

CURRICULUM VITAE

SEYED VAHID ALAVI NEZHAD KHALIL ABAD

Ph.D. of Civil Engineering (Geotechnical Engineering)

Assistant Professor Dr.,

Department of Civil Engineering,
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PERSONAL DATA

Date of Birth : March 30, 1980
Place of Birth : Iran

Gender : Male
Nationality : Iranian

EDUCATION

Bachelor of Science in Mining Engineering (Mining Exploitation) March 1999 to March 2003
Amirkabir University of Technology, Tehran, Iran.

Final Project: "Assessment of rock slope stability by using stereographic projection: a case study at Tehran-Rasht railway tunnel"

- Based on discontinuities survey data, stereographical projection was used to evaluate the stability condition of the rock slope. The result of the probable failure mode was verified by geomechanical properties of the rock. The stability of the rock slope was governed by the rock mass structure.

Master of Civil Engineering, Majoring in Geotechnic June 2008 to January 2011
University Technology Malaysia, Skudai, Malaysia.

Thesis: "Assessment on Blasting – Induced Rock Slope Instability at Bandar Seri Alam, Johor"

- Utilization and examination of Kinematic Analysis and SMR in order to assess the induced instability caused by blasting operation. Optimizing the results by the two existing methods in order to identify the modes of failure in the dynamic condition.

Doctor of Philosophy in Civil Engineering January 2011 to September 2014
University Technology Malaysia, Skudai, Malaysia.

Thesis: "Geomechanical Model for Surface Excavation in Tropically Weathered Granite"

- Weathered rock mass and rock material characterizations were established for tropically weathered granite. Four dominant weathering profiles of granite were identified in the southern part of Malaysia. In addition, a typical mass weathering profile was proposed based on detailed characteristics. A geomechanical model for estimation of surface excavation performance was proposed.

WORK EXPERIENCE

September 2015 – Present

Assistant Professor, Department of Civil Engineering, Birjand University of Technology, Iran
Responsibilities

- ♦ Director of International Relations Committee, Birjand University of Technology
- ♦ Deputy Dean (Research and Innovation), Faculty of Civil, Mining and Chemical Engineering (2015-2016)
- ♦ Teaching subjects including Soil Mechanics, Foundation Engineering, Rock Mechanics, Geometrical Design of Highway, Tunnel Engineering, Pavement Engineering and

- Technical English Terms for Civil Engineers .
- ◆ Supervision of Undergraduate Students ' Final Projects .
- ◆ Academic Adviser of Undergraduate Students .
- ◆ Research Study

September 2014 to September 2015

Postdoctoral Fellow, Department of Geological Engineering, Faculty of Engineering, Istanbul University, Turkey

Responsibilities:

- ◆ Conducted a research on development of geological engineering model of weathered rocks for civil and mining engineering activities

August 2006 to May 2008

Technical and Engineering Division of Industries and Mines, Organization of Khorasan Razavi Province, Iran

Responsibilities:

- ◆ Quarry Design and Feasibility Study in Surface Mining Operation

August 2006 to January 2007

Lecturer (Part time) at Islamic Azad University, Kashmar, Iran.

Responsibilities:

- ◆ Taught surveying practice

June 2005 to July 2006

Kavosh Pay Mashhad Consulting Engineers Company, Mashhad, Iran .

Responsibilities:

- ◆ Tunnel designer and instrument control expert

SKILLS

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| Experiments | Experienced with characterization , testing and/or analysing soil or rock samples in geotechnic laboratory. |
| Engineering Software | Plaxis, GeoStudio, Dips, Surfer, Datamine |
| Other Software | SPSS, Microsoft Applications and scientific program packages, Sigma Plot |
| <i>Language</i> | Fluent in Spoken and Written English and Persian (native) and fair in Spoken and Written Thai, Malay and Turkish. |
| <i>Strength</i> | <p>Accountable : Responsibility of decision and action, result oriented and always pushing to deliver on stretch goals</p> <p>Teamwork : Build trust by respecting the idea and contribution of everyone to positive moral and spirit within the team.</p> <p>Energizing : Be eager to learn, self-motivation, display can-do and optimistic attitude, frequently recognized contribution for others and make work fun.</p> |

PUBLICATIONS

- **Alavi Nezhad Khalil Abad, S. V.**, Mohamad, E. T., Jahannirinezhad, H., Hajihassani, M., and Namazi, E. (2011). Zonation of Landslide Hazards Based on Weights of Evidence Modeling Along Tehran - Chalos Road Path, Iran. *Electronic Journal of Geotechnical Engineering*. Vol 16, 1083-1097.
- **Alavi Nezhad Khalil Abad, S. V.**, Mohamad, E. T., Jahed Armaghani, D., and Kalatehjari, R. (2013). Stability Analysis of A Railway Trench By Using Stereographical Projection. *Electronic Journal of Geotechnical Engineering*. Vol 18, 3401-3409.
- **Alavi Nezhad Khalil Abad, S. V.**, Mohamad, E. T., Komoo, I. (2014). Dominant Weathering Profiles of Granite in Southern Peninsular Malaysia. *Engineering Geology*. Elsevier. 183, 208-215. Doi: 10.1016/j.enggeo.2014.10.019.

- **Alavi Nezhad Khalil Abad, S. V.**, Mohamad, E. T., Komoo, I., and Kalatehjari, R. (2015). A Typical Weathering Profile of Granitic Rock in Johor, Malaysia Based on Joint Characterization. *Arabian Journal of Geosciences*. Springer. 8(1), 2191-2201. Doi: 10.1007/s12517-014-1345-7.
- **Alavi Nezhad Khalil Abad, S. V.**, Mohamad, E. T., Komoo, I., and Kalatehjari, R. (2015). Assessment of Weathering Effects on Rock Mass Structure in Granite. *Jurnal Teknologi (Sciences & Engineering)*. 72(1), 71-75. Doi: 10.11113/jt.v72.2875.
- **Alavi Nezhad Khalil Abad, S. V.**, Tugrul, A. (2018). A New Geomechanical Approach in Assessment of Surface Excavation. *Engineering Geology*. Elsevier. (Under Review).
- **Alavi Nezhad Khalil Abad, S. V.**, Tugrul, A. (2018). Influence of Weathering on Water Absorption and Strength Reduction in Granitic Rock. *Bulletin of Engineering Geology and the Environment*. Springer. (Under Review).
- **Alavi Nezhad Khalil Abad, S. V.**, Tugrul, A., Gokceoglu, C. (2018). Characterization of Weathering Profiles in Different Types of Rock (A Review). *Rock Mechanics and Rock Engineering*. Springer. (Under Review).
- **Alavi Nezhad Khalil Abad, S. V.**, Tugrul, A., Gokceoglu, C., Jahed Armaghani, D. (2016). Characteristics of Weathering Zones of Granitic Rocks in Malaysia for Geotechnical Engineering Design. *Engineering Geology*. Elsevier. 200, 94-103. Doi:10.1016/j.enggeo.2015.12.006.
- **Alavi Nezhad Khalil Abad, S. V.**, Yilmaz, M., Jahed Armaghani, D., Tugrul, A. (2018). Prediction of the Durability of Limestone Aggregates Using Computational Techniques. *Neural Computing and Applications*. Springer. 29(2), 423-433. Doi: 10.1007/s00521-016-2456-8.
- Hajihassani, M., Marto, A., Namazi, E., **Alavi Nezhad Khalil Abad, S.V.**, and Karimi Shahrabaki, M. (2011). Prediction of Surface Settlements Induced by NATM Tunneling Based on Artificial Neural. *Electronic Journal of Geotechnical Engineering*. Vol 16, 1471-1480.
- Jahed Armaghani, D., Momeni, E., **Alavi Nezhad Khalil Abad, S. V.**, and Khandelwal, M. (2015). Feasibility of ANFIS Model for Prediction of Ground Vibrations Resulting from Quarry Blasting. *Environmental Earth Sciences*. Springer. Doi: 10.1007/s12665-015-4305-y
- Mohamad, E. T. and **Alavi Nezhad Khalil Abad, S. V.** (2011). Assessment on Blasting-Induced Rock Slope Instability at Johor, Malaysia. 2011. *Electronic Journal of Geotechnical Engineering*. Vol 16, 357-374.
- Mohamad, E. T., **Alavi Nezhad Khalil Abad, S. V.**, and Rosli, S. (2011). Challenges of Excavation by Ripping Works in Weathered Sedimentary Zone. *Electronic Journal of Geotechnical Engineering*. Vol 16, 1337-1350.
- Mohamad, E. T., Jahed Armaghani, D., Hajihassani, M., **Alavi Nezhad Khalil Abad, S. V.**, Marto, A., and Moghaddam, R. (2015). Evaluation and prediction of flyrock resulting from blasting operations using empirical and computational methods. *Engineering with Computers*. Springer. Doi: 10.1007/s00366-015-0402-5
- Mohamad, E. T., Jahed Armaghani, D., Momeni, E., and **Alavi Nezhad Khalil Abad, S. V.** (2014). Prediction on unconfined compressive strength of soft rocks: a PSO-based ANN approach. *Bulletin of Engineering Geology and the Environment*. Springer. Doi: 10.1007/s10064-014-0638-0.
- Mohamad, E. T., Jahed Armaghani, D., Noorani, S. A., Rosli, S., and **Alavi Nezhad Khalil Abad, S. V.** (2012). Prediction of Flyrock in Boulder Blasting by Using Artificial Neural Network. *Electronic Journal of Geotechnical Engineering*. Vol 17, 2585-2595.
- Mohamad, E. T., Latifi, N., Aminaton, M., Moradi, R., and **Alavi Nezhad Khalil Abad, S. V.** (2013). Effects of Relative Density on Shear Strength Characteristics of Sand-Tire Chips Mixture. *Electronic Journal of Geotechnical Engineering*. Vol 18, 613-622.
- Mohamad, E. T., Rosli, S., and **Alavi Nezhad Khalil Abad, S. V.** (2011). Durability Assessment of Weak Rock by Using Jar Slaking Test. *Electronic Journal of Geotechnical Engineering*. Vol 16, 1319-1335.
- Namazi, E., Hisham, M., Ahmad Kueh Beng Hong, Hajihassani, M., Siti Norafida Jusoh, and **Alavi Nezhad Khalil Abad, S.V.** (2012). Ground Behaviour around a Tunnel Using Various Soil Models. *Electronic Journal of Geotechnical Engineering*. Vol 17, 609-622.

- Ping Chiet Tiong, K., Anuar Kassim, K., Min Lee, L., and **Alavi Nezhad Khalil Abad, S. V.** (2018). Unconfined Compressive Strength of Biomediated Fine-Grained Soil. *Ecological Engineering*. Elsevier. (Under Review)

INTERNATIONAL CONFERENCES: PROCEEDINGS & PRESENTATION

- **Alavi Nezhad Khalil Abad, S. V.**, Mohamad, E. T., Hajihassani, M., Kalatehjari, R., and Namazi, E. (2011). Rock Slope Stability Assessment by Using Kinematic Analysis and Slope Mass Rating at Bandar Seri Alam, Johor. *Geoscience Conference*. 11-12 June. Johor Bahru, Malaysia.
- **Alavi Nezhad Khalil Abad, S. V.**, Mohamad, E. T., Komoo, I., Kalatehjari, R., and Hajihassani, M. (2012). Review on the Limitations and Applications of Geological Strength Index. *Geoscience Conference*. 23-24 June. Kuching, Malaysia.
- Hajihassani, M., Marto, A., **Alavi Nezhad Khalil Abad, S. V.**, Mohamad, E. T., and Kalatehjari, R. (2011). Effects of Geological Conditions on Surface Settlement Due to Tunnelling in Soft Soils. *Geoscience Conference*. 11-12 June. Johor Bahru, Malaysia.
- Kalatehjari, R., Nazri bin Ali, Hajihassani, M., **Alavi Nezhad Khalil Abad, S. V.**, and Mohamad, E. T. (2011). Limit Equilibrium Stability Equations of Soil Slopes in Complicated Geological Zones, Considerations and Issues. *Geoscience Conference*. 11-12 June. Johor Bahru, Malaysia.
- Namazi E., Mohamad, E. T., **Alavi Nezhad Khalil Abad, S. V.**, Hajihassani, M., and Kalatehjari, R. (2011). Evaluation of Effective Parameters on Boulders Drilling and Blasting. *Geoscience Conference*. 11-12 June. Johor Bahru, Malaysia.

BOOK

Alavi Nezhad Khalil Abad, S. V. and Mohamad, E. T. (2013). *Instability Assessment of Rock Slope*. Germany: LAP Lambert Academic Publishing. ISBN:978-3838370934

EXPERTISES and AREA of INTEREST

- Soil Mechanic and Rock Mechanic
- Engineering Geology and Geoscience
- Rock Mass Classification
- Site Investigation and Laboratory Testing
- Slope Stability
- Foundation Engineering
- Tunnelling and Excavation Design
- Drilling and Blasting Design
- Applications of Geotechnical Software
- Environmental Geotechnic
- Geometrical Design of Highway

PROFESSIONAL MEMBERSHIP

- Member of Association of Mining Engineering, Iran. (2005-present)
- Member of National Tropical Rock Engineering Research Group (NaTROCK), Malaysia (2011-2014)
- Member of Geoenvironment and Geohazard Research Group, Universiti Teknologi Malaysia (2013-2014)
- Affiliate Member of American Society of Civil Engineers (ASCE) (2014-Present)
- International Association of Engineering Geology and the Environment (IAEG) (2015-present)

REVIEWER IN ISI JOURNAL (IMPACT FACTOR JOURNAL)

- *Engineering Geology Journal* (ISSN: 0013-7952), Elsevier.
- *Rock Mechanics and Rock Engineering* (ISSN: 0723-2632), Springer.
- *Soil Dynamics and Earthquake Engineering* (ISSN: 0267-7261), Elsevier.
- *Bulletin of Engineering Geology and the Environment* (ISSN: 1435-9537), Springer.

- Journal of Rock Mechanics and Geotechnical Engineering (ISSN: 1674-7755), Elsevier
- Journal of Neural Computing and Applications (ISSN: 0941-0643), Springer
- Journal of the International Measurement Confederation (ISSN: 0263-2241), Elsevier

AWARDS and ACHIEVEMENTS

- Outstanding Reviewer-Journal of the International Measurement Confederation (2018)
- Recognized Reviewer-Journal of the International Measurement Confederation (2018)
- Recognized Reviewer-Journal of Rock Mechanics and Geotechnical Engineering (2018)
- Recognized Reviewer-Engineering Geology Journal (2017)
- Outstanding Reviewer-Engineering Geology Journal (2016)
- International Doctoral Fellowship Award, Ministry of Science, Technology and Innovation (Malaysia) (2013)
- International Doctoral Fellowship Award, Ministry of Science, Technology and Innovation (Malaysia) (2012)
- International Doctoral Fellowship Award, Ministry of Science, Technology and Innovation (Malaysia) (2011)
- Awarded as the top student of Alghadir Pre-University Center, Kashmar, Iran (1998)
- Awarded as the top student of mathematics and physics from Mehrehavaran high school, Kashmar, Iran