

Saeed Karimi Nasab
Associate Professor of Geomechanics
kariminasab@uk.ac.ir



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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Shear strength of rocks Coupled fluid flow through discrete fracture network
Positions/ Experiences	<ul style="list-style-type: none"> Head of the Department of Mining Engineering, ShahidBahonar University of Kerman Vice Chancellor for Research, Energy and Environment Research Institute, ShahidBahonar University of Kerman Vice Chancellor for Research, Gol-e-Gohar Iron Ore and Steel Research Institute
Recent research projects	<p>COMPLETED RESEARCHES</p> <ul style="list-style-type: none"> 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 OreCompany
Patents	<ul style="list-style-type: none"> Non-destructive apparatus to determine concrete quality Anti-destruction connection of water well casing
Courses taught (Undergraduate)	<ul style="list-style-type: none"> Exploratory drilling Geotechnics
Courses taught (Graduate)	<ul style="list-style-type: none"> Rock slope stability Instrumentation and field testing Advanced surface excavations design Advanced geotechnics

	<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 thesis	<p>COMPLETED</p> <p>Shahram Eskandari Nasab, <i>A reliability based approach for evaluating pit slope stability methods</i>, S. Karimi Nasab, 2013.</p> <p>Mojtaba Salari, <i>Effect of alteration and weathering on rock geomechanical parameters for probabilistic slope stability analysis a case study in: Gol-e-Gohar iron mine</i>, M. Ataei, S. KarimiNasab, 2013.</p> <p>Mohammad Kazem Afzali, <i>Storage of gas in salt domes and analysis instability of them with software FLAC 3D</i>, H. Jalalifar, S. Karimi Nasab, 2011.</p> <p>Yaghoob Rashidian Zarini, <i>Analysis of the results of deformation modulus using dilatometer, Case study: Saymareh dam</i>, S. Karimi Nasab, H. Jalalifar, 2011.</p> <p>Amir Estak, <i>Toppling failure analysis of rock slopes, Case study: ore body "B" of Sangan iron mine</i>, S. Karimi Nasab, H. Jalalifar, 2011.</p> <p>Nima Babanouri, <i>Investigation of over consolidation effect on shear behavior of single rock fractures</i>, S. Karimi Nasab, A. Baghbanan, 2010.</p> <p>Emran Jaber, <i>Numerical simulation of oil storage reservoir stability in hard rock</i>, H. Jalalifar, S. Karimi Nasab, 2010.</p> <p>Akbar Esmailzadeh, <i>2D discontinuities modeling using MATLAB</i>, S. Karimi Nasab, H. Mansouri, 2010.</p> <p>Fahimeh Dabiri, <i>Determination of rock mass deformation modulus at Bakhtiyari dam site using geostatistics</i>, S. Kariminasab, H. Jalalifar, 2010.</p> <p>Mohammad Reza Aminorroaya, <i>Beheshtabad site investigation based on karstification index</i>, G. Kamali, S. KarimiNasab, 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 AkhoondbabaiTabari, <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>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. KarimiNasab, 2007.</p> <p>HosseinZareRashkowieh, <i>Stability analysis and final slope design at Gol-e-Gohar iron ore mine no. 3.</i>,S. KarimiNasab, R. Rahmannejad, 2006.</p> <p>AyoubNouri, <i>Numerical analysis of dams grout curtain using UDEC, Case study: Kurdistan Siazakh dam</i>, S. KarimiNasab, R. Rahmannejad, 2006.</p> <p>AbdolkhakimJavid, <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. KarimiNasab, R. Rahmannejad, 2006.</p> <p>Reza Alkhamis, <i>The effect of land subsidence due to groundwater withdrawal on well casing</i>, S. KarimiNasab, F. Aryana, 2005.</p> <p>MostafaMahmoodianAsl, <i>Plate loading test modeling, the Karun IV dam project case</i>, S. KarimiNasab, R. Rahmannejad, 2004.</p> <p>AzadehHojat, <i>Geoelectrical studies to investigate groundwater and geological structures in area no.3 of Gol-e-Gohar iron ore mine</i>, 2003.</p> <p>AlirezaPayamani, <i>Recognition qualitative evaluation and elementary investigation of nonmetallic industrial minerals of Saveh area mines.</i>, M. Ranjbar, S. KarimiNasab, 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>SaeedKarimiNasab, AzadehHojat, 2007, <i>Subsurface drainage for slope stabilization</i>, 2001, Kevin Forrester, ASCE Press”. Translated into Persian, ShahidBahonar University Press (221).</p> <p>NimaBabanouri, SaeedKarimiNasab, AlirezaBaghbanan, 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>

**Journal
publications**

- AmiriHossaini, Kh., Babanouri, N., **KarimiNasab, S.**, 2014, *The influence of asperity deformability on the mechanical behavior of rock joints*, International Journal of Rock Mechanics & Mining Sciences 70: 154–161.
- Babanouri, N., **KarimiNasab, S.**, Sarafrazi, S., 2013, *A hybrid particle swarm optimization and multi-layer perceptron algorithm for bivariate fractal analysis of rock fractures roughness*, International Journal of Rock Mechanics & Mining Sciences 60: 66–74.
- Akbar, S., Ranjbar, H., **KarimiNasab, S.**, Abdolmaleki, M., 2013, *Landslide risk assessment using knowledge-driven fuzzy model and fuzzy-evident weight integrated method in Maskoon area, Jiroft*, Journal of Engineering Geology 7 (1): 1601-1622.
- Babanouri, N., Mansouri, H., **KarimiNasab, S.**, Bahaadini, M., 2013, *A coupled method to study blast wave propagation in fractured rock masses and estimate unknown properties*, Computers and Geotechnics 49: 134–142.
- Esmailzadeh, A., **KarimiNasab, S.**, Mansouri, H., 2013, *Two dimensional geometrical modeling of discontinuities using MATLAB software*, Iranian Journal of Mining Engineering 8 (18): 81-93.
- Ebadi, M., **KarimiNasab, S.**, Jalalifar, H., 2012, *Estimating the deformation modulus of rock mass based on analytical and numerical methods*, Iranian Journal of Mining Engineering 6 (13): 79-91.
- Ebadi, M., **KarimiNasab, S.**, Jalalifar, H., 2011, *Estimating the deformation modulus of jointed rock mass under multilateral loading condition using analytical methods*, Journal of Mining and Environment 2 (2).
- Zareiyan, E., **KarimiNasab, S.**, Jalalifar, H., 2011, *Analysis of wall closure rate of oil wells due to the creep phenomenon in salt formations*, Analytical & Numerical Methods in Mining and Material Engineering 1 (1): 46-50.
- Babanouri, N., **KarimiNasab, S.**, Baghbanan, A., Mohamadi, H., 2011, *Over-consolidation effect on shear behavior of rock joints*, International Journal of Rock Mechanics & Mining Sciences 48: 1283–1291.
- KarimiNasab, S.**, Hojat, A., Kamkar-Rouhani, A., AkbariJavar, H., and Maknooni, S., 2011, *Successful use of geoelectrical surveys in area 3 of the Gol-e-Gohar iron ore mine, Iran*, Mine Water and the Environment. Journal of the International Mine Water Association (IMWA).
- KarimiNasab, S.**, Ranjbar, H., Akbar, S., 2010, *Susceptibility assessment of the terrain for slope failure using remote sensing and GIS, a case study of Maskoon area, Iran*, International Geoinformatics Research and Development Group (IGRDG).
- Shayestehfar, M.R., **KarimiNasab, S.**, Mohammadalizadeh, H., 2008, *Mineralogy, petrology, and chemistry studies to evaluate oxide copper ores for heap leaching in Sarcheshmeh copper mine, Kerman, Iran*, Journal of Hazardous Materials.
- Rahmannejad, R., Javid, A. **KarimiNasab, S.**, 2008, *Numerical modeling of direct shear test*, Journal of Hydrotechnical Construction, no. 1 Moscow, Russia.
- Majdi, A., Amini, M, **KarimiNasab, S.**, 2007, *Adequate drainage System design for heap leaching structures*, Journal of Hazardous Materials.
- Alghasi, CH., Rahmannejad, R., **KarimiNasab, S.**, 2007, *Calculation of lining of tunnel Kakareza by back analysis*, Mining Information Analytical Bulletin Moscow Mining University 9, Moscow, Russia.
- KarimiNasab, S.**, Hojat, A., MollaeiFard, M.R, 2007, *Technical factors for selecting optimum heap leach pad sites*, Engineering and Mining Journal (E & MJ).
- Alkhamis, R., **KarimiNasab, S.**, Aryana, F., 2006, *Investigating the effect of land subsidence due to groundwater discharges on well casing damage*, Water & Wastewater Journal 60: 77-

	87.
<p style="text-align: center;">Conference proceedings</p>	<p>FROM 2012 TO DATE:</p> <p>Moradipour, M., Ranjbar, H., Hojat, A., KarimiNasab, S., Daneshpajuh, S., RanjyRoodposhti, 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., KarimiNasab, 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>EskandariNasab, Sh., Hosainpanahi, M., Zare, H., KarimiNasab, 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., KarimiNasab, 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>RabieeVaziri, M., MohammadiAzizabadi, H., KarimiNasab, 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., KarimiNasab, S., Aliari, A.R., 2013, <i>Application of georadarto investigate the seepage from grout curtain and concrete dams</i>, 7th National Civil Engineering Congress, Zahedan, Iran.</p> <p>Anjomshoa, N., Ranjbar, H., KarimiNasab, 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>KarimiNasab, 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., KarimiNasab, 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>MirzaeiEbrahimabadi, S., KarimiNasab, 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>GhanadShirazi, H., KarimiNasab, 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., KarimiNasab, 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., KarimiNasab, S., 2012, <i>Laboratory studies to investigate the effect of pore water salinity on resistivity of saturated sands</i>, 2nd Mineral Industries Conference, Kerman, Iran, 60-67.</p> <p>Daryaei, A., KarimiNasab, S., Hojat, A., 2012, <i>Designing and calibration of electrical resistivity cell for soil samples in laboratory geotechnical tests</i>, 1st Iranian Mining Technologies Conference, Yazd, Iran.</p>

- Shamsadinifard, A.R., **KarimiNasab, S.**, 2012, *Slope stability analysis of the northern wall of Gol-e-Gohar iron ore mine no. 1 using rock engineering system method*, 1stIranianMining Technologies Conference, Yazd, Iran: 838-845.
- Yazdani, M., **KarimiNasab, S.**, 2012, *A comparison of kinematic analysis of Gol-e-Gohar iron ore mine using inclined and horizontal hemispherical projections*, 1stIranianMining Technologies Conference, Yazd, Iran: 947-953.
- HemmatiBhrghani, K., **KarimiNasab, S.**, 2012, *Investigating the soil gradation using non-destructive methods*, 15th Iranian Geophysical Conference, Tehran, Iran: 64-67.
- Babanouri, N., **KarimiNasab, 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.,**KarimiNasab, 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.
- AmiriHossaini, Kh., **KarimiNasab, S.**, ZareRashkowieh, 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.