

Curriculum Vitae



ZAKARIA ENDUT

No 4, Jalan KS 1/5, Kota Sultan Ahmad Shah,
25200 Kuantan, Pahang.

Full name : **Zakaria Endut**
Nick Name : Zak
Place & Date of Birth : Kuala Terengganu, July 27th, 1971
Gender : Male
Nationality : Malaysia
Education Level : BSc (Hons) Geology– University Kebangsaan Malaysia (1995)
Ph. D-University Malaya (2016)

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Profile:

Graduated with Degree in Geology from University Kebangsaan Malaysia in May 1995 and Ph.D from University Malaya, 2016. PhD research is about structural classification of vein system in Penjom Gold Mine. I am a dynamic and hard working person with experiences in mining geology and mineral resources exploration. Have a good knowledge of structural control of vein systems especially in Central and Eastern Belt (Penjom, Bt Ibam, Merapoh and Selinsing) and factor controlling the localization of the deposit. I am also an experiences exploration geologist and mine geologist working from pit mining geologist to Superintendent Production Geologist, working closely with mining engineer and metallurgist.

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Working Experiences:

- May 1995 to April 1997: Engineering Geologist at Karak Highway Second Tunnel project.

Company: Terratech Consultant S/B (Subsidiary of MTD Capital Bhd)

Scope of work: Underground geological mapping, supervise geotechnical work. Engineering geological mapping for slope stability and slope design. Detail mapping of fault, joint and fracture intensity and the effect to tunnel wall stability

- April 1997 to July 1997: Engineering Geologist

Company: Centralized Soil Exploration Sdn. Bhd.

Scope of work: Geotechnical drilling for site investigation, Geotechnical core logging, slope geological mapping, soil sampling, costing and planning.

- August 1997 to April 2015: Pit Geologist, Senior Mine Geologist/Senior Resources Geologist/Superintendent Production Geologist.

Company: Specific Resources Sdn. Bhd. (Penjom Gold Mine, Kuala Lipis, Pahang)

Scope of work: Grade Control, Mine Geologist, in pit exploration:

1. Geological mapping of pit exposure for resources estimation and geotechnical assessment
2. Drilling and sampling, RC grade control drilling and logging, limited diamond drilling core logging.
3. Ore mining supervision.
4. Quality assurance and quality control (QA/QC), grade control ore block modeling with polygonal blocking and conditional simulation with geostatistical approach.
5. Small scale resources estimation. Planning for in pit resources exploration
6. Mine to resource and mine to mill reconciliation, drilling, geological mapping and modeling, Liaison and coordinate with other personnel (Mining engineer, Metallurgist and administration).
7. Production scheduling and reporting of ore tonnes and grade (for weekly and monthly report). Conducting safety and operation meeting at various level.

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- November 2015 to Dec 2018: Head of Exploration

Company: Borneo Oil and Gas Corporation Sdn. Bhd. (Mining Division)

Site: Bukit Ibam Gold Mine, Muadzam Shah;

1. Carried out exploration activities for alluvial/colluvium ore and hard rock resources. Supervision of trenching sampling and diamond drilling and logging. Preparing resources report and long term planning.
 2. Structural geology mapping of exposure for geological interpretation.
 3. Setting up small to bigger scale mining and exploration activity.
- January 2019 to Present: Lecturer Universiti Sains Malaysia

Educational Background

Year	School / University	Place
1978-1983	Sekolah Kebangsaan Beladau Kolam	Kuala Terengganu
1983-1988	Sekolah Menengah (A) Tok Jiring	Kuala Terengganu
1989-1991	Matriculation: Sekolah Menengah Sains Sultan Mahmud Pusat Matrikulasi Kuala Pilah	Kuala Terengganu Negeri Sembilan
1991-1995	University Kebangsaan Malaysia BSc (Hons) Geology	Bangi, Selangor
2010-2015	University Malaya (Ph. D)	Kuala Lumpur

Training and Courses related to geology and mining

Date	Training/Course	Location
1997	Southwest Pacific Rim Gold Copper systems (by Greg Corbett)	Penjom
2000	New development in grade control, Workshop during Mining Geology Conference (by Bill Shaw)	Brisbane, Australia
2003	Orogenic Lode Gold and Intrusion Related Deposit (By Dr Ian Bogie, SKM Consultant, Australia)	Penjom

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2004	Exploration for Orogenic Gold Deposit and Intrusion Related Gold Deposit (By Prof. David I. Groves)	Penjom
2005	Structural Geological Coursework (By Brett Davis)	Penjom
2006	Exploration and Mining Geochemistry	Penjom
2007	Geostatistical Mineral Resources/Ore Reserve Estimation and meeting JORC requirement	Perth, Australia
2008	Hydrothermal system (By Greg Morrison)	Penjom
2013	Introduction to Geostatistic (By Mohan Srivastava)	Bandung, Indonesia
2013	MGEI Porphyry and Epithermal Gold Deposit (Noel White and David Cooke)	Bali, Indonesia
2014	MGEI Gold and copper workshop. Resources estimation and JORC CODE compliances.	Palembang, Indonesia
2015	Resources modeling (Ordinary kriging-Datamine)	Jakarta, Indonesia
2016	Introduction to Micromine Software	Merapoh, Pahang

Computers skills

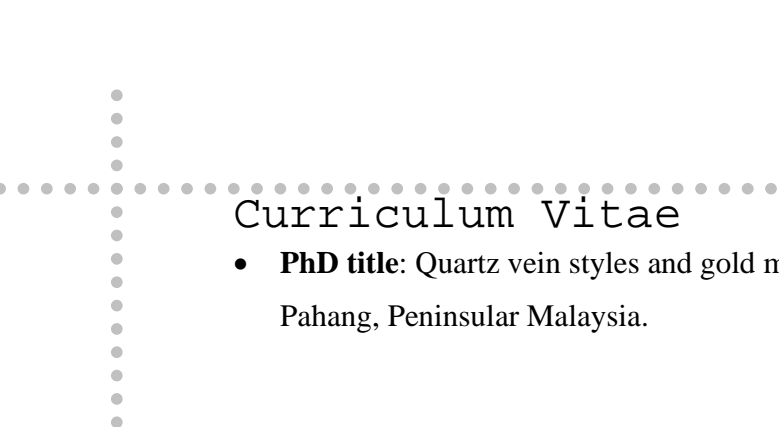
- Microsoft Office (Words, Excel, Access, Power point)
- Mining software: Datamine Studio 3, Basic Micromine
- Arc View 3.2a, Arc Map, Basic Adobe Illustrator CS3
- MP3 Geostatistical software for Grade Control (Conditional Simulation)

Language Skills

- Malay (Very good – Oral and written)
- English (Very good – Oral and written)

Academic Study (Ph. D)

- **Field:** Economic geology, structural geology and geochemistry



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- **PhD title:** Quartz vein styles and gold mineralization in the Penjom Gold Mine, Pahang, Peninsular Malaysia.

- **Thesis chapter:**
 1. Introduction
 2. Gold deposit classification
 3. Host rock of the Penjom gold deposit
 4. Carbonaceous ore body
 5. Structural geology and veins system
 6. Mineralogy, texture, sulphide and gold mineralization
 7. Geochemistry of veins and ore
 8. Galena geochemistry and lead isotope
 9. Discussion and conclusion

Publication:

Endut, Z., Ng, T. F., Abdul Aziz, J. H., Teh, G. H., 2015. Structural analysis and vein episode of the Penjom Gold Deposit, Malaysia: Implications for Gold Mineralisation and Tectonic History in the Central Belt of Malaysia, **Ore Geology Reviews** V. 69, p157-173.

(Impact factor: 3.558)

Endut, Z., Ng, T. F., Abdul Aziz, J. H., Meffre, S. and Makoundi, C. 2015. Characterization of Galena and Vein Paragenesis in the Penjom Gold Mine, Malaysia: Trace Elements, Lead Isotope Study and Relationship to Gold Mineralization Episodes. **Acta Geologica Sinica** (English Edition). Vol. 89. No. 6 pp.1801–1840.

(Impact factor: 1.682)

Conference papers

1. Endut, Z., Ng, T. F., Abdul Aziz, J. H., Teh, G. H., 2015b. Style of veins in Penjom Gold Mine, Malaysia–Implications for gold mineralisation and structural episodes. **PACRIM 2015**, Hong Kong, China, 18-20 Mac 2015.
2. Endut, Z., Ng, T. F., Abdul Aziz, J. H., Teh, G. H., Mohammed, S., 2014. Style, textures and paragenesis of veins in Penjom Gold Mine, Malaysia: Implications on gold mineralization episode. Abstract of **GEOSEA 2014** Conference, Yangoon, Myammar
3. Endut, Z. and Teh, G.H., 2010. Structural control on quartz vein in Penjom Gold Mine with emphasise of Kalampong Pit. Proceedings of the **Annual Geological Conference 2010**, Geological Society of Malaysia, 11-12 June 2010, Shah Alam.
4. Endut, Z., Ng, T. F and Teh, G.H., 2012. Some aspect of vein texture, microstructure and implication to gold mineralization episode in Penjom Gold Mine. Proceeding of the **Annual Geological Conference 2012**, Geological Society of Malaysia, June 2012, Kuching, Sarawak.
5. Endut, Z., Haznur, R., Mohammed, S., Ismail, S., Prihananto, A., 2014. Geology of the Penjom Gold Deposit, Pahang, Malaysia. Proceeding of **Sundaland Resources 2014** MGEI Annual Conference, November 17-18, Palembang, Sumatra, Indonesia.

Membership:

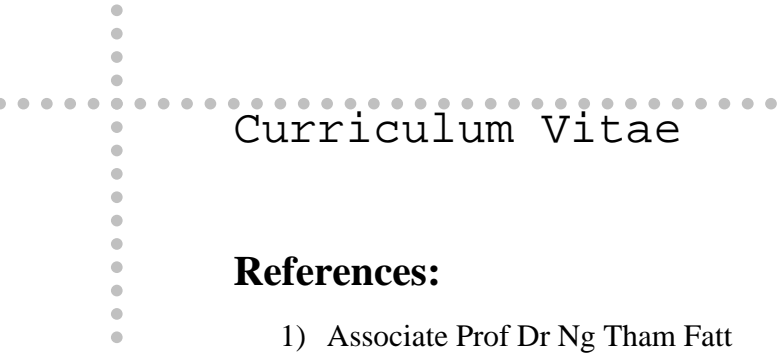
AusIMM-membership no. 208236

MIGM-membership no. 770

Professional Geologist (P. Geo: 220)

Others

- Chairman, Economic Geology Working Group, Geological Society of Malaysia (2011-2016).
- ROTU (Reserve Officer Training Unit)-UKM: (1990-1996)



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References:

- 1) Associate Prof Dr Ng Tham Fatt
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Tel no: 0379577036)

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