management Regional Conference 2009. Kuala Lumpur Malaysia. Pp: 205-208.
39. **Wan Zuhairi WY**, P. Nikolopoulos, K Soga, and R. Whalley. 2009. Sorption characteristics of tetrachloroethylene (PCE) in natural soils. Proceedings of the 3rd Japan-Malaysia Symposium on Geohazards and Geoenvironmental Engineering. Pp. 125-132
40. Mohd Raihan Taha, **Wan Zuhairi Wan Yaacob**, Abd Rahim Samsudin & Jasni Yaakob. 2009. Groundwater Quality at Two Landfill Sites in Selangor, Malaysia. 3rd Japan-Malaysia Symposium on Geohazards and Geoenvironmental Engineering- Geotechnical & Ecological Environmental Management for Global Sustainability. Pp. 15-22.
41. Fares Yahya Alshaebi, **Wan Zuhairi Wan Yaacob**, Abdul Rahim Samsudin. 2009. Arsenic Removal By Peat Soil Using Batch Equilibrium Test. Symposium on Sustainability Science and Management (UMTAS). Pp. 501-508
42. Chong Yee Liew & **Wan Zuhairi Wan Yaacob**. 2010. Application of Residual Soils as Low-Cost Adsorbents for Heavy Metals. *Proceedings of the 3rd International Conference on Southeast Asian Natural Resources and Environmental Management (SANREM 2010)*. Pp: 151-163.
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44. Chong Yee Liew & **Wan Zuhairi Wan Yaacob**. 2010. Heavy Metal Migration Through Waste Materials Using High Speed Column Infiltration Test. Seminar UKM-UNRI Ke-6. Pp: 466-468.
45. Muchlis, **Wan Zuhairi W.Y.** & Zahari I. 2010. Pembinaan Pengempar Geoteknik Di Universiti Kebangsaan Malaysia Untuk Pemodelan Fizikal Pergerakan Bahan Pencemar Organik. Seminar UKM-UNRI Ke-6. Pp: 115-118.
46. Ilyias Idris, M. Mukhlisin & **W. Zuhairi W. Yaacob**. 2010. Pembinaan Pengempar Geoteknik Di Universiti Kebangsaan Malaysia Untuk Pemodelan Fizikal Pergerakan Bahan Pencemar Organik. Seminar UKM-UNRI Ke-6. Pp: 332-335.
47. Nurul Jannah Abd Rashid, Abdul Ghani Rafek, **Wan Zuhairi Wan Yaacob** & Nor Shahidah Nazer. 2010. Inventori Dan Pengelasan Tanah Runtuh Di Kawasan Hulu Kelang, Selangor. Seminar UKM-UNRI Ke-6. Pp: 378-380.
48. Esmail Al Sabahi, Abdul Rahim S, **Wan Zuhairi W.Y.**, Fadhl Al Nozaily & Fares Alshaebi. 2010. The Effective of Leachate Composition on Groundwater and Soil In The Vicinity of Ibb City, Yemen. The 1st Annual International Conference – Ibb 2010. 1-3 August 2010.
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51. Wan Zuhairi W.Y. & Chong Yee Liew 2011. Residual soils as low-cost natural adsorbents for removal of heavy metals from aqueous solutions. Proceedings of the 10th Japan-Korea-France-Canada Joint Seminar on Geoenvironmental Engineering. May 21-22, 2011, Kagawa Japan. Pp. 63-68.
52. Hiroki Mogami, Wan Zuhairi W.Y., Toru Inui & Takeshi Katsumi 2011. Estimating hydraulic conductivity of compacted clays by a small centrifuge. Proceedings of the 10th Japan-Korea-France-Canada Joint Seminar on Geoenvironmental Engineering. May 21-22, 2011, Kagawa Japan. Pp. 173-176.
53. Noraznida Kamaruzaman, Tengku Noradibah Tengku Khalid & Wan Zuhairi WY. 2011. Development of new Zero Valent Iron (ZVI) for the Treatment of Heavy Metal Contaminated Water. Proceedings National Geoscience Conference 2011. 11-12 June, Johor Bharu (ISBN 978-983-99102-8-5). Pp. 111
54. Noorulakma Ahmad, Zulfahmi Ali Rahman & Wan Zuhairi WY. 2011. Pengaruh cecair larut resap terhadap had-had Atterberg dan sifat pemadatan tanah aluvium. Proceedings National Geoscience Conference 2011. 11-12 June, Johor Bharu (ISBN 978-983-99102-8-5). Pp. 28
55. Mahsa Tashakor, Hamzah Mohamed, Wan Zuhairi Wan Yaacob, Md Pauzi Abdullah & Baba Musta. 2011. Uncorrelated surface water and soil geochemistry in ultrabasic land of Ranau Sabah. Proceedings National Geoscience Conference 2011. 11-12 June, Johor Bharu (ISBN 978-983-99102-8-5). Pp. 117
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57. Nur Atiqah Anuar & Wan Zuhairi WY. 2011. Perlarutan dan fluks jisim logam berat dalam medium poros. Proceedings National Geoscience Conference 2011. 11-12 June, Johor Bharu (ISBN 978-983-99102-8-5). Pp. 96-97.
58. Zeinab Asry, Abdul Rahim Samsudin, Wan Zuhairi WY. & Jasni Yaakub 2011. Groundwater investigation using electrical resistivity imaging technique at Sg. Udang, Melaka, Malaysia. Proceedings National Geoscience Conference 2011. 11-12 June, Johor Bharu (ISBN 978-983-99102-8-5). Pp. 89-90.
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EDITOR

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2. Proceedings for Geological Conference UKM-ITB 2006. Langkawi Malaysia.

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1. **W. Zuhairi, W.Y.** 2000. Leaching Column Experiment on Selected Soil Samples from South Wales, UK. Young Geologists Nite V. Geological Society of Malaysia. Universiti Malaya. *Warta Geologi*, **26** (5): 145.
2. **Wan Zuhairi WY.** 2002. Sorption of lead, nickel and zinc by some Malaysian soils. *Simposium Kimia Analisis Malaysia ke 15 (SKAM15)*. 10-12 September 2002. Pp. 141.
3. **W. Zuhairi, W.Y.** 2002. Partitioning of heavy metals in soil column using selective sequential extractions. Young Geologists Nite VI. Geological Society of Malaysia. Universiti Malaya. 21 August 2002. *Warta Geologi*, **28** (4): 173.
4. Bahaa El-Din El Wali, Abdul Rahim Samsuddin, **Wan Zuhairi W.Y.** and Suharsono. 2003. Resistivity Investigation of a Covered Landfill in Shah Alam, Selangor. *Biennial Conference on Natural Resources, Environment and Development (NARED) 2003*. pp. 22.
5. **Wan Zuhairi, W.Y.**, Abdul Rahim Samsuddin, Tan Boon Kong, Abdul Ghani Rafek and Mohd. Barzani Gasim. 2003. Evaluation of Soil Sorption Capacity on Heavy Metals. *Biennial Conference on Natural Resources, Environment and Development (NARED) 2003*. pp. 35.
6. **Wan Zuhairi, W.Y.**, Tan Boon Kong, Yong, R.N. and Abdul Rahim Samsuddin. 2003. Assessment of Soils for Engineering Clay Liner in Waste Disposal Sites. *Biennial Conference on Natural Resources, Environment and Development (NARED) 2003*. pp. 37.
7. Abdul Rahim Samsuddin, Mohd Tadza A. Rahman, Bahaa El-Din El Wali, Rahman Yaacob, Lakam Mejus and **Wan Zuhairi W.Y.** 2003. Resistivity Surveying of Contaminated Municipal Landfill Site in Taiping Town, Perak, Malaysia. *Biennial Conference on Natural Resources, Environment and Development (NARED) 2003*. pp. 61.
8. Norlailatul Zuraidah, **Wan Zuhairi WY**, Abdul Rahim S, & Abdul Ghani R. 2005. Characteristics of Ampar Tenang leachate and effects on surface and groundwater. *Proceedings of 2nd Regional Symposium on Environment and Natural Resources, Kuala Lumpur, Malaysia*. Pp 67.
9. Norlailatul Zuraidah, **Wan Zuhairi WY**, Abdul Rahim S, & Abdul Ghani R. 2005. Characteristics of Air Hitam landfill leachate. *Proceedings of 2nd Regional Symposium on Environment and Natural Resources, Kuala Lumpur, Malaysia*. Pp 67.
10. Dayang Haspariah Sapri & **Wan Zuhairi WY.** 2006. Pencirian tanah baki granit di sekitar kawasan Cheras, Kajang, dan Kuala Kubu Bharu, Selangor. *Abstract in National Geoscience Conference 2006*. Pp 22-23.
11. **Wan Zuhairi WY**, Abdul Rahim Samsudin & Tan Boon Kong. 2006. Sorption distribution coefficient (Kd) of lead and copper on the selected soil samples from Selangor. *Abstract in National Geoscience Conference 2006*. Pp 24-25.

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1. Hamzah Mohamed, Wan Fuad Wan Hassan, Mohd Yussof Hussain, Ishak Yusof & **Wan Zuhairi Wan Yaacob**.2007. Final Report on the Mineral Development Plan for Pahang State. UKM Pakarunding.
2. **Wan Zuhairi Wan Yaacob**, Raihan Taha, Jasni Yaakob dan Abdul Rahim Samsudin. 2010. Desktop Study on Groundwater Contamination at Landfill Sites in Selangor. Volume I. UKM Pakarunding.
3. **Wan Zuhairi Wan Yaacob**, Raihan Taha, Jasni Yaakob dan Abdul Rahim Samsudin. 2010. Desktop Study on Groundwater Contamination at Landfill Sites in Selangor. Volume II. UKM Pakarunding.
4. **Wan Zuhairi Wan Yaacob**, Raihan Taha, Jasni Yaakob dan Abdul Rahim Samsudin. 2010. Desktop Study on Groundwater Contamination at Landfill Sites in Selangor. Volume III. UKM Pakarunding.
5. SIRIM MS 2072: 2008. Developing and Implementing Early Action for Site Remediation.
6. SIRIM MS 07Z031R0. Practice For Assessment Of Attaining Clean Up Level For Site Closure (Released For Public Comment)

CONFERENCES AND SEMINAR ATTENDED

Date	Title	Venue	Participation
16/9/1997- 18/9/1997	Conference of Geoenvironmental Engineering. Organized by British Geotechnical Society and Cardiff School of Engineering	Cardiff, United Kingdom	Participant
13/9/1999- 15/9/1999	2 nd Conference of Geoenvironmental Engineering. Organized by British Geotechnical Society and Cardiff School of Engineering.	London, United Kingdom	Presenter
4/10/1999- 8/10/1999	Seventh International Waste Management and Landfill Symposium	Cagliari, Sardinia, Italy	Presenter
10/9/2001 - 12/9/2001	IAGI GEOSEA: Regional Congress on Geology, Mineral and Energy Resources	Jogyakarta, Indonesia	Presenter
23/10/2001	Engineering geology and geotechnics of slopes	Department of geology Universiti Malaya	Presenter
9/5/2002- 7/5/2002	Trends in integrated solid waste management: towards waste minimization	Crystal Crown Hotel, PJ	Presenter
17/7/2002- 16/7/2002	The 5 th UKM ITB Joint Seminar on Chemistry 2002	Hotel Equatorial, Melaka	Presenter
21/8/2002	Young Geologist Night VI Organised by Geological Society of Malaysia	Universiti Malaya	Presenter
26/10/2002- 22/10/2002	JSPS Seminar on Waste Management	Kyoto University, Japan	Presenter
24/5/2003- 26/5/2003	Annual Geological Conference 2003	Hotel Hilton, Kuching Sarawak	Presenter
25/9/2003- 27/9/2003	Symposium on Natural Resources, Environment, and Development (NARED) 2003	Hotel Hilton, Kuching Sarawak	Presenter
21/12/2003- 23/12/2003	IRPA Monitoring Seminar RM 8, 2003	Melaka	Presenter
8/3/2004- 10/3/2004	Workshop on Mechanical-Biological-Treatment and Landfilling of Solid Waste the state-of-the-art	Mines Resort, Serdang	Presenter
4/6/2004- 6/6/2004	Annual Geological Conference 2004	Hotel Putra Palace	Presenter
13/12/2004- 14/12/2004	Malaysian-Japan Symposium on Geohazards and Geoenvironmental Engineering Recent Advances	Hotel Equatorial, Bangi	Presenter
14/8/2005- 23/8/2005	Clean Water Supply and Quality Research Course Year 2005	Hotel Katerina, Batu Pahat, Johor.	Presenter
17/6/2005- 18/6/2005	The 6 th ITB-UKM Joint Seminar on Chemistry 2005	Denpasar, Bali, Indonesia	Presenter
12/6/2006 - 13/6/2006	National Geoscience Conference 2006	Armada Hotel, Petaling Jaya, Selangor	Presenter

COURSE ATTENDED

Date	Title	Sponsor	Venue
18/5/2001	First PPSSSA Colloquium	UKM	Port Dickson, Negeri Sembilan
16/8/2001	Bengkel Penggunaan sistem pencarian Maklumat gemilang Perpustakaan UKM	UKM	Perpustakaan Tun Sri Lanang
8/10/2001	INDUKSI Training Course	UKM	Bilik Latihan Aras 4, UKM
22/5/2002	ICT Course at FST	UKM	Fakulti Sains Teknologi
24/7/ 2002	Workshop on Exam Question Quality Assessment.	UKM	Bilik Kuliah DKG1113, FST
16/8/2002	Workshop on Research Methodology and Writing for young scientists.	UKM	Hotel Century Mahkota, Melaka
12/5/2003	2 nd PPSSSA Colloquium	UKM	ESSET Bangi
8/3/2004- 10/3/2004	Workshop on Mechanical-Biological-Treatment and Landfilling of Solid Waste the state-of-the-art	Fakulti	Mines Resort, Serdang
17/5/2004	Competency Level Assessment (PTK3)	UKM	Kelab Rekreasi Universiti, UKM
15/11/205- 22/11/2005	Competency Level Assessment (PTK5)	UKM	ESSET Bangi
20/6/2005- 24/6/2005	MODFLOW computer program Training Course	MINT	MINT, Bangi, Selangor
28/8/2006- 29/8/2006	COLDFUSION computer program Training Course	UKM	UKM

PROFESSIONAL ASSOCIATIONS AND COMMITTEES:**Professional associations:**

Year	Professional association	Status
2000-Present	Geological Society of Malaysia (GSM)	Member
2002-Present	Malaysian University Consortium for Environment and Development (MUCED)	Member
2002 -Present	Japan Society for the Promotion of Science-Vice Chancellors Council of Malaysia (Solid & Hazardous Waste Group)	Member
2006	Working Group on Environmental Geology and Hydrogeology in Geological Society of Malaysia.	Coordinator

Committees:

Year	Committee	Status
2002	FST Road-Show Committee	Member
2002	Student Welfare Committee	Member
2002	Computer and ICT Committee for Geology Programme	Member
2003	Course Advisory Committee for the Environmental Engineering Diploma, Curriculum Development Department, Ministry of Higher Education Malaysia.	Member
2003	FST ICT Committee	Member
2003	Laboratory Coordinator for PPSSSA	Coordinator
2003	Computer laboratory Coordinator (Geology)	Coordinator
2003	Geochemistry Laboratory Coordinator (Geology)	Coordinator
2004	Four-Year Academic Programme Committee	Member
2005	Faculty website coordinator	Coordinator

International Collaborations:

Date	Collaboration
1 st December 2006 to 14 th December 2006	Visiting Scientist to Kyoto University, Kyoto, Japan. Japan Society for the Promotion of Science-Vice Chancellors Council of Malaysia (JSPS-VCC).
2006	Honorary Scientific Committee in The Sixth International Symposium on Eastern Mediterranean Geology. Organized by Jordanian Geologists Association.
22 nd October 2003 to 26 th October 2003	Visiting Scientist to Kyoto University, Kyoto, Japan. Japan Society for the Promotion of Science-Vice Chancellors Council of Malaysia (JSPS-VCC).
7 th September 2007 to 7 th December 2007	Visiting Scientist to University of Cambridge, United Kingdom under Ministry of Science Technology and Innovation (MOSTI) Fellowship. Research was conducted in collaboration with Prof Kenichi Soga at University of Cambridge.

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