Mohsen Moghaddasi *Resume*

Phone: +982155484965

Cell phone: +98 9128848508

E-mail: Mmoghaddasi30@gmail.com

Birth Date: 1988

Marital Status: Married

Address: Floor 1, No: 51, Mirqasemi Alley, Nabard Street, Tehran

Education

2011 –2014

M.Sc. Geophysics (geoelectric)

Institute of geophysics, Tehran University, Tehran, Iran

M.Sc. Thesis: Applying Modified LOLIMOT Neuro-Fuzzy model to predict a log from other logs

2006-2010

B.Sc. Mechanical Engineering, Faculty of Engineering, Isfahan University of technology, Isfahan, Iran

IT Skill

- Microsoft Office Package (MS Word, MS Excel, PowerPoint)
- Excellent capabilities in surfing the Web and using it for effective research purposes
- Familiar with these softwares: Geosoft, Arc GIS, Surfer, RES2DMOD, RES2DINV, IPI2WIN, RockWorks, Voxler, AutoCAD, SeisImager , ...

Language Proficiency

- Persian: Native Language
- English: Working language (Semi-fluent)

Training & Job Experiences

Job Experience:

- Geophysical Advisor, Kowsar Minning & Industrial Development Investment Co. Parttime. Aug 2020 – Present
- Geophysicist, Jarfabkavosh Consulting Engineering Co. (2013-Present)
- Geophysicist, Institute of geophysics, University of Tehran.(2 years)

Exploration of metallic and non-metallic mines

- Geologist and geophysicist in geophysical studies (Magnetometry) in skarn and IOCG deposit in Moshyrieh, Semnan, Semnan province.
- Geologist and geophysicist in geophysical studies (IP & Rs) to explore probable copper mineralization of Kahyaz, Ardestan, Isfahan province
- Geologist and geophysicist in geophysical (geoelectric) studies to explore the bitumen mineral in the Gilsonite mine area of Chal Imamzadeh Davood village, Aligudarz city, Lorestan province
- Geologist and geophysicist in geophysical studies (Magnetometry) to explore the mineral potential of iron (magnetite), Neyestanak, Naein, Isfahan province
- Geologist and geophysicist in geophysical studies (Magnetometry) to explore the mineral potential of iron (magnetite) and delineate alteration zones in Mehrabad, Nain, Isfahan province.
- Geologist and geophysicist in geophysical studies (Magnetometry) to explore the mineral potential of iron (magnetite) and delineate alteration zones in Kahyaz, Nain, Isfahan province.
- Geologist and geophysicist in geophysical studies to explore probable skarn mineralization in Maleki, Rabor, Kerman province
- Geologist and geophysicist in geophysical studies (Magnetometry) to explore the probable porphyry and determine the extent of the potassic alteration zone, Shirinak (Chartagh) village, Bardsir city, Kerman province
- Geologist and geophysicist in geophysical studies (Magnetometry) to explore the probable porphyry and its alteration zones, Jabardagh village, Meshkinshahr city, Ardebil province
- Geologist and geophysicist in geophysical studies (Magnetometry) in the ophiolitic zone for delineation of geological structures, Mianrud village, Sarbisheh city, South Khorasan province

- Geologist and geophysicist in geophysical studies (Magnetometry) to explore the epithermal gold bearing zone, Taherababd village, Natanz city, Isfahan province
- Geologist and geophysicist in geophysical studies (Magnetometry) to explore the probable porphyry and determine the extent of different alteration zones, Lar village, Zahedan city, Sistan, and Baluchestan province.
- Geologist and geophysicist in geophysical studies (Magnetometry) to explore the probable porphyry and determine the extent of different alteration zones, Milajerd village, Natanz city, Isfahan province.
- Geologist and geophysicist in geophysical studies (Magnetometry) to explore the probable intrusive plutonic bodies in probable (Cu & Au) skarn deposit, Lar village, Shabestar, East Azerbaijan province.
- Geologist and geophysicist in geophysical studies (IP & Rs) to explore gold epithermal deposit in zone C of Milajerd, Natanz, Isfahan province
- Geologist and geophysicist in geophysical studies (IP & Rs) to explore probable skarn mineralization in zone A of Milajerd, Natanz, Isfahan province
- Geologist and geophysicist in geophysical studies (Magnetometry) to explore the probable intrusive plutonic bodies in probable (Cu & Au) skarn deposit, Iry village, Shabestar, East Azerbaijan province.
- Economic assessment of more than 30 promising zones for metallic minerals (lead, zinc, copper, gold, silver, iron) in the central part of the Sanandaj-Sirjan tectonic belt, Iran.
- Economic assessment of more than 10 promising zones for non-metallic minerals (marble, crystal, silica, limonite, bentonite, barite, limestone, and ...) in the central part of the Sanandaj-Sirjan tectonic belt, Iran.

Performing about 250 groundwater exploration projects by using geoelectrical methods in different parts of Iran.

Geophysical data acquisition, processing, and interpretation by geological and hydrogeological constraints:

•Service Centers:

Iran Space Organization (Mahdasht site), Parand Azad University, Ghizqalehsi Dam manufactory Kaleibar; Natural gas station for their groundwater demand (Zanjan)

• Industrial and mining centers:

Armitage Ceramic Company, Saveh; Kasra Ceramic Company, Sanandaj; Washcloth Factory, Malard Industrial Area; Awaj, Tarom Sofla, Lia and Segzabad(Hakimieh) Industrial Towns; RAK Ceramic Factory, Shahreza; Hara copper mine, Bandare Khamir; Ahrarsara mineral industry, Qarchac. Sahneh limestone quarry, Sahneh, Sangan steel factories water supply through Transboundary Aquifers, Mazandaran Gypsum Factory

- **Livestock, poultry, and fish farming units:**

Poultry Farm, Parsian; Fish Farming Unit, Shoush; Livestock unit of Gomrokan Village, Mahdash; Livestock Unit, Hamvatan dairy company, Roodehen; Livestock Unit, Mehdi Abad; Livestock unit, Avaj; Livestock unit, Alamut city; livestock unit of Bardsir, Kerman; fish farm of Mohammad Abad Arab, Pishva; 12000 units of livestock cows, Segazabad village, Buein Zahra, Ardestan

- **Agricultural gardens and farms in the following cities:**

Karaj (Kondur village, Ghasem Gorji village and Mohammadshahr district); Malard (Zarin Abad village); Buein Zahra (Jahan Abad and Esmat Abad villages); Danesfahan; Lavasanat; Golpayegan (Shideabad village); Nazarabad; Abyek (village of Ziaran, Salehiyeh village); Roodehen (2 projects); Damavand (Garmabdareh village); Mamuniyeh; Aligudarz (Kan-Sokh village); Garmsar; Savojbolagh (Kordan area and Kohsar village); Shahriar (Amirieh village); Saveh (4 Projects); Shazand; Marzan Abad; Khansar; Kelardasht; Isfahan (Ashokavand village); Khomeini shahr; Hashtgerd (Khor village); Komijan (Khomar Baghi village); Hashtgerd city; Sari (Telmadreh village); Firoozkooh; Shahrekord; Ben; Kharaghan, Farrokhsahr(Dastgerd emamzadeh, 3 projects); Tarom Olia, Jafarieh;Qum, Mehdishahr, Gok tappeh: Mahabad, Kermanshah and etc

- **Supplying potable water:**

Mashhad (25 wells of the emergency water potable supply project of Mashhad from the western city lands), Zehabad village of Tarom Sofli, Abdul Abad village of Nazarabad city, Malkhasat Sari village, Javand and Darb Hara villages of Bandar Lange city, Khonj village of Khor Va Biyabank cities

- ✓ Submit a hydrogeological report of the main Khansar spring to Payandab Consulting Engineering Co, Iran.
- ✓ Providing multiple advice expert in the field of groundwater resources (introducing the best drilling positions, drilling techniques, determination of the best gallery (tunnel) direction for some wells, optimization of groundwater extraction techniques, etc).
- ✓ Studying and delineating the direction, depth, and shape of slip surface in a Deraloo mine landslide by geoelectrical methods (Pole_Dipole array).

- ➢ Research and study whole processes needed for the best possible site selection of underground dams and submitting some proposals to some companies for supplying their water demand (recently).
- ➢ Experienced and taught eyes geologist who can extract Geological inferences based on the Interpretation of satellite images (professional in Google Earth Pro software), aerial photos, and field geological features.

- ➢ Groundwater-related data acquisition from wells, springs, and Qanats (Measurement of discharge rate, static and dynamic groundwater table, quality of groundwater such as PH and EC, and submission of small reports about each well, spring, or Qanat to Isfahan Regional Water Authority).

- ➢ Submit small technical reports about more than 800 groundwater wells, 300 springs, and 400 qanats to the Isfahan Regional Water Authority Company

Consultancy and supervision

- Analyzing airborne geomagnetic and radiometric data layer of 2 probable porphyry deposits and comparing the results by ground-based magnetometric data, south of Kerman province, Kowsar mining holding
- Introducing airborne geophysical sensors by focusing on geomagnetic sensors used on drones to study and explore deposits and to know the advantages and limitations of each sensor. Employer: Steel Research Institute of Isfahan University of Technology, Jarfabkavosh Labroud Co.
- Geophysical advisor for reprocessing previously acquired geophysical data and delineating boreholes on the probable reduced intrusion-related gold system and delineating 1 target zone NGKP Co.
- Geophysical advisor for reprocessing previously acquired geophysical data over a probable porphyry system, Shourab, Foolad Mobarakeh Isfahan Co.
- Geophysical advisor for reprocessing previously acquired geophysical data over a probable porphyry system and delineating 2 target zones, Khankendi, Meshgin shahr, Ardabil province, Bama holding
- Geophysical advisor for reprocessing previously acquired geophysical data over a probable porphyry system and delineating 1 target zone, Kalkafi, Naein, Isfahan province, Ayandesazan Mehrpoo Co.
- Geophysical advisor for reprocessing previously acquired geophysical data over a deep big geomagnetic anomaly, Birjand, Ahangaran, South Khorasan province, Ayandesazan Mehrpoo Co.
- Geophysical advisor for reprocessing previously acquired geophysical data over a probable IOCG system Rangan, Natanz, Isfahan province, Mahan Holding

Engineering geophysics studies:

- Geologist and geophysicist in geophysical studies using the geoelectric method in the Qaleh Kooshk Niasar site, Kashan, to identify karst cavities, the sequence of fractured zones, and determining the limits of the high susceptible zones for the landslide. Client: Niasar Municipality Consultant: Zamin Saat Company
- Supervising geologist in GPR studies of the North Tehran Fault (Region 22)
- Geophysical studies using geoelectrical methods in the Kocheri dam overflow area to identify karstic fractures, sequences of layers, and fractured zones, Employer: Tehran Regional Water Organization, Consultant: Mahab Qods Consulting Engineering Company
- Geoelectrical studies to determine the limits of a sliding plate on the Deralo mine trench.
- Geophysical (geoelectric) study of the construction of the second phase of the Jarqouye solar power plant to determine the areas susceptible to corrosion, determine the suitable points for earthing, optimize the proposed cathodic protection, etc., Jarqouye city, Isfahan province

- Geophysical (geoelectrical) study of Sepiddasht solar power plant to determine areas susceptible to corrosion, determine suitable points for earthing, etc., Borujen city, Chaharmahal, and Bakhtiari province
- Geophysical (geoelectrical) study of the construction of the Kushk solar power plant to determine the areas susceptible to corrosion, to determine the suitable points for earthing, to optimize the proposed cathodic protection, etc., Bafq city, Yazd province
- Geophysical (geoelectric) study of Harand solar power plant to determine areas susceptible for corrosion, determine suitable points for earthing, optimize proposed cathodic protection, etc., Harand city, Isfahan province
- Geophysical (geoelectric) study of Goldiran factory in the lands of Payam Karaj airport to understand subsurface geology and determining areas susceptible to corrosion etc., Karaj city, Alborz province
- Well logging studies for determination of soil parameters and separation of layers boundary at Bushehr power plant site. (Include calibration of instruments, data acquisition, processing and interpretation of results), Bushehr, Iran. (Institute of geophysics, University of Tehran)
  (In these studies, natural gamma, gamma-gamma and neutron logs were acquired. For separation of the layers boundary, natural gamma logs, for density determination gamma-gamma logs and for determination of the formation's porosity, neutron logs were used)
- Geophysicist in geophysical studies (IP/RS) at the site of the artificial lake of Karaj for identifying the composition and sequence of strata and Locating masses of underground clay and sand Karaj, Iran. (Institute of Geophysics, University of Tehran)

Having Work experience with logging devices (Robertson), geoelectric (ABEM SAS 300, SAS 1000, SYSCAL R2, RESECS) and GPR device (Zond). And also familiar with Numis Plus and WADI (VLF).

Professional teaching courses & lectures

- **Study and exploration of groundwater resources by using geophysical(geoelectrical) methods (In Persian), National Iranian Geophysical Society, October 2024**

- **Teaching a course (webinar): Application of geophysical methods in the study and exploration of copper (± molybdenum, ± gold) porphyry deposits (In Persian), Asr Danesh Madan Institute, February 2024**

- **Teaching a course (webinar): Application of geophysical methods in the exploration of copper porphyry deposits (± molybdenum, ± gold) (In Persian), National Iranian Geophysical Society, December 2022**

- **Teaching a course (webinar): Study and exploration of groundwater by using geophysical methods especially geoelectric (In Persian), National Iranian Geophysical Society, March 2022**

Publications

Published Papers

- **Moghaddasi, H., Moghaddasi, M. and Neyamadpour, A., 2024. Analysis of some error-causing factors in two-dimensional geoelectrical studies and providing a solution to minimize them. Journal of Economic Geology, 16(3): 123–136. (in Persian with English abstract)** https://doi.org/10.22067/econg.2024.1123
- **Hosein Moghaddasi; Mohsen Moghaddasi; Mohammad Masnabadi, Integrated use of analytical signal and upward continuation for exploration of porphyry deposits and also separation and delineation of alterations related to these deposits (case study from the south of Kerman province) (In Persian),** 16th Symposium of Iranian Society of Economic Geology, Tabriz, Iran, 9-10 September, 2024.
- **Hosein Moghaddasi, Mohsen Moghaddasi, Analysis of some error-causing factors in two-dimensional geoelectrical studies and providing a solution to minimize them.** 1st conference of Geophysics in Minning, Tehran, Iran, 20-21 February 2024.
- **Hosein Moghaddasi, Mohsen Moghaddasi, A new method for IP/Rs data acquisition in frequency domain on a network (In Persian).** 15th Symposium of Iranian Society of Economic Geology, Damghan, Iran, 12-13 September, 2023.
- **Hosein Moghaddasi, Mohsen Moghaddasi, The role of correct delineation of bedrock topography in successful groundwater exploration using Electrical resistivity tomography).** With oral presentation 19th Iranian Geophysics Conference, November 2020, Tehran
- **Hosein Moghaddasi, Mohsen Moghaddasi, How right site selection of "Sofalzan" Qanat, established civil settlements in Googad Golpayegan?! (In Persian).** With oral presentation**,** 1st National Congress about Qanat and other ancient *Water* Related *Structures*, Ardekan, Iran, 20-21 February 2019.
- **Hosein Moghaddasi, Mohsen Moghaddasi, Muteh village qanat site selection: a sample of the triumphant struggle of ancient Iranian engineers against violent nature (In Persian).** 1st National Congress about Qanat and other Ancient *Water* Related *Structures*, Ardekan, Iran, 20-21 February 2019.

Seminars:

Providing research Seminar about “Fuzzy - neural models and its Application in Well Logging”,

Institute of Geophysics, Tehran University, Iran.

Hobbies

Traveling and Visiting New Places, Mountain Climbing.