

## Curriculum Vitae

### **Masoud Cheraghi Seifabad, Ph.D.**

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#### Education :

Ph.D in Rock Mechanics from University of Newcastle upon Tyne,UK, 1992

(Title of thesis : An investigation into the mechanical cutting of rock materials with particular reference to fracture mechanics)

MSc in Mining Engineering from University of Tehran, Iran

(Title of thesis : acidizing in oil wells)

#### Practical Experience :

2 years in Mining Industry

3 years in Petroleum Industry (fully responsible for quality control of 15 oil wells as a production engineer in Khuzestan, Agha Jari, southern province of Iran)

24 years of lecturing on rock mechanics

#### Qualifications :

Member of Iranian Rock Mechanics Association (Affiliated to ISRM)

Teaching graduate level of Rock Mechanics and Tunnelling

Supervision of graduate students in experimental research programs in the field of rock mechanics

Experience in the application of numerical methods (FEM, BEM) the mining and geotechnical fields

#### Publications :

##### Conference Papers

A Moghim, M Cheraghi Seifabad, M Behnia (2018) Dynamic stability analysis of Bakhteyari hydropower cavern by using the numerical method (3DEC), Civil, Architecture and Urban Development Conference of Muslim Countries, Tabriz, Iran

R Salamat Mamakani, M Cheraghi Seifabad (2019) Subsidence definition of line 2 Tabriz metro using empirical and numerical methods, Conference on Civil Engineering, Architecture and Urban Development of Contemporary Iran, Tabriz, Iran

Zadsar H., Cheraghi M. (2014) Selection of the best method for risk assessment using stability zonation in Koliyan-Rostaq, Mazandaran, Iran.

Safi Samgh Abadi R., Cheraghi Seifabad M. (2013) Reduce the uncertainty of soil parameters and Karaj line 2 subway tunnel modeling using back analysis, 10th Iranian Tunnelling Conference, Underground Spaces and the Millennium Development Goals, Tehran, Iran.

Hosseini S., Cheraghi Seifabad M. (2013) The review of soil arching effect and its application on optimization of the distance between piles in supporting structure, symposium on advances in science & technology commission-II : National Conference on Civil Engineering & Sustainable development, Mashhad, Iran.

Safi Samgh Abadi R., Cheraghi Seifabad M. (2012) Optimization of soil characteristics with back analysis in Karaj Metro, 31st Geological Congress, Tehran, Iran.

Cherloo M.A., Hashemolhosseini, H., Cheraghi M., Mahdevari S. (2012) The feasibility of underground excavation of subway stations in urban historical area, 9th International Congress on Civil Engineering, Isfahan, Iran.

Cherloo M.A., Hashemolhosseini, H., Cheraghi M., Mahdevari S. (2012) The effect of curved steel pipes as pre-supporting system on the stability of subway stations-Naghshe Jahan square as a case study, 9th International Congress on Civil Engineering, Isfahan, Iran.

Asami S., Cheraghi Seifabad M. (2012) Anisotropy effect on the stability and support design, 7th Asian Rock Mechanics Symposium, Seoul, South Korea.

Ebrahimabadi A., Goshtasbi K., Shahriar K., Cheraghi Seifabad M. (2011) Performance prediction of roadheaders in fully mechanized Tabas coal mine project of Iran, 22nd World Mining Congress & Expo, Istanbul, Turkey.

Cheraghi Seifabad M. (2004) Finite element modelling of rock cutting experiments, Eurock 2004, Salzburg, Austria.

Cheraghi Seifabad M. (2001) Effective parameters of wear on rock cutting tools, 3rd surface engineering conference, Isfahan, Iran.

Cheraghi Seifabad M. (2001) Design considerations in a long tunnel, 38th US symposium, Washington DC, USA.

Cheraghi Seifabad M. (2000) Tunnelling in swelling ground, NARMS 2000, Seattle, Washington, USA.

Cheraghi Seifabad M . (1998) Laboratory tests to investigate the effect of presence of discontinuities on rock cutting parameters, International Conference on Mechanics of Jointed and Faulted Rock, Vienna, Austria.

Cheraghi Seifabad M. (1998) Fracture Mechanics Approach to Tunnelling Machines, Canadian Society for Civil Engineering, Halifax, Nova Scotia, Canada.

Cheraghi Seifabad M.(1998) Fracture Toughness Evaluation and the Mechanical Characteristics, 8th Congress IAEG, Vancouver, British Columbia, Canada.

Cheraghi Seifabad M. (1997) Fragmentation of rock cutting, 1st Asian Rock Mechanics Symposium, Seoul, South Korea.

#### Journal Papers

H Zadsar, M Cheraghi Seifabad, M Ahmadi (2020) An investigation into fracture toughness and mechanisms in anisotropic rocks using the Acoustic Emission method, **Rudarsko-geološko-naftni zbornik 35 (2)**

E Karimzade, M Cheraghi Seifabad, M Sharifzadeh, A Baghbanan (2019) Modelling of Flow–Shear Coupling Process in Rough Rock Fractures Using Three-Dimensional Finite Volume Approach, 4693-4713

A Darvishpour, M Cheraghi Seifabad, DA Wood, H Ghorbani (2019) Wellbore stability analysis to determine the safe mud weight window for sandstone layers, 46(5), 1031-1038

M Behnia, M Cheraghi Seifabad (2018) Stability analysis and optimization of the support system of an underground powerhouse cavern considering rock mass variability, Environmental Earth Sciences, 77, 1-16

J Tavakoli, M Behnai, M Cheraghi Seifabad (2018) Estimation of rock block size distribution with Distinct Element Method (DEM) using Geological Strength Index (GSI), Journal of Engineering Geology, 12(2), 259-276

H Bakhshandeh Amnieh, AH Rostamai, K Shahriar, H Chakeri, M Cheraghi Seifabad (2018) Subsidence prediction for twin tunnels using empirical formula-A case study: Isfahan, Iran, Scientific Quarterly Journal, Geosciences, 28(109), 3-6

H Jaberi, M Cheraghi Seifabad, M Behnia (2017) The Stochastic Assessment of Geomechanical and Strength Parameters for Rock Masses/ Case Study: Pressure Tunnels

of Azad Pump-Storage Power Plant Project, *Journal of Dam and Hydroelectric Powerplant*, 4(13), 55-59

Karimzade E., Sharifzadeh M., Zarei H. R. , Shahriar K., Cheraghi Seifabad M. (2017) Prediction of water inflow into underground excavations in fractured rocks using a 3D discrete fracture network (DFN) model, *Arabian Journal of Geosciences*, Vol 10, No.9.

Cheraghi Seifabad M., Sadrnejad S.A., Ebrahimi D. (2015) A Study of Swelling Behaviour in a Tunnel Using Finite Element Methods, *Periodica Polytechnica, Civil Engineering*, Vol 59, No. 2, PP.103-107.

Cheraghi. Seifabad M., Khosravi A. A., Vafaeian M. (2013) The Stability Analysis of Soork Dam Abutments, *International Journal of Earth Sciences and Engineering*, Vol 6, No. 2, PP. 259-268.

Cheraghi Seifabad M., Ehteshami P. (2013) Estimating the drilling rate in Ahvaz oil field, *Journal of Petroleum Exploration and Production Technology*, Vol 3, No. 3, PP. 169-173.

Cheraghi Seifabad M., Beheshti Zavareh S. (2013) Excavation method in Goushfill mine, *International Journal of Engineering and Technology*, Vol 2, No. 3, PP. 225-229.

Cheraghi. Seifabad M., Koosha B., Soltani B. (2013) Slope Stability Analysis of the 3rd Kuhrang Tunnel Portal, *Journal of Earth Sciences and Geotechnical Engineering*, Vol 3, No. 1, PP. 85-89.

Cheraghi Seifabad M. (2013) Engineering Geology of Ghomroud Tunnel with Emphasis on Water Inflow-A Case Study, *Electronic Journal of Geotechnical Engineering*, Vol 18, PP. 45-54.

Hosseini S., Cheraghi Seifabad M. (2013) Optimization the Distance between Piles in Supporting Structure Using Soil Arching Effect, *Journal of Civil Engineering and Urbanism*, Vol 3, No. 6, PP. 386-391.

Abdi Cherloo M., Hashemolhosseini H., Cheraghi Seifabad M., Mahdevari S. (2013) Feasibility evaluation for excavation of Naghshe Jahan Square subway station by underground methods, *Journal of Rock Mechanics and Geotechnical Engineering*, Vol 5, No. 6, PP. 1-9.

Cheraghi Seifabad M. (2012) Fracture Mechanics of Different Rocks, *Amir Kabir Journal*, Vol 1, PP. 1-9 (In Farsi)

Ebrahimabadi A., Goshtasbi K., Shahriar K., Cheraghi Seifabad M. (2012) A Universal Model to Predict Roadheaders' Cutting Performance / Universal Model Do

Prognozowania Postępu Prac Kombajnów Do Drążenia Tuneli, Archives of Mining Sciences, Vol 57, No. 4, PP. 1015-1026.

Ebrahimabadi A., Goshtasbi K., Shahriar K., Cheraghi Seifabad M. (2011) Predictive models for roadheaders' cutting performance in coal measure rocks , Yerbilimleri/Hacettepe Üniversitesi Yerbilimleri Uygulama ve Araştırma Merkezi Dergisi, Vol 32, No. 2, PP. 89-104.

Ebrahimabadi A., Goshtasbi K., Shahriar K., Cheraghi Seifabad M. (2011) A model to predict the performance of roadheaders based on the Rock Mass Brittleness Index, South African Institute of Mining and Metallurgy, Vol 111, No. 5, 355-364.