

BRIEF CURRICULUM VITEA (CV)



1. PERSONAL DATA

Name : **Hareyani binti Zabidi**
Nationality : **Malaysian**
Current Position : **Lecturer at Universiti Sains Malaysia**
Qualifications :

Year	Degree	Discipline	University
2001	Bachelor of Science (Hons)	Geology	Universiti Kebangsaan Malaysia
2008	PhD	Engineering Geology	Imperial College, London , UK

Field of specialization : **Engineering Geology, Rock Mechanics & Karst Engineering**
Tel (office) /HP : **(O): + 604-599124; (M) + 0135016293**
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2. ACHIEVEMENTS

- On going grants : 1. Hydrogeochemical Evolution Study of Karstified Conduit Network in Ordovician – Devonian Carbonitic Rocks of Peninsular Malaysia, 2019, (FRGS: RM 138, 500)
- Completed grants : 1. Conduits Network and Karstic Evolution Study of Limestone Formation in Granitic Intrusion Boundary/Aureole and Fault Zones, 2016, (FRGS: RM 85,200)
2. Industrial Exploration and Evaluation of Geological Occurrences of Kaolinite Clay Deposit for Glass Industry, 2016, (AUN-SEED/Net; RM 3,298)
3. Geological studies of the Kuala Lumpur Limestone Formation towards the understanding of karst formation in Kuala Lumpur, 2009, (Incentive Grant, USM; RM 5, 000)
4. Geological studies of the Kuala Lumpur Limestone Formation towards the understanding of karst formation in Kuala Lumpur, 2010, (Short-term Grant, USM; RM 39, 000)
5. Digital Mapping & 3D Visualization/Modelling of Karstified Klang Valley Subsurface Geology using Rockworks and ArcGIS, 2010, (Short-term Grant, USM; RM 38, 133)
6. Kinta Valley karst system: geologic functioning and development of karst terrains, 2010, (FRGS; RM 50,500)
7. Mineralogical and textural characteristics studies of ion-adsorption rich type mineralization and heavily deformed granite in estimating the excavatability of Titiwangsa Main Range sensitive zone, 2011, (FRGS; RM 100, 000)
8. Geological features and geotechnical impact on tunnelling projects across geotectonically sensitive boundary zone of Titiwangsa Main Range, Malaysia, 2011, (ERGS; RM 179,000)
9. Study of engineering behaviour of soft rocks from Hulu Jelai Hydroelectric Dam Project, Cameron Highland, Pahang, 2014, (RU; RM 138, 000)

Graduated students

: **PhD**

Co-Supervisor

1. **Farshid Bateni**, Extension of Numerical Manifold Method for Plasticity and Fracture Modelling of Rock Mass. *Graduated 2014.*

MSc

Main Supervisor

1. **Afikah Rahim**. The effect of rockmass properties and groundwater inflow related to performance of Tunnel Boring Machine (TBM) at Pahang Selangor Raw Water Transfer Tunnel Project (PSRWT). *Graduated 2014.*
2. **Nurfarhana Hassan**. Probe Drilling Data Analysis to Predict Rock Mass Strength. *Graduated 2018.*
3. **Nur Khafiza Sapari**. In-situ stress study at highly fractured rock formation at Hulu Jelai hydroelectric dam project, Cameron Highland, Pahang. *Graduated 2018.*
4. **Khong Ling Han**. Industrial exploration and evaluation on geological occurrence of kaolinite clay deposit for glass industry. *Graduated 2019.*

Co-Supervisor

1. **Maclive Wilkinson Anak Agam**. Limit Equilibrium and Finite Element-Shear Strength Reduction Stability Analysis, Kota Bunyih Tailings Dam, Pengkalan Hulu, Perak, Malaysia. *Graduated 2018.*
2. **Mochamad Trisugiwo**. Geomechanical Influence on Rock Mass Deformation at Hulu Terengganu Hydroelectric Power Surge Chamber Cavern. *Graduated 2017.*

Postgraduate under supervision

: **PhD**

Main Supervisor

1. **Syaran Bin Suri**. Conduits Network and Karstification Evolution of Limestone Formation in Granitic Intrusion Boundary/Aureole and Fault Zones
2. **Sylvanus Sebbeh-Newton**. Application of Euler Deconvolution and Geochemistry in Delineating Mineral Potential Zones.

Co-Supervisor

1. **Muhammad Taquiuddin Zakaria**, Exploring the Sumatra Fault Segments Using Integrated Geophysical Methods in Northern Sumatra Island

MSc

Main Supervisor

1. **Nur Qurrahtin A'ini Md. Yusof**. Hydrogeological study of dam foundation of Hulu Jelai Hydroelectric dam project, Cameron Highland, Pahang.
2. **Nur Lyana Khalil**. Influence of Geological Features on Rock Fragmentation by Blasting.
3. **Nur Emilia Qistina Mohd Anua**. Photogrammetric Mapping of Karstified Limestone Formation at Granitic Intrusion Boundary/Aureole and Fault Zones.

Co-Supervisor

1. **Piseth Heng**. Mapping Molybdenum deposit with IP at Den Mountain, Takeo province, Cambodia.

Achievements/
Awards/
Recognitions

: **Academic Awards**
International

1. Sponsorship for attending the 3rd Regional Conference on Geological Engineering Research in ASEAN, Siem Reap, Cambodia, 2010. AUN-

- SEED/Net, Japan
2. Sponsorship for attending the 5th AUN/SEED-Net Regional Conference on Geo-Disaster Mitigation in ASEAN, Manila, Philippines. 2011. AUN-SEED/Net, Japan
 3. Sponsorship for attending the 5th AUN/SEED-Net Regional Conference on Geological Engineering. 2012. AUN-SEED/Net, Japan
 4. Awarded for International UNESCO/POLAND co-sponsored Fellowships Program Engineering at AGH University Science and Technology, Poland. 4/11/2012 – 27/2/2013. UNESCO and AGH, University Science and Technology, POLAND.
 5. Sponsorship for attending XXVI Scientific Conference on Trends in the Development of Heavy Duty Machines, Zakopane, Poland. 2012. UNESCO.
 6. Sponsorship for attending International Conference on Geo resources & Sponsorship for attending the 1st AUN/SEED-Net Regional Conference on Natural Disaster, Yogyakarta, Indonesia. 2014. AUN- SEED/Net, Japan
 7. Sponsorship for attending the 4th AUN/SEED-NET Regional Conference on Natural Disaster 2016 (RCND 2016), KL. AUN-SEED/Net, Japan
 8. Sponsorship for attending the 5th AUN/SEED-NET Regional Conference on Natural Disaster 2017 (RCND 2017), Bangkok, Thailand. AUN-SEED/Net, Japan
 9. Geological Engineering, Yogyakarta, Indonesia. 2013. AUN-SEED/Net, Japan

National

1. Awarded a USM Hall of Fame Award (Anugerah Hadiah Sanjungan) 2011 under Publication Category – Engineering Geology
2. Sponsorship for attending 12th Multidisciplinary Conference on Sinkholes and the Engineering and Environmental Impacts of Karst, St. Louis, Missouri, USA, 2011. Oversea Conference Fund, USM
3. Sponsorship for visiting Faculty of Engineering, Hokkaido University, Japan. 1/11/2012 – 28/2/2013. CDAE Fund, USM
4. Anugerah Perkhidmatan Cemerlang USM, Hotel Vistana, Penang, 10/4/2017

Assessor/Examiner External Examiner

MSc

1. Norsyafiqah Salimun, Depth Variation of Geophysical and Geomechanical Properties of Kati Formation from Ctw-1 Well, Seri Iskandar, Perak, Malaysia. MSc in Petroleum Geosciences, Universiti Teknologi Petronas (UTP). 2018
2. Maame Adwoa Maisie, Characterization of Shales from the Belaga Formation, Central Sarawak, Malaysia. MSc in Petroleum Geoscience, Universiti Teknologi Petronas (UTP), Malaysia. 2019

Assessor/Examiner Internal Examiner

PhD

1. Vongsavanh Soysouvanh, Mineralogical and Geochemical Characteristics of the Phu Kam (AU-CU) and Ban Houayxai (AU-AG) Mineralization from Laos. PhD of School of Materials and Mineral Resources Engineering. To viva by Dec, 2018
2. Tagwai Gregory Mathew, Spatial Remote Sensing of Orogenic Gold Potential Mapping in Kelantan, Malaysia. PhD, 2019.
3. Ali Yaraghi, Investigation of Potential Weathered REE-Bearing Granitoid Crust from Western Tin Granite, Peninsular Malaysia. PhD, 2019.

MSc

1. Sangkhone Panhyavisy, Characterization and potential utilization of

- gypsum from Lao PDR, MSc of School of Materials and Mineral Resources Engineering. 2013
2. Seng Sophea, Evaluation and Processing of Andalusite Mineral from Terengganu, Malaysia, MSc of School of Materials and Mineral Resources Engineering. 2015
 3. Norazirah Ahmad, Modelling the Effect of Particle Breakage in Comminution Machine, MSc of School of Materials and Mineral Resources Engineering. 2018

Visiting Lecturer / Visiting Scientist/Visiting Fellow

International

1. AGH, University of Science and Technology, POLAND. Visiting scientist at Faculty of Drilling, Oil and Gas, AGH University Science and Technology, Poland. 1/11/2012 –28/2/2013
2. Chulalongkorn University, Thailand, Visiting lecturer of Educational Interaction Malaysia – Thailand Program. 23 – 31/1/2010.
3. Institut Teknologi Bandung (ITB), Indonesia, Visiting lecture of Program Malaysian – Indonesian Minerals Educational Exposure Excursion, Institut Teknologi Bandung (ITB), Indonesia. 18 – 23/5/2013
4. Universitas Syiah Kuala, Aceh Indonesia. Visiting lecturer of Malaysia – Indonesia Education Program. 8 – 13/3/2015
5. Hokkaido University, JAPAN. Visiting scientist at Faculty of Engineering, Hokkaido University, Japan. 1/11/2012 – 28/2/2013.

National

1. Interstate Raw Water Transfer (ISRWT) project, Visiting scientist at Ministry of Energy, Green Technology and Water (KETTHA) &SHIMIZU-NISHIMATSU-UEMB-IJM JOINT VENTURE (SNUI-JV) project sites, 1/8/2011 – 30/9/2011
2. Ulu Jelai Hydroelectric project, Visiting scientist at Tenaga Nasional Berhad (TNB) &Salini Impregilo project sites, 2015

Member of a Panel Discussion / Forum

International

1. Panel of discussion, Scientific Progress in Engineering and Technological Innovation: Today and Future, (9/12/2012), UNESCO Inter-regional Engineering Conference in Technology and Education – Global Benchmarking and Monitoring, AGH, UST Krakow, Poland
2. Member of forum, Engineering Education in Malaysia, (25/1/2013), UNESCO AGH Chair Workshop on Innovation and Technology Transfer to Emerging Countries in the Frame of the UNESCO Activities, AGH, UST Krakow, Poland.

National

1. Panel of discussion, Sesi 2: Gempa Bumi – Mitigasi dan Dasar, Bengkel Kedua Kajian Pengurusan Risiko Gempa Bumi dan Tsunami, Jabatan Meteorologi Malaysia (Met Malaysia), 24-25 Jun, 2014

Keynote Speaker

International

1. Speaker, Engineering Education in Malaysia, (2012), UNESCO Interregional Engineering Conference in Technology and Education – Global Benchmarking and Monitoring, AGH, UST Krakow, Poland
2. Speaker, Towards a global minerals engineering: a way forward, (2012), UNESCO Interregional Engineering Conference in Technology and Education – Global Benchmarking and Monitoring, AGH, UST Krakow, Poland
3. House of Quality, (2012), THE UNESCO/POLAND COSPONSORED FELLOWSHIPS PROGRAMM ENGINEERING CYCLE 2012 AGH, UST Krakow, Poland

4. Scanning Electron Microscope Part of Advance Analytical class,(2012), THE UNESCO/POLAND CO-SPONSORED FELLOWSHIPS PROGRAMME ENGINEERING CYCLE 2012 AGH, UST Krakow, Poland
5. Speaker, School on the Move (SOM) under the AJBCEP, Japan program in conjunction with Regional Conference of Geo-Resource, Penang, 2015
6. Speaker, Engineering geology of rock masses, prediction and application and research activities at Mineral Resources Engineering Program, School of Materials and Mineral Resources Engineering, USM, Hokkaido University, Japan. 2016
7. Keynote Speaker, The 1st International Seminar on Science and Technology, Palu, Sulawesi, Indonesia, Faculty of Mathematics and Natural Sciences, Tadulako University, 2018

National

1. Speaker, Bengkel Kedua Kajian Pengurusan Risiko Gempa Bumi dan Tsunami, Jabatan Meteorologi Malaysia (Met Malaysia), 24-25 Jun, 2014
2. Speaker, Karst studies in Kuala Lumpur, SMART tunnel project, Malaysia, Geological Society of Malaysia, University Malaya, KL, 2013
3. Speaker, 1-day In-house Training on Thin Section and Ore Microscopy, PPKBSM, USM, 2014
4. Speaker, Workshop on Advanced Mineral Characterization, PPKBSM, USM, 2009
5. Speaker, Short course on the introduction to Characterization and Processing of Rare Earth Elements (REEs), PPKBSM, USM, 2016

3. RESEARCH PUBLICATIONS:

1. Zabidi, H & deFreitas, M. H. (2006), Structural studies for the prediction of karst in the Kuala Lumpur limestone. IAEG2006, **Geological Society of London**. Paper no.264.
2. Zabidi, H & deFreitas, M. H. (2011), Re-evaluation of rock core logging for the prediction of preferred orientations of karst in the Kuala Lumpur Limestone Formation. **Engineering Geology**. Vol. 117, issues 3-4. P 159-169.
3. Zabidi, H & deFreitas, M. H. (2011), Preferred directions of karst in the Kuala Lumpur Limestone Formation: a comparison of predictions with reality. **ASEAN Engineering Journal**, 1, No. 3.
4. Zabidi, H & deFreitas, M. H. (2013), Geospatial analysis in identifying karst cavity distribution: The SMART Tunnel, Malaysia. **Carbonates and Evaporites**. DOI 10.1007/s13146-013-0148-3
5. Anuar, H & Zabidi, H. (2013), The effect of rock properties on NATM-4 drillability in the Interstate Raw Water Transfer (ISRWT) Tunnel project. **Caspian Journal of Applied Sciences Research**, 2(AICCE'12 & GIZ' 12), pp.393-399.
6. M. A. M. Ismail, R. Azit, S. M. Ng, H. Zabidi, N. Bakhudin, Z. Nordin. (2013), Evaluation of Geological Conditions Ahead of a Tunnel Face using the Tunnel Seismic Prediction Method (TSP) – Lesson Learned from the Pahang-Selangor Raw Water Transfer Tunnel, Malaysia, **ISRM International Symposium – EUROCK 2013**, 23 – 26 Oct, Wroclaw, Poland
7. H. Zabidi, M. Termizi, S. Aliman, K. S. Ariffin and N. L. Khalil, (2016), Geological Structure and Geomorphological Aspects in Karstified Susceptibility Mapping of Limestone Formations, **Procedia Chemistry**, Vol. 19, p.659–665
8. Nur Khafiza Sapari, Hareyani Zabidi & Kamar Shah Ariffin, (2016), Geochemical prospecting of tin mineralization zone at Belukar Semang prospect, Gerik, Perak, **Procedia Chemistry**, Vol. 19, p. 729–736
9. Yaraghi, M. H. Abang Sapri, E. Ahmadi, N. Baharun, S. A. Rezan, N. I. Shoparwe, S. Ramakrishan, K. S. Ariffin, M. N. Ahmad Fauzi, H. Zabidi, I. Hanafi, H. H. Seli. (2016), Microstructural Study of Leached Nitrided Malaysia Ilmenite with Coal-Polystyrene Reductant. **Key Engineering Materials**, Vol. 701, p. 132 –137.
10. NurLyana Khalil, Hareyani Zabidi, Kamar Shah Ariffin, Mohd. Hazizan Mohd Hashim, (2016), Effect of Geological Condition on Degree of Fragmentation in a Simpang Pulau Marble Quarry. **Procedia Chemistry**, Vol. 19, p.694–701

11. N.Q.A.M. Yusof, H. Zabidi, (2016), Correlation of mineralogical and textural characteristics with engineering properties of granitic rock from Hulu Langat, Selangor. ***Procedia Chemistry***, Vol. 19, p. 975–980
12. M.A.M. Fadel, H. Zabidi, K.S. Ariffin, (2016), Monitoring the Quarry Pit Development. ***Procedia Chemistry***, Vol. 19, p. 721–728
13. N. Hassan, H. Zabidi, K. S. Ariffin and M. Trisugiwo, (2016), Effect of Drilling Speed of Probe Drilling Data on the Clustering of Rock Strength at NATM-4, Hulu Langat, Selangor. ***Procedia Chemistry***, Vol. 19, p. 737–742
14. M. Trisugiwo and H. Zabidi, (2016), Joint Analysis to Evaluate Geological Over-break in Excavation of Surge Chamber Cavern. ***Procedia Chemistry***, Vol. 19, p. 659–665
15. M.W. Agam, M.H.M. Hashim, M.I. Murad and H. Zabidi, (2016), Slope Sensitivity Analysis using Spencer's Method in Comparison with General Limit Equilibrium Method. ***Procedia Chemistry***, Vol. 19, p. 659–665
16. Ali Yaraghi, Mohammad Hanif Abang Sapri, Norlia Baharun, Sheikh A. Rezan, Noor Izah Shoparwe, Sivakumar Ramakrishnana, Kamar Shah Ariffin, M.N. Ahmad Fauzi, Hareyani Zabidi and Hazman Haji Seli, (2016), Aeration leaching of Iron from Nitrided Malaysian Ilmenite reduced by Polystyrene- Coal Reductant. ***Procedia Chemistry***, Vol. 19, p. 659–665
17. Afikah Rahim, Hareyani Zabidi, Mochamad Trisugiwo & Abdul Ghani M. Rafek, (2016), Parametric Performance Study of Tunnel Boring Machine (TBM) In the Titiwangsa Main Range Granite, Malaysia. ***Procedia Chemistry***, Vol. 19, p. 969–974
18. Syaran Suri, Hareyani Zabidi & Fauziah Ahmad (2017), Modelling evolution of karst aquifer from one dimension to three dimension: A review, ***AIP Conference Proceedings***, Vol 1892, Issue 1
19. N.E.Q.M. Anua & H. Zabidi, (2018), Petrography and Geochemistry of Kinta Valley Palaeozoic Carbonate Rock. ***Journal of Physics (JPCS): IOP Conf. Series***, (1082) 012095
20. Nur Qurrahtin A'ini Md.Yusof & Hareyani Zabidi (2018), Reliability of Using Standard Penetration Test (SPT) in Predicting Properties of Soil. ***Journal of Physics (JPCS): IOP Conf. Series***, (1082) 012094
21. Hareyani Zabidi, Nurmaliana Mohd Khadri & Muhammad Irfan Mohd Azmi, (2018), Mechanical anisotropy of jointed rock mass under uniaxial compression and tensile loading. ***Journal of Physics (JPCS): IOP Conf. Series***, (1082) 012096
22. M W Agam, M H M Hashim and H Zabidi, (2018) Deterministic and Probabilistic Assessments of the Slope Stability of Kota Bunyih Dam, Pengkalan Hulu, Perak. ***Journal of Physics (JPCS): IOP Conf. Series***, (1082) 012093
23. H. Zabidi & Nur Lyana Khalid, Morphometric and geological features of potential karst depressions in Kinta Limestone Formation, Malaysia (2018) ***Journal of Physics (JPCS): IOP Conf. Series***, Vol. 1242 (012044)
24. H. Zabidi, M. Trisugiwo & A. Rahim, Structural Controls on Groundwater Inflow Analysis of Hardrock TBM, (2019) (Taylor & Francis) ***Cogent Geoscience Journal***, Vol 5 (1637556)
25. N. K. Sapari & H. Zabidi, (2019) Determination of strength variation in jointed anisotropic rocks behavior using UCS and Brazilian Tensile test. ***Materials Today: Proceedings***, Vol 17, 905 - 911
26. Nur Farhana Hassan, Onimisi A. Jimoh, Shehu Abdulazeez & Zabidi Hareyani, (2019). The effect of mineralogical composition on strength and drillability of granitic rocks in Hulu Langat, Selangor Malaysia. ***Geological and Geotechnical Engineering***, 37(6), 5499-5505, DOI 10.1007/s10706-019-00995
27. M.T. Zakaria, N.M. Muztaza, H. Zabidi, F. Ahmad, T. Adeeko, N. Ismail and N. Samsudin (2019), Slope Instability Evaluation Using 2D Resistivity Method of Gua Musang-Cameron Highland Highway, ***Lowland Technology International (LTI) Journal*** (Accepted)
28. Onimisi A Jimoh, Shehu Shaib Abdulazeez, Mochamad Trisugiwo and Hareyani Zabidi, (2019), Assessment of Supporting System of Hulu Terengganu Hydroelectric Surge Chamber Cavern in Malaysia, ***Bulletin of Geological Society Malaysia*** (Accepted)
29. Nur Emilia Qistina Mohd Anua, Aisyah Shahirah Juhari, Solihin Yaacob, Syaran Suri and Hareyani Zabidi, (2019), Slope Stability Assessment in Opencast Quarry – An UAV Approach, ***Bulletin of Geological Society Malaysia*** (Accepted)