

Saeed Karimi Nasab

Associate Professor of Mining Engineering

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Ph.D. in Mining Engineering, Paris School of Mines, France (1997)

M.Eng. in Mining Engineering, Paris School of Mines, France (1993)

B.Eng. in Mining Engineering, Isfahan University of Technology, Iran (1986)

Technical fields of study	Stability analysis of soil and rock slopes Instrumentation and field testing Nondestructive laboratory experiments Geostatistics Site selection Mine drainage Underground storage of hydrocarbon material
Research interests	Shear strength of rocks Coupled fluid flow through discrete fracture network
Positions/ Experiences	Head of the Department of Mining Engineering, Shahid Bahonar University of Kerman Vice Chancellor for Research, Energy and Environment Research Institute, Shahid Bahonar University of Kerman Vice Chancellor for Research, Gol-e-Gohar Iron Ore and Steel Research Institute
Recent research projects	RECENT COMPLETED RESEARCHES Feasibility study of underground rock cavern for storage of crude oil in Iran, Iranian Oil Terminals Company Slope stability studies of mine no. 1 at Gol-e-Gohar iron ore mine, Gol-e-Gohar Iron Ore Company
Patents	Non-destructive apparatus to determine concrete quality Anti-destruction connection of water well casing
Courses taught (Undergraduate)	Exploratory drilling Geotechnics
Courses taught (Graduate)	Rock slope stability Instrumentation and field testing Advanced surface excavations design

	<p>Advanced geotechnics</p> <p>Geotechnical sampling</p> <p>Advanced foundations on rock</p> <p>Rock fractures and fluid flow</p> <p>Underground hydrocarbon storage</p>
Memberships	<p>International Society of Rock Mechanics (ISRM)</p> <p>Iranian Society of Rock Mechanics</p> <p>Iranian Society of Mining Engineering</p>
Reviewer	<p>International Journal of Rock Mechanics & Mining Sciences</p> <p>International Journal of Mining & Geo-Engineering</p> <p>Arabian Journal of Geosciences</p> <p>Journal of Mining Engineering</p> <p>Sharif Journal of Civil Engineering</p> <p>Journal of Engineering Geology</p> <p>Journal of Geosciences</p> <p>Journal of Tunneling & Underground Space Engineering (TUSE)</p> <p>Journal of Transportation Engineering</p> <p>Journal of Mining and Environment</p>
Advised Ph.D. Thesis	<p>CURRENT</p> <p>Hasan Roosta, Modeling displacements of Salt dome for storage of hydrocarbon <i>using SAR interferometry</i>, H. Jalalifar, S. Karimi Nasab.</p> <p>Ebrahim Ghotbi-Ravandi, <i>Numerical and Physical Modeling of Water Curtain Performance of Underground Crude Oil Storage to Reduce Multiphase Flow in Fractured-Porous Media</i>, R. Rahmamejad, S. Karimi Nasab.</p> <p>COMPLETED</p> <p>Nima Babanouri, <i>Mechanical Behavior of Rock Joints Based on Three-Dimensional Surfaces Characterization</i>, S. Karimi Nasab, 2014.</p>
Advised MSc. Thesis	<p>COMPLETED</p> <p>Sayed Mohammad Sadegh Alavi, <i>Evaluation of rock-mass permeability tensor and prediction of drainage tunnel inflows, case study: Gol-e-Gohar Iron Mine No.1</i>, S. Karimi Nasab.</p> <p>Naser Shykholeslam, <i>Assessment of rock bolts performance by using non-destructive tests</i>, S. Karimi Nasab.</p> <p>Abdolbaset Afsordeh, <i>Effects of strength anisotropy of Gol-e-Gohar schists on slope stability</i>, S. Karimi Nasab.</p> <p>Bahman Moradi, <i>Seepage Analysis of Rock Masses and Grouting Curtain, Case Study:</i></p>

Symareh Dam Site, S. Karimi Nasab.

Amir Yazdani Cherati, *Modeling of shear strength of block-in-matrix rocks (Bimrocks) using synthetic rock approach, S. Karimi Nasab, H. Jalalifar.*

Farhad Hajiheydari, *Investigation the effect of strength anisotropy on the stability of rock slopes, Case study: Gol-e-Gohar min no.1, S. Karimi Nasab, 2014.*

Mpjtaba Rabiei Vaziri, *Probabilistic analysis of rock mass characteristics, Case study: Gole-e-Gohar mine no.1, S. Karimi Nasab, 2013.*

Sajjad Tahmasbi, *Seepage analysis of rock masses and grouting curtain, Case study: Karoun 4 dam site, S. Karimi Nasab, 2013.*

Hossein Ghannad Shirazi, *Investigating the groundwater behavior around underground unlined rock cavern of crude oil storage, S. Karimi Nasab, H. Jalalifar, 2013.*

Maliheh Soltanzali Beiglu, *Liquefaction potential evaluation of underground structures using geostatistics, Case study: line 2 of Tabriz metro, S. Karimi Nasab, 2013.*

Saeed Mirzaei Ebrahimabadi, *Investigating the effect of over-consolidation on the stability of jointed rock slopes, S. Karimi Nasab, 2013*

Shahram Eskandari Nasab, *A reliability based approach for evaluating pit slope stability methods, S. Karimi Nasab, 2013.*

Mojtaba Salari, *Effect of alteration and weathering on rock geomechanical parameters for probabilistic slope stability analysis a case study in: Gol-e-Gohar iron mine, M. Ataei, S. Karimi Nasab, 2013.*

Mohammad Hadi Najarzadeh, *Radon exhalation rate of some rocks versus various mechanical pressure on rock: simulation of some earthquake characteristics in the laboratory, A. Hosseini Ranjbar, S. Karimi Nasab, 2013.*

Khabat Amiri Hoeeeni, *Investigating the effect of deformability of intact rock on the shear behavior of rock joints, S. Karimi Nasab, 2012.*

Foad Soufi, *Evaluating the deformation modulus of rock mass in blasting induced damaged zone, Case study: Bakhtiari dam site, S. Karimi Nasab, H. Jalalifar, 2011.*

Mohammad Kazem Afzali, *Strorage of gas in salt domes and analysis instability of them with software FLAC 3D, H. Jalalifar, S. Karimi Nasab, 2011.*

Yaghoob Rashidian Zarini, *Analysis of the results of deformation modulus using dilatometer, Case study: Saymareh dam, S. Karimi Nasab, H. Jalalifar, 2011.*

Amir Estak, *Toppling failure analysis of rock slopes, Case study: ore body "B" of Sangam iron mine, S. Karimi Nasab, H. Jalalifar, 2011.*

Fakhredin Mahdian Amraee, *Evaluation of PLT tests results sensitivity analysis of the factor affecting on the deformation modulus, using 3DEC numerical software, Case study: Bakhtiari dam, S. Karimi Nasab, H. Jalalifar, 2011.*

Nima Babanouri, *Investigation of over consolidation effect on shear behavior of single rock fractures, S. Karimi Nasab, A. Baghbanan, 2010.*

Emran Jaber, *Numerical simulation of oil storage reservoir stability in hard rock, H. Jalalifar, S. Karimi Nasab, 2010.*

Akbar Esmailzadeh, *2D discontinuities modeling using MATLAB, S. Karimi Nasab, H. Mansouri, 2010.*

Fahimeh Dabiri, *Determination of rock mass deformation modulus at Bakhtiyari dam site using geostatistics, S. Karimi nasab, H. Jalalifar, 2010.*

Mohammad Reza Aminorroaya, *Beheshtabad site investigation based on karstification index,*

	<p>G. Kamali, S. Karimi Nasab, 2010.</p> <p>Mohammad Ebadi, <i>Development of an analytical solution to determine deformation modulus of jointed rock masses</i>, S. Karimi Nasab, H. Jalalifar, 2010.</p> <p>Ali Akhoondbabai Tabari, <i>Determination of deformation modulus of rock mass at Bakhtiari dam site, based on plate load test and empirical methods</i>, S. Karimi Nasab, H. Jalalifar, 2009.</p> <p>Saeed Hosseinizadeh, <i>Determination of optimum direction and stability analysis of hydropower stations cavern, Case study: Bakhtyari dam hydropower station</i>, S. Karimi Nasab, H. Jalalifar, 2009.</p> <p>Ehsan Bahrami Rad, <i>Dam type selection and slope stability of tailings dams, mine no. 1 of Gol-e-Gohar case</i>, S. Karimi Nasab, A. Pak, 2008.</p> <p>Mohammad Alghsi Chgeni, <i>Back analysis of elastic modulus and ratio of horizontal stress to vertical stress, Case study: water conveyance tunnel, Kakareza, Khoramabad Lorestan</i>, R. Rahmannejad, S. Karimi Nasab, 2007.</p> <p>Hassan Mazijani, <i>Investigation and modeling of shear strength of rock joints, A case study in Gol-e-Gohar iron mine</i>, S. Karimi Nasab, H. Jalalifar, 2007.</p> <p>Mohammad Mokhtari, <i>Investigation of rock properties using Canonical Correlation analysis method, mine no.1 of Gol-e-Gohar case</i>, S. Karimi Nasab, 2007.</p> <p>Hossein Zare Rashkowieh, <i>Stability analysis and final slope design at Gol-e-Gohar iron ore mine no. 3.</i>, S. Karimi Nasab, R. Rahmannejad, 2006.</p> <p>Ayoub Nouri, <i>Numerical analysis of dams grout curtain using UDEC, Case study: Kurdistan Siyazakh dam</i>, S. Karimi Nasab, R. Rahmannejad, 2006.</p> <p>Abdolkhamid Javid, <i>Determination of the shear strength parameters of rock mass based on the in situ tests and numerical methods, Case study: Narmab reservoir dam site</i>, S. Karimi Nasab, R. Rahmannejad, 2006.</p> <p>Reza Alkhamis, <i>The effect of land subsidence due to groundwater withdrawal on well casing</i>, S. Karimi Nasab, F. Aryana, 2005.</p> <p>Mostafa Mahmoodian Asl, <i>Plate loading test modeling, the Karun IV dam project case</i>, S. Karimi Nasab, R. Rahmannejad, 2004.</p> <p>Azadeh Hojat, <i>Geoelectrical studies to investigate groundwater and geological structures in area no.3 of Gol-e-Gohar iron ore mine</i>, A. Kamkar Rohani, S. Karimi Nasab, 2003.</p> <p>Alireza Payamani, <i>Recognition qualitative evaluation and elementary investigation of nonmetallic industrial minerals of Saveh area mines.</i>, M. Ranjbar, S. Karimi Nasab, 2002.</p> <p>Kaveh Talebi, <i>Slope stability analysis of eastern wall of Sarcheshmeh copper mine</i>, A. Moradzadeh, S. Karimi Nasab, R. Naderi, 2002.</p> <p>Mohammad Ali Nabizadeh, <i>Stability analysis of the second site of the Sarcheshmeh heap leaching</i>, S. Karimi Nasab, M. Ranjbar, 2002.</p> <p>Ali Abbasnejad, <i>An investigation of hydrogeological behavior of rock masses surrounding Choghart iron open pit mine</i>, S. Karimi Nasab, H. Katibeh, 2000.</p> <p>Basem Sobhdamian, <i>An investigation of the dulling tricon bits, used in oil and gas industry</i>, S. Karimi Nasab, Sayed Hassan Khoshro, 2000.</p> <p>Mohamad Reza Rahimi, <i>Stability analysis and support system design for Gheshlagh tunnel</i>, S. Karimi Nasab, H. Jalalifar, K. Sharyar, 1999.</p>
<p>Books/ Chapters in books</p>	<p>Saeed Karimi Nasab, Azadeh Hojat, 2007, <i>Subsurface drainage for slope stabilization</i>, 2001, Kevin Forrester, ASCE Press". Translated into Persian, Shahid Bahonar University Press</p>

	<p>(221).</p> <p>Nima Babanouri, Saeed Karimi Nasab, Alireza Baghbanan, 2012, <i>The dependence of shear behavior of rock fractures on the normal loading-unloading history</i>, Chapter 6 in “Advances in Engineering Research, Vol. 2”, Nova Science Publishers, Inc. New York, pp. 383-414.</p>
<p style="text-align: center;">Journal publications</p>	<p>Amiri Hossaini, Kh., Babanouri, N., Karimi Nasab, S., 2014, <i>The influence of asperity deformability on the mechanical behavior of rock joints</i>, International Journal of Rock Mechanics & Mining Sciences 70: 154–161.</p> <p>Babanouri, N., Karimi Nasab, S., Sarafrazi, S., 2013, <i>A hybrid particle swarm optimization and multi-layer perceptron algorithm for bivariate fractal analysis of rock fractures roughness</i>, International Journal of Rock Mechanics & Mining Sciences 60: 66–74.</p> <p>Akbar, S., Ranjbar, H., Karimi Nasab, S., Abdolmaleki, M., 2013, <i>Landslide risk assessment using knowledge-driven fuzzy model and fuzzy-evident weight integrated method in Maskoon area, Jiroft</i>, Journal of Engineering Geology 7 (1): 1601-1622.</p> <p>Babanouri, N., Mansouri, H., Karimi Nasab, S., Bahaadini, M., 2013, <i>A coupled method to study blast wave propagation in fractured rock masses and estimate unknown properties</i>, Computers and Geotechnics 49: 134–142.</p> <p>Esmailzadeh, A., Karimi Nasab, S., Mansouri, H., 2013, <i>Two dimensional geometrical modeling of discontinuities using MATLAB software</i>, Iranian Journal of Mining Engineering 8 (18): 81-93.</p> <p>Ebadi, M., Karimi Nasab, S., Jalalifar, H., 2012, <i>Estimating the deformation modulus of rock mass based on analytical and numerical methods</i>, Iranian Journal of Mining Engineering 6 (13): 79-91.</p> <p>Ebadi, M., Karimi Nasab, S., Jalalifar, H., 2011, <i>Estimating the deformation modulus of jointed rock mass under multilateral loading condition using analytical methods</i>, Journal of Mining and Environment 2 (2).</p> <p>Zareiyan, E., Karimi Nasab, S., Jalalifar, H., 2011, <i>Analysis of wall closure rate of oil wells due to the creep phenomenon in salt formations</i>, Analytical & Numerical Methods in Mining and Material Engineering 1 (1): 46-50.</p> <p>Babanouri, N., Karimi Nasab, S., Baghbanan, A., Mohamadi, H., 2011, <i>Over-consolidation effect on shear behavior of rock joints</i>, International Journal of Rock Mechanics & Mining Sciences 48: 1283–1291.</p> <p>Karimi Nasab, S., Hojat, A., Kamkar-Rouhani, A., Akbari Javar, H., and Maknooni, S., 2011, <i>Successful use of geoelectrical surveys in area 3 of the Gol-e-Gohar iron ore mine, Iran</i>, Mine Water and the Environment. Journal of the International Mine Water Association (IMWA).</p> <p>Karimi Nasab, S., Ranjbar, H., Akbar, S., 2010, <i>Susceptibility assessment of the terrain for slope failure using remote sensing and GIS, a case study of Maskoon area, Iran</i>, International Geoinformatics Research and Development Group (IGRDG).</p> <p>Shayestehfar, M.R., Karimi Nasab, S., Mohammadalizadeh, H., 2008, <i>Mineralogy, petrology, and chemistry studies to evaluate oxide copper ores for heap leaching in Sarcheshmeh copper mine, Kerman, Iran</i>, Journal of Hazardous Materials.</p> <p>Rahmannejad, R., Javid, A. Karimi Nasab, S., 2008, <i>Numerical modeling of direct shear test</i>, Journal of Hydrotechnical Construction, no. 1 Moscow, Russia.</p> <p>Majdi, A., Amini, M, Karimi Nasab, S., 2007, <i>Adequate drainage System design for heap leaching structures</i>, Journal of Hazardous Materials.</p> <p>Alghasi, CH., Rahmannejad, R., Karimi Nasab, S., 2007, <i>Calculation of lining of tunnel Kakareza by back analysis</i>, Mining Information Analytical Bulletin Moscow Mining</p>

	<p>University 9, Moscow, Russia.</p> <p>Karimi Nasab, S., Hojat, A., Mollaei Fard, M.R, 2007, <i>Technical factors for selecting optimum heap leach pad sites</i>, Engineering and Mining Journal (E & MJ).</p> <p>Alkhamis, R., Karimi Nasab, S., Aryana, F., 2006, <i>Investigating the effect of land subsidence due to groundwater discharges on well casing damage</i>, Water & Wastewater Journal 60: 77-87.</p>
<p style="text-align: center;">Conference proceedings</p>	<p>FROM 2012 TO DATE:</p> <p>Moradipour, M., Ranjbar, H., Hojat, A., Karimi Nasab, S., Daneshpajuh, S., Ranjy Roodposhti, H., 2014, <i>GPR measurements on heap No.1 and heap No.3 of Sarcheshmeh copper mine to determine acid saturated zones</i>, 1st National Conference on Ground Penetrating Radar, Kerman, Iran.</p> <p>Kosari, S., Hojat, A., Karimi Nasab, S., 2013, <i>Laboratory measurements to investigate the effect of sulphuric acid on the electrical resistivity of soil samples</i>, 1st National Conference on Exploration Engineering of Underground Resources, Shahrood, Iran.</p> <p>Eskandari Nasab, Sh., Hosainpanahi, M., Zare, H., Karimi Nasab, S., 2013, <i>Investigating the effect of drainage on stabilization of final Gol-e-Gohar mine walls using reliability based approach</i>, International Conference on Civil Engineering Architecture & Urban Sustainable Development, Tabriz, Iran.</p> <p>Hosainpanahi, M., Eskandari, SH., Zare, H., Karimi Nasab, S., 2013, <i>A comparison of discontinuities mapped along oriented boreholes using MATLAB software: Case study, Gol-e-Gohar mine no. 1</i>, 7th National Civil Engineering Congress, Zahedan, Iran.</p> <p>Rabiee Vaziri, M., Mohammadi Azizabadi, H., Karimi Nasab, S., 2013, <i>Probabilistic analysis of rock mass characteristics and their effect on designing of rock slopes</i>, 7th National Civil Engineering Congress, Zahedan, Iran.</p> <p>Tahmasbi, S., Karimi Nasab, S., Aliari, A.R., 2013, <i>Application of georadar to investigate the seepage from grout curtain and concrete dams</i>, 7th National Civil Engineering Congress, Zahedan, Iran.</p> <p>Anjomshoa, N., Ranjbar, H., Karimi Nasab, S., 2013, <i>Feasibility study of natural gas storage in underground caverns using GIS (Case study; western Fars province)</i>, 1st Petroleum Technical Conference and Exhibition.</p> <p>Karimi Nasab, S., Hojat, A., Kosari, S., 2013, <i>Investigating the effect of NaCl content of pore water on the electrical resistivity of soil samples</i>, 3rd International Conference on Environmental Planning & Management, Tehran, Iran.</p> <p>Moradipour, M., Karimi Nasab, S., Hojat, A., Ranjbar, H., 2013, <i>Feasibility study of detecting acid saturated zones in copper heap leaching using laboratory measurements of electrical resistivity</i>, 1st International Conference on Mining, Mineral Processing, Metallurgical and Environmental Engineering (ICME2013), Zanjan, Iran, 67-72.</p> <p>Mirzaei Ebrahimabadi, S., Karimi Nasab, S., Mohammadi, H.R., 2012, <i>Determination of over consolidation ratio in Gol-e-Gohar mine no. 1</i>, 2nd Mineral Industries Conference, Kerman, Iran, 452-456.</p> <p>Ghanad Shirazi, H., Karimi Nasab, S., Jalalifar, H., 2012, <i>Investigating gas seepage mechanism from unlined rock caverns of hydrocarbon material storage</i>, 2nd Mineral Industries Conference, Kerman, Iran, 493-502.</p> <p>Ranjbar, S., Karimi Nasab, S., Hojat, A., 2012, <i>Investigating the effect of grain size on electrical resistivity of samples in laboratory measurements</i>, 2nd Mineral Industries Conference, Kerman, Iran, 159-164.</p> <p>Kosari, S., Hojat, A., Karimi Nasab, S., 2012, <i>Laboratory studies to investigate the effect of</i></p>

pore water salinity on resistivity of saturated sands, 2nd Mineral Industries Conference, Kerman, Iran, 60-67.

Daryaei, A., **Karimi Nasab, S.**, Hojat, A., 2012, *Designing and calibration of electrical resistivity cell for soil samples in laboratory geotechnical tests*, 1st Iranian Mining Technologies Conference, Yazd, Iran.

Shamsadinifard, A.R., **Karimi Nasab, S.**, 2012, *Slope stability analysis of the northern wall of Gol-e-Gohar iron ore mine no. 1 using rock engineering system method*, 1st Iranian Mining Technologies Conference, Yazd, Iran: 838-845.

Yazdani, M., **Karimi Nasab, S.**, 2012, *A comparison of kinematic analysis of Gol-e-Gohar iron ore mine using inclined and horizontal hemispherical projections*, 1st Iranian Mining Technologies Conference, Yazd, Iran: 947-953.

Hemmati Bhrghani, K., **Karimi Nasab, S.**, 2012, *Investigating the soil gradation using non-destructive methods*, 15th Iranian Geophysical Conference, Tehran, Iran: 64-67.

Babanouri, N., **Karimi Nasab, S.**, Mansouri, H., 2012, *Modeling of Blast Waves Propagation through Jointed Rock Masses, a Case Study at the Gol-e-Gohar Iron Ore Mine (Iran)*, American Rock Mechanics Association (ARMA), 46th US Rock Mechanics / Geomechanics Symposium, USA.

Babanouri, N., **Karimi Nasab, S.**, Sarafrazi, S., 2012, *Estimating Fractal Parameters of Rock Fracture Roughness by a Heuristic System*, American Rock Mechanics Association (ARMA), 46th US Rock Mechanics / Geomechanics Symposium, USA.

Amiri Hossaini, Kh., **Karimi Nasab, S.**, Zare Rashkowieh, H., 2012, *Evaluation of Barton-Bandis empirical model to estimate the shear behavior of soft and hard rock joints*, 1st Iranian Coal Conference, Shahrood university of technology.