

Azadeh Hojat

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Personal details	Nationality: Iranian Year of Birth: 1978 Marital Status: Single Address: Department of Mining Engineering, Faculty of Engineering, Shahid Bahonar University of Kerman, Kerman, I.R., Iran, P.O. Box: 7618868366 Tel.: +98-34-32112764 Fax: +98-34-32121003 http://academicstaff.uk.ac.ir/en/azhojat
Education	<ul style="list-style-type: none">▪ Ph.D. in Geophysics, Institute of Geophysics, University of Tehran, Tehran, I. R., Iran (2010).▪ M. Sc. in Geophysics, (1st rank student with the average grade 18 out of 20), Faculty of Mining & Geophysics, Shahrood University of Technology, Shahrood, I. R., Iran (2003).▪ B. Sc. in Mining Engineering (Mineral Exploration), Department of Mining Engineering, Shahid Bahonar University of Kerman, Kerman, I. R., Iran (2001).
Technical fields of study	<ul style="list-style-type: none">• Electrical methods in applied geophysics• Satellite geomagnetism
Research interests	<ul style="list-style-type: none">➤ Application of geoelectrical methods in engineering and environmental studies➤ Application of GPR method in engineering and environmental studies➤ Geomagnetic observatories
Languages	<ul style="list-style-type: none">✓ Persian: Native✓ English: Fluent<ul style="list-style-type: none">○ Teaching English at Simin English Institute (and participating in its T.T.C.), Kerman, 1998-1999.○ Teaching English at Shokouh's English Institute (and participating in its T.T.C.), Kerman, 1998.✓ Italian: Intermediate
Experiences	<ul style="list-style-type: none">• Assistant Professor of Geophysics, Department of Mining Engineering, Shahid Bahonar University of Kerman, Iran, 2010 to date.• Manager of the web site of the department of mining engineering, Shahid Bahonar University of Kerman, 2014 – to date.• Establishing and supervising the “Applied Geophysics Laboratory”, Shahid Bahonar University of Kerman, Iran, 2013 to date.• Invited Lecturer in Geophysics, Kerman Graduate University of Technology, Iran, 2010 – 2013.• Invited Lecturer in Geophysics, Shahid Bahonar University of Kerman, Iran, 2007 –

	<p>2010.</p> <ul style="list-style-type: none"> • <i>Consultant of geophysical projects</i>, KGK Mining and Exploration Company, 2007 – 2009. • <i>Member of the research team to prepare the Database on Site Selection Criteria of Heap Leaching Facilities</i>, Sarcheshmeh Research & Development Center, Kerman, Iran, 2001 – 2003. <p>Scientific Events</p> <ul style="list-style-type: none"> • Scientific coordinator of the <i>2nd National Conference and the 3rd Workshop on Ground Penetrating Radar</i>, Shahid Bahonar University of Kerman, Iran, May 2016. • Manager of the Executive Committee of the <i>3rd National Open Pit Mining Conference</i>, Shahid Bahonar University of Kerman, Iran, May 2015. • Scientific coordinator of the <i>1st National Conference and the 2nd Workshop on Ground Penetrating Radar</i>, Shahid Bahonar University of Kerman, Iran, April 2014. • Coordinator of the <i>1st Workshop on Ground Penetrating Radar</i>, Shahid Bahonar University of Kerman, Iran, April 2012. • Working as part of the team in the Executive Committee of the <i>International Workshop on Mineral Resources and Development</i>, Shahid Bahonar University of Kerman, Iran, June 2004. • Working as part of the team in the Executive Committee of <i>1st Iranian Open Pit Mine Conference</i>, Shahid Bahonar University of Kerman, Iran, 2001.
<p>Research projects</p>	<p>CURRENT RESEARCHES</p> <ul style="list-style-type: none"> • Electrical resistivity and GPR studies to map the underground extent of qanats at Shahid Bahonar University of Kerman. • Reconnaissance exploration of geothermal potential areas in Kerman Province. <p>COMPLETED RESEARCHES</p> <ul style="list-style-type: none"> • Pilot GPR studies at Cheshmehshirdoosh marble quarry to detect discontinuities • Site selection studies to select the optimum location for constructing a geomagnetic observatory in Kerman province, Iran. • Detection of qanats at Shahid Bahonar University of Kerman. • The necessity of constructing new geomagnetic observatories in Iran. • Determination of geomechanical properties of soils using laboratory measurements of electrical resistivity. • Investigating the efficiency of the “triangle of life” method to survive in Iran earthquakes. • A new method to determine geothermal potential sites using satellite magnetic field models. • Curie-temperature depth estimation using satellite lithospheric magnetic field models. • Estimating the Curie-temperature depth of the eastern Iran using MF5 satellite magnetic field model. • Geoelectrical studies to investigate groundwater and geological structures in Area No. 3

	<p>of Gol-e-Gohar iron ore mine.</p> <ul style="list-style-type: none"> • Site selection criteria for heap leaching pads.
Teaching experience	<p>GRADUATE STUDENTS</p> <ul style="list-style-type: none"> ▪ Novel methods in mineral exploration, Department of Mining Engineering, Shahid Bahonar University of Kerman. ▪ Advanced exploration geophysics, Department of Mining Engineering, Shahid Bahonar University of Kerman. ▪ Ground Penetrating Radar method, Department of Mining Engineering, Shahid Bahonar University of Kerman. ▪ Special issues in exploration, Department of Mining Engineering, Shahid Bahonar University of Kerman. ▪ Oil exploration, Department of Mining Engineering, Shahid Bahonar University of Kerman. ▪ Explorations using IP method, Kerman Graduate University of Technology. ▪ Explorations using the electrical resistivity method, Kerman Graduate University of Technology. ▪ Geoelectrics, Kerman Graduate University of Technology. ▪ Advanced Well Logging, Department of Oil and Gas Engineering, Shahid Bahonar University of Kerman. <p>UNDERGRADUATE STUDENTS</p> <ul style="list-style-type: none"> ▪ Exploration geophysics (1) ▪ Exploration geophysics (2) ▪ Laboratory and field geophysics ▪ Principles of mineral exploration ▪ Well logging
Memberships	<ul style="list-style-type: none"> ✓ EAGE ✓ Austrian Geophysical Society (AGS) ✓ Iranian Geophysical Society ✓ Iranian Geological Society, 1998- 2002.
Reviewer	<ul style="list-style-type: none"> • Journal of the Earth and Space Physics • Iranian Journal of Geophysics • Journal of Geosciences • International Journal of Mining and Geo-Engineering • Iranian Journal of Science and Technology • Journal of Mining and Environment • Reviewing more than 50 papers for national conferences
Supervised thesis	<p>CURRENT</p> <ul style="list-style-type: none"> ➤ Sanaz Noorbakhsh, <i>Investigating the applicability of using geomagnetic observatory data as an earthquake precursor</i>, Supervisors: Azadeh Hojat, Mansoureh Montahaei. ➤ Nastaran Heydarabadipour, <i>Investigating the geothermal potential at Sarduiyeh area, Kerman Province, using geologic and aeromagnetic data and satellite images</i>, Supervisors: Azadeh Hojat, Hojatollah Ranjbar, Advisor: Saeed Karimi Nasab. ➤ Mohammad Fahim Avish, <i>Remote sensing and geophysical studies to investigate the geothermal resources in the Sirch area, Kerman Province</i>, Supervisors: Hojatollah Ranjbar, Azadeh Hojat, Advisor: Saeed Karimi Nasab.

	<p>COMPLETED</p> <ul style="list-style-type: none"> ➤ Amir Derakhshan, <i>Investigating the equivalent permeability of heap leaching pads by changing the direction of acid sprinkling; Case study: heap no. 1 of Sarcheshmeh copper mine</i>, Supervisor: Azadeh Hojat, Advisor: Saeed Karimi Nasab, Defense: March, 2016. ➤ Marjan Izadi Yazadanabadi, <i>Site selection studies for constructing a geomagnetic observatory in Kerman Province</i>, Supervisors: Azadeh Hojat, Hojatollah Ranjbar, Advisor: Saeed Karimi Nasab, Defense: January, 2016. ➤ Sima Mahmoudi, <i>Detection of Qantas using remote sensing studies and electrical resistivity measurements, case study: Shahid Bahonar University of Kerman</i>, Supervisors: Azadeh Hojat, Hojatollah Ranjbar, Advisor: Saeed Karimi Nasab, Defense: January, 2015. ➤ Mosayeb Moradipour, <i>An investigation of subsurface characteristics of heap leaching at Sarcheshmeh copper mine, using geophysical methods</i>, Supervisors: Hojatollah Ranjbar, Azadeh Hojat, Advisor: Saeed Karimi Nasab, Defense: January, 2014. <p>NOTE: Based on the regulations of the mining engineering department, newly employed members are allowed to supervise M.Sc. thesis after the third year of employment.</p>
<p>Books</p>	<ul style="list-style-type: none"> • Hojat, A., 2012, <i>Applied problems in exploration geophysics</i>, Setayesh Publication Distribution Institute, ISBN: 978-600-5184-50-1, selected as the <u>book of the year 2014</u> in Kerman Province for engineering sciences. • Hojat, A., Ranjbar, H., 2011, <i>Principles of applied geoelectrics</i>, Setayesh Publication Distribution Institute, ISBN: 978-600-5184-34-1, selected as the <u>book of the year 2011</u> in Kerman Province for basic sciences. • Karimi Nasab, S., Hojat, A., 2007, <i>Subsurface drainage for slope stabilization</i>, 2001, Kevin Forrester, ASCE Press". Translated into Persian, Shahid Bahonar University Press (221).
<p>Journal publications</p>	<ul style="list-style-type: none"> – Izadi Yazdanabadi, M., Hojat, A., Ranjbar, H., Karimi Nasab, S., 2016, <i>Important parameters to locate new geomagnetic observatories to develop geomagnetic studies in Iran</i>, Journal of the Earth and Space Physics, under press. – Mahmoudi, S., Hojat, A., Ranjbar, H., Karimi Nasab, S., 2016, <i>Remote sensing and GIS studies to detect subsidence potential areas due to the hidden qanats at Shahid Bahonar University of Kerman</i>, Journal of Advanced Applied Geology, under press. – Moradipour, M., Ranjbar, H., Hojat, A., Karimi Nasab, S., Ranjy Roodposhti, H., Daneshpajuh, S., 2015, <i>Subsurface characterization of heap leaching pads using geophysical surveys; Case study: Sarcheshmeh Copper Mine</i>, Journal of Research on Applied Geophysics, Vol. 1 (1): 1-9. – Hojat, A., Fox Maule, C., Hemant Singh, K., 2016, <i>Reconnaissance exploration of geothermal potential sites using satellite magnetic field models in Kerman province, Iran</i>, Journal of the Earth and Space Physics, 41 (4). – Karimi Nasab, S., Hojat, A., Kamkar Rouhani, A., Akbari Javar, H., and Maknooni, S., 2011, <i>Successful use of geoelectrical surveys in area no. 3 of the Gol-e-Gohar iron ore mine, Iran</i>, Journal of Mine Water and the Environment, Vol. 30, Issue 3: 208-215, doi:10.1007/s10230-011-0135-7. – Hojat, A., Hosseinzadeh Guya, N., Maule, C.F., 2010, <i>A new method to determine geothermal potential sites using satellite magnetic field models</i>, Iranian Journal of Geophysics, 4 (1): 33-43. – Hojat, A., Hoseinzadeh Guya, N., Hemant, K., 2010, <i>Application of equivalent source</i>

	<p><i>magnetic dipole (ESMD) method to calculate Curie depth using MF5 satellite magnetic model, Iranian Journal of Geology, No. 13.</i></p> <ul style="list-style-type: none"> - Hojat, A., Hosseinzadeh Guya, N., 2007, <i>Estimation of magnetic crust thickness from magnetic field models based on satellite magnetic data</i>, Journal of the Earth and Space Physics, Vol. 33, No. 2: 85-93. - 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), September 2007: 54-59.
<p style="text-align: center;">Conference proceedings</p>	<p>FROM 2010 TO DATE:</p> <ul style="list-style-type: none"> - Moradipour, M., Hojat, A., Ranjbar, H., Karimi Nasab, S., Daneshpajuh, S., Ranjy Roodposhti, H., 2015, <i>Application of geophysical methods to determine subsurface acid saturated zones of heap No.3 at Sarcheshmeh copper mine, Iran</i>, 8th International Workshop on Advanced Ground Penetrating Radar, Florence, Italy. - Izadi Yazdanabadi, M., Hojat, A., Ranjbar, H., Karimi Nasab, S., 2015, <i>Site selection criteria for constructing geomagnetic observatories</i>, 33rd National Geosciences Symposium, Tehran, Iran. - 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. - 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. - 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. - 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. - 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. - Kosari, S., Hojat, A., Karimi Nasab, 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. - Hojat, A., Khaorami, H., 2012, <i>An investigation of constructing a geomagnetic observatory in Kerman province</i>, Iran, 2nd Mineral Industries Conference, Kerman, Iran, 19-25. - Daryaei, A., Karimi Nasab, S., Hojat, A., 2012, <i>Designing and calibration of electrical resistivity cell for soil samples in laboratory geotechnical tests</i>, The First Iranian Mining Technologies Conference and Exhibition, Yazd, Iran. - Hojat, A., Hemant Singh, K., Maule, C.F., Hosseinzadeh Guya, N., 2012, <i>Calculation of Curie isotherm depth for reconnaissance exploration of geothermal reservoirs</i>, 15th Iranian Geophysical Conference, Tehran, Iran: 16-19. - Khorami, H., Hojat, A., 2012, <i>The necessity of constructing new geomagnetic</i>

observatories in Iran, 2nd Geological Congress of Iranian Plateau, Zarand, Iran.

- **Hojat, A.**, Hosseinzadeh Guya, N., 2010, *Application of satellite magnetic field models in reconnaissance exploration of geothermal reservoirs*, 1st National Conference of Energy and Environment, Kerman, Iran.