



## Mohammad Darbor

Associate Professor

College: Faculty of Mining Engineering

### Education

Degree	Graduated in	Major	University
BSc	2008	Mining Engineering	Shahid Bahonar University of Kerman
MSc	2010	Mining Engineering, Rock Mechanics	Amirkabir University of Technology
Specialized Courses	2017	Mining Engineering, Rock Mechanics	Curtin University
Ph.D	2018	Mining Engineering, Rock Mechanics	Isfahan University of Technology

### Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
Department of Mining Engineering	Dean of The College of Varzaghan Engineering	Tenure Track	Full Time	

### Work Experience

- Dec 2023-Present, **Associate Professor**, Department of Mining Engineering, Sahand University of Technology, Tabriz, Iran.
- March 2021-Present, **Dean of The College of Varzaghan Engineering**, Department of Mining Engineering, Sahand University of Technology, Iran.
- April 2018-Dec 2023, **Assistant Professor**, Department of Mining Engineering, Sahand University of Technology, Tabriz, Iran.

- Jan 2023-May 2023, **The scientific manager of the employment test**, Sungun Copper Complex, Varzeghan, Iran.
- Sep 2022-Sep 2023, **Central member of the Rock Mechanics Committee**, Iranian Mining Engineering Organization.
- Sep 2022-Present, **Mining technical responsible person**, Mining Engineering Organization of East Azerbaijan, Tabriz, Iran.
- Sep 2020-Sep 2023, **Advisor of the Scientific Association**, The College of Varzeghan Engineering, Varzeghan, Iran.
- Feb 2020-April 2020, **The scientific manager of the employment test**, Tabriz Oil Refining Company, Tabriz, Iran.
- August 2015- Sep 2022, **Mining technical responsible person**, Mining Engineering Organization of Isfahan, Isfahan, Iran.
- Sep 2012-Sep 2013, **Lecturer**, Department of Mining Engineering, Sahand University of Technology, Tabriz, Iran.
- May 2011-Sep 2012, **Senior Mining Engineer**, Shargh Cement Co., Mashhad, Iran.
- Feb 2011-May 2011, **Geotechnical Engineer**, Kavoshgaran Consulting Engineers, Tehran, Iran.
- August 2008-August 2015, **Mining technical responsible person**, Mining Engineering Organization of Razavi Khorasan, Mashhad, Iran.

## Awards

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- Member of Iran's National Elites Foundation, 2008-Present.
- Top teaching professor of College of Varzeghan Engineering, Sahand University of Technology, 2024.
- The leading educational professor, Sahand University of Technology, 2023.
- The best professor of student evaluation, Sahand University of Technology, 2023.
- Top teaching professor of Faculty of Mining Engineering, Sahand University of Technology, 2022.
- Top researcher, Appreciation festival of the top researchers and technologists of Sahand University of Technology, 2021.
- Iran's top graduate award, Iran's National Elites Foundation, 2019.
- 1st rank among all PhD students graduated at Department of Mining Engineering (GPA: 18.98), Isfahan University of Technology, 2018.
- Winner of a 12342 AUD scholarship from Ministry of Science, Research and Technology of Iran for sabbatical at the Curtin University, Kalgoorlie, WA, Australia, 2016.
- 5th rank at the PhD entrance exam of Iran universities, 2013.
- The top young man of North Khorasan province, North Khorasan Governorate, 2011.
- Research and Innovation Award of the Iran's National Elites Foundation, 2010.
- A Patent confirmed at Iran's National Elites Foundation, 2010.
- Exceptional talent during the Master of science at Department of Mining Engineering

(GPA: 17.23), Amirkabir University of Technology, 2010.

- 1st rank among all BSc students graduated at Department of Mining Engineering (GPA: 18.90), Shahid Bahonar University of Kerman, 2008.

## Subjects Taught

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- PhD: Advanced fracture mechanics, Mechanics of strata and methods of control
- MSc: Advanced rock mechanics, Continuous and discontinuous mechanics in rock, Advanced strength of materials
- BSc: Geotechnical engineering, Drilling methods, Statics (Engineering mechanics), Strength of materials, HSE, Technical services in mines.

## Papers in Journals

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1. Ansari, T., Chakeri, H., Darbor, M., Amoun, S., Shakeri, H., Investigating the effect of soil grading parameters on the tool wear in mechanized tunneling using EPB-TBM machine, *Journal of Mining and Environment*, Vol. 15, pp. 301-321, 2024-01, ISI (WOS).
2. Khodaei Ashestani, S., Chakeri, H., Darbor, M., Khoshzaker, E., Bazargan, Sh., Estimating penetration rate of excavation machine using geotechnical parameters and neural networks in Tabriz metro, *Journal of Analytical and Numerical Methods in Mining Engineering*, Vol. 13, pp. 1-9, 2024-01, ISC.
3. Nickjouy Tabrizi, AH., Chakeri, H., Darbor, M., Amoun, S., Shakeri, H., Evaluating the effect of tool wear in soft soil using new TBM tunneling simulator device, *Journal of Testing and Evaluation*, 2023-09, ISI (WOS).
4. Chakeri, H., Darbor, M., Sh. Maleki, F., Minaee, T., Experimental investigation of steel fibers' effect on the improvement of mechanical properties of concrete segmental lining in mechanized tunneling, *Rudarsko Geolosko Naftni Zbornik*, Vol. 38, pp. 55-63, 2023-08, ISI (WOS).
5. Faramarzi, L., Darbor, M., Ebrahimi, B., Hoseinie, S. H., The effect of anisotropy on the mechanical properties of artificial rock mass based on laboratory physical modelling, *Journal of Analytical and Numerical Methods in Mining Engineering*, Vol. 13, pp. 51-62, 2023-07, ISC.
6. Khoshzaker, E., Chakeri, H., Darbor, M., Shakeri, H., The effects of water content and grain size on the clogging and abrasivity of fine-grained soils in mechanized excavation, *Rudarsko-geološko-naftni zbornik*, Vol. 38, pp. 65-74, 2023-06, ISI (WOS).
7. Mousapour, H., Chakeri, H., Darbor, M., Hekmatnejad, A., Evaluating the wear of cutting tools using a tunnel boring machine laboratory simulator, *Mining of Mineral Deposits*, Vol. 17, pp. 28-34, 2023-06, ISI (WOS).
8. Nikjou Tabrizi, AH., Chakeri, H., Darbor, M., Shakeri, H., The effect of TBM operational parameters on the wear of cutting tools using a tunnel boring machine laboratory simulator, *Journal of Analytical and Numerical Methods in Mining Engineering*, Vol. 12, pp. 55-63, 2023-01, ISC.
9. Darbor, M., Chakeri, H., Ansari, T., The influence of soil particle size distribution on the abrasion of EPB machine cutting tools. *Ferdowsi Civil Engineering*, ۱۲-۳۴، ۲۰۲۲-۱۷ شماره صفحات، ۳۵، مجلد ۱۷، ISC.
10. Chakeri, H., Aghababaei, H., Darbor, M., Mostafaei Daneshmand, H., Evaluation of reliability, availability and maintainability of back-up locomotives in earth pressure balance tunnel boring machine (EPB-TBM): A Case study: Tabriz Metro Line ۱, *Iranian Journal of Mining Engineering*, ۱۷، شماره، مجلد ۱۷، ۶۸-۸۸، ۲۰۲۲-۶۸ صفحات، ISC.
11. Shamsoddin Saeed, M., Jalalifar, H., Shamsoddini, H., Darbor, M., A comparative study on the application of Regression-PSO and ANN methods to predict backbreak in open-pit mines, *Journal of*

Analytical and Numerical Methods in Mining Engineering, Vol. 11, pp. 55-66, 2022-02, ISC.

12. Darbor, M., Shakeri, H. Experimental study of the effects of sample geometry on hydraulic fracturing under triaxial stresses. *Journal of Engineering Geology*, ۰۵-۹۴, ۲۰۲۱-۶۷ شماره صفحات ۱۵، مجلد ۱۵، ISC.
13. Darbor, M., Chakeri, H., Asgharzadeh Dizaj, M., Investigation of the effect of different parameters on the penetration rate of earth pressure balance boring machine using fuzzy and neuro-fuzzy methods, and metaheuristic algorithms (A case study: Tabriz metro line 2), *Journal of Analytical and Numerical Methods in Mining Engineering*, Vol. 10, pp. 43-60, 2021-01, ISC.
14. Ashrafi, J., Faramarzi, L., Darbor, M., Sharifzadeh, M., Ferdosi, B., The effects of temperature on the mechanical properties of rocks, *International Journal of Mining and Geo-Engineering*, Vol. 54, pp. 147-152, 2020-12, ISI.
15. Darbor, M., Shakeri, H. A laboratory study of the effects of stress regimes on hydraulic fracturing. *Journal of Petroleum Geomechanics*, ۱۲-۵۹, ۲۰۱۹-۴۵ شماره صفحات ۳، مجلد ۱۳، ISC.
16. Darbor, M., Shakeri, H., Faramarzi, L. Experimental study of the perforation effect on hydraulic fracturing under triaxial stresses using physical modeling. *Journal of Analytical and Numerical Methods in Mining Engineering*, ۱۰-۱۰۴, ۲۰۱۹-۸۹ شماره صفحات ۹، مجلد ۹، ISC.
17. Darbor, M., Faramarzi, L., Sharifzadeh, M., Performance assessment of rotary drilling using non-linear multiple regression analysis and multilayer perceptron neural network, *Bulletin of Engineering Geology and the Environment*, Vol. 78, pp. 1501-1513, 2019-04, ISI (WOS).
18. Darbor, M., Faramarzi, L., Sharifzadeh, M., Rezaee, H. Evaluation of specimen size-effect in sedimentary rocks and grain size effect in concrete specimens on uniaxial compressive strength. *Journal of Analytical and Numerical Methods in Mining Engineering*, ۰۵۷ شماره صفحات ۸، مجلد ۸، شماره ۱۰-۷۰، ۲۰۱۸، ISC.
19. Darbor, M., Faramarzi, L., Sharifzadeh, M., Size-dependent compressive strength properties of hard rocks and rock-like cementitious brittle materials, *Geosystem Engineering*, Vol. 22, pp. 179-192, 2018-02, ISI (WOS).
20. Rahmati, A., Faramarzi, L., Darbor, M., Squeezing rock conditions at phyllite-slate zone in the Golab water conveyance tunnel, Iran: a case study, *Journal of Central South University*, Vol. 24, pp. 2475-2485, 2017-11, ISI (WOS).
21. Behzadi Nezhad, H., Faramarzi, L., Darbor, M. Stability analysis and support system design of penstock tunnels bifurcation with headrace tunnel of Rudbare-Lorestan dam project. *Journal of Analytical and Numerical Methods in Mining Engineering*, ۰۴-۱۲۳, ۲۰۱۷-۱۱۳ شماره صفحات ۱۳، ISC.