

## **CURRICULUM VITAE**

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### **Theses:**

**“Petrological and geochemical study of the Niyasar plutonic complex, Urumieh-Dokhtar magmatic belt, Iran”** Ph.D thesis, Tarbiat Modares University, Tehran, Iran (2012).

**“Study of petrography, petrology and petrogenesis of the Natanz plutonic complex with implication to the thermodynamic conditions of crystallization”** MsC thesis, Tabriz University, Tabriz, Iran (2007).

### **Honors:**

- First Grade PhD student in Geology department, Tarbiat Modares University, Tehran (2010)
- Financial support from Iranian Ministry of Science, Research and Technology for six months outstanding in Austria (2011)
- EGU young scientist Award, Vienna (2015)
- IGGCAS Research Grant for application of O, Hf and U-Pb isotopic analyses on detrital zircons from Precambrian–Mesozoic Iranian sedimentary units, Beijing, China (2015-2016).
- GUNDISHAPUR Research Grant for project entitled: "Understanding of geodynamic setting of the metamorphic complex associated with Fe-Mn mineralizations in Takab area, Northwest of Iran" from Center for International Scientific Studies & Collaboration (CISSC), Ministry of Science, Research and Technology, Islamic Republic of Iran (2018-2019).

**Research Interest:**

Application of zircon geochronology in geodynamic evolution of continental crust; Geochemical and isotopic evolution of igneous rocks; Application of mineral thermometers and barometers to igneous and metamorphic rocks (using Electron Probe Microanalysis and Laser Ablation Inductively Coupled Plasma Mass Spectrometry); Geochemical and isotopic investigation of ore deposits; Remote Sensing for Mineral Exploration

**Theses & Dissertations Supervised**

Supervisor and Advisor in more than 30 MsC geosciences theses at the IASBS and Zanzan university.

**Book Translation**

"The Field Description of Igneous Rocks". 2nd ed, Dougal Jerram and Nick Petford, 2011. Wiley-Blackwell

Translated to Persian By: **Maryam Honarmand** and Mehdi Daraei; Alavi Publication Co.

**Publications:**

- **Honarmand, M.**, 2026. Arc shoshonitic magma triggered polymetallic mineralization, NW Iran: Implications to magmatic-hydrothermal evolution and mineralization processes. Canadian Journal of Earth Sciences, Accepted paper.

- **Honarmand, M.**, Li, X.H., Zhang, L. and Le Roux, P., 2026. Eocene magmatic flare-up and crustal thickening in NW Iran: quantitative constraints on the subduction-to-collision transition. International Journal of Earth Sciences, 115(3), p.39.

- Wagner, C., Boudouma, O., Rividi, N., Orberger, B., Nabatian, G., **Honarmand, M.** and Monsef, I., 2025. Magnetite Texture and Geochemistry in the Takab Ore Deposit (NW Iran): Implications for a Complex Hydrothermal Evolution. Minerals, 15(2), p.137.

- **Honarmand, M.**, Nabatian, G., Wagner, C., Monsef, I., Delpech, G., Bayon, G., Boudouma, O. and Orberger, B., 2024. Late Ediacaran iron formations in NW Iran: Origin, depositional age, tectonic and climatic significance. Precambrian Research, 406, p.107382.

- **Honarmand, M.**, van der Boon, A., Neubauer, F., Heberer, B., Li, Q., Kuiper, K.F., Mason, P.R. and Krijgsman, W., 2024. Geochemical constraints on the geodynamic setting of Alborz-Azerbaijan Cenozoic magmatism. *Chemical Geology*, 645, p.121889.
- **Honarmand, M.**, Nabatian, G., Wagner, C., Monsef, I., Delpéch, G., Bayon, G., Boudouma, O. and Orberger, B., 2024. Late Ediacaran iron formations in NW Iran: Origin, depositional age, tectonic and climatic significance. *Precambrian Research*, 406, p.107382.
- **Honarmand, M.**, van der Boon, A., Neubauer, F., Heberer, B., Li, Q., Kuiper, K.F., Mason, P.R.D., Krijgsman, W. 2023. Geochemical constraints on the geodynamic setting of Alborz-Azerbaijan Cenozoic magmatism. *Chemical Geology*, <https://doi.org/10.1016/j.chemgeo.2023.121889>.
- Afshari, M. Nabatian, Gh. **Honarmand, M.** Ebrahimi M., Li, X.H. 2023. Shoshonitic pluton and an associated base-metal deposit in the Taram–Hashtjin metallogenic zone, NW Iran: implication for tectono-magmatic evolution and metallogenic considerations. *Australian Journal of Earth Sciences*, DOI: 10.1080/08120099.2023.2273974.
- Orberger, B., Wagner, C., Boudama, O., Rividi, N., Bauer, C., Wagner, R., Nabatian, G., **Honarmand, M.**, Monsef, I. 2023. Magnetite–Hematite Characterization at Micron Scale with Implications for Metallurgical Processing and Decarbonization. *Material Proceedings*, v. 15, 37. <https://doi.org/10.3390/materproc2023015037>.
- Hwang, J. Park, J.W., Wan, B., **Honarmand, M.** 2023. Contrasting platinum-group element geochemistry of post-collisional porphyry Cu ± Au ore-bearing and barren suites in the central and southeastern Urumieh-Dokhtar magmatic arc, Iran. *Mineralium Deposita*, v. 58, p. 1583–1603, <https://doi.org/10.1007/s00126-023-01195-7>.
- Wagner, C.; Villeneuve, J.; Boudouma, O.; Rividi, N.; Orberger, B.; Nabatian, G.; **Honarmand, M.**; Monsef, I. In Situ Trace Element and Fe-O Isotope Studies on Magnetite of the Iron-Oxide Ores from the Takab Region, North Western Iran:

Implications for Ore Genesis. *Minerals* 2023, 13, 774. <https://doi.org/10.3390/min13060774>.

- Van der Boon, A., Kuiper, K.F., van der Ploeg, R., Cramwinckel, M.J., **Honarmand, M.**, Sluijs, A., and Krijgsman, W. 2021. Exploring a link between the Middle Eocene Climatic Optimum and Neotethys continental arc flare-up. *Climate of the Past*, v. 17, p. 229–239.

- Bauer, C.; Wagner, R.; Orberger, B.; Firsching, M.; Ennen, A.; Garcia Pina, C.; Wagner, C.; **Honarmand, M.**; Nabatian, G.; Monsef, I. Potential of Dual and Multi Energy XRT and CT Analyses on Iron Formations. *Sensors*. 2021, 21, 2455.

- Nabatiana, Gh., Li, X.H., **Honarmand, M.**, Esmaeili, R. 2021. The magmatic evolution of the Neotethyan rift: Geochronologic, isotopic, and geochemical evidence from A-type felsic magmatism, NW Iran. *Journal of Geodynamics*. <https://doi.org/10.1016/j.jog.2021.101829>

- **Honarmand M.**, Nabatian, Gh., Aflaki, M., Ebrahimi, M. 2020. " Zircon U-Pb dating and geochemistry of the Moghanlou mylonite gneiss and granite intrusions, west of Zanjan ", *Scientific Quarterly Journal, Geosciences*, v. 29, No.116 (In Persian with English abstract).

- Naderi, A., Nabatian, Gh., Honarmand, M., Houhestani, H. 2020. "Geology and formation of Halab Mn deposit, SW Zanjan", *Scientific Quarterly Journal, Geosciences*, v. 29, No.115 (In Persian with English abstract).

- Abodalahi, F., Nabatian, Gh., Li, J.W., **Honarmand, M.**, Ebrahimi, M. 2020. "Saheb Granitoid Batholith, North of Kurdistan: An Evidence of CretaceousPaleocene Magmatism in the Sanandaj-Sirjan Zone" *Journal of Economic Geology*, v. 12, No. 3 (In Persian with English abstract).

- Ahrabian, P., Nabatian, Gh., Mokhtari, A., **Honarmand, M.**, Kouhestani, H. 2020. Mineral chemistry and chromite mineralization in the Qaranaz-Alamkandi area, west Zanzan, *Journal of Economic Geology*, v. 12, No. 4 (In Persian with English abstract).
- Ahrabian, P., Nabatian, Gh., Mokhtari, A., **Honarmand, M.**, Kouhestani, H. 2020. Application of electron microprobe studies in determining genesis of chromite mineralization in the Qaranaz-Alamkandi area, west of Zanzan, *Journal of Advanced Applied Geology*, DOI: 10.22055/aag.2020.30512.2025 (In Persian with English abstract).
- Shafaiepour, N., Mokhtari, A., Kouhestani, H., **Honarmand, M.** 2020. Petrology and Geochemistry of the Qozlou Granitoid and Related Fe skarn (west Zanzan), *Journal of Economic Geology*, v. 12, No. 1 (In Persian with English abstract).
- Mohammadi, M., Nabatian, Gh., **Honarmand, M.**, Ebrahimi, M. 2019. Geology and Origin of the Dohneh Copper Mineralization, Northeast of Zanzan, *Journal of Economic Geology*, v. 11, No. 3 (In Persian with English abstract).
- **Honarmand, M.**, Xiao, W., Nabatian, Gh. Blades, M.L., Santos, M.C. Collins, A.S., Ao, S. "Zircon U-Pb-Hf isotopes, bulk-rock geochemistry and Sr-Nd-Pb isotopes from late Neoproterozoic basement in the Mahneshan area, NW Iran: Implications for Ediacaran active continental margin along the northern Gondwana and constraints on the late Oligocene crustal anataxis", *Gondwana Research*, 57, 48-76 (2018).
- Van der Boon, A., Van Hinsbergen, D. J. J., Rezaeian, M., Gürer, D., **Honarmand, M.**, Pastor-Galán, D., Krijgsman, W., Langereis, C. G., "Quantifying Arabia–Eurasia convergence accommodated in the Greater Caucasus by paleomagnetic reconstruction", *Earth and Planetary Science Letters*, 482, 454-469, (2018).

- Zolfaghari, M., Nabatian, Gh., Azimzadeh, A., **Honarmand, M.**, Azizi, P. 2018. Geology, mineralization, mineralogy and genesis of Pigheshlagh Cu-Zn-Pb deposit, NW Zanzan, Journal of Economic Geology, v. 28, No. 109 (In Persian with English abstract).
- Nabatian, G., Li, X.-H., **Honarmand, M.**, Melgarejo, J. C., "Geology, mineralogy and evolution of iron skarn deposits in the Zanzan district, NW Iran: Constraints from U-Pb dating, Hf and O isotope analyses of zircons and stable isotope geochemistry", Ore Geology Reviews, 84, 42-66, (2017).
- Nabatian, G., Wan, B., **Honarmand, M.**, "Whole rock geochemistry, molybdenite Re-Os geochronology, stable isotope and fluid inclusion investigations of the Siah-Kamar deposit, western Alborz-Azarbayjan: New constrains on the porphyry Mo deposit in Iran", Ore Geology Reviews, 91, 638-659, (2017).
- **Honarmand, M.**, Li, X.-H., Nabatian, G., Neubauer, F., "In-situ zircon U-Pb age and Hf-O isotopic constraints on the origin of the Hasan-Robat A-type granite from Sanandaj–Sirjan zone, Iran: implications for reworking of Cadomian arc igneous rocks", Miner Petrol, 1-17, (2017).
- **Honarmand, M.** Li, X.H., Nabatian, Gh., Rezaeian, M., Etemad-Saeed, N. 2016. Neoproterozoic–early Cambrian tectono-magmatic evolution of the Central Iranian terrane, northern margin of Gondwana: Constraints from detrital zircon U–Pb and Hf-O isotope studies. Gondwana Research, doi:10.1016/j.gr.2016.05.007.
- **Honarmand, M.** Rashidnejad Omran, N., Neubauer, F., Nabatian, Gh., Emami, M. H., Bernroider, M., Ahmadian, J., Ebrahimi , M., Liu, X. 2016. Mineral chemistry of a Cenozoic igneous complex, the Urumieh–Dokhtar magmatic belt, Iran: Petrological implications for the plutonic rocks. Island Arc, v. 25, 153-27.
- Nabatian, Gh., Jiang, Sh.Y, **Honarmand, M.**, Neubauer, F. 2015. Zircon U-Pb ages, geochemical and Sr-Nd-Pb-Hf isotopic constraints on petrogenesis of the Tarom-Olya pluton, Alborz magmatic belt, NW Iran. Lithos v. 244, 42-58.

- **Honarmand, M.**, Rashidnejad Omran, N., Neubauer, F., Nabatian, Gh., Emami, M. H., von Quadt, A., Dong, Y., Bernroider, M. 2015. Geochemistry of enclaves and host granitoids from the Kashan granitoid complex, central Iran: Implications for enclave generation by interaction of cogenetic magmas. *Journal of Earth Science* v. 26, 626-647.
- Nabatian, Gh., Rastad, E., Neubauer, F., **Honarmand, M.**, Ghaderi, M. 2015. Iron and Fe-Mn mineralisation in Iran: implications for Tethyan metallogeny *Australian Journal of Earth Sciences*, v. 62, 211-241.
- Nabatian, Gh., Ghaderi, M., Neubauer, F., **Honarmand, M.**, Liu, X., Dong, Y., Jiang, Sh. von Quadt, A., Bernroider, M. 2014. Petrogenesis of Tarom high-potassic granitoids in the Alborz-Azarbaijan belt, Iran: Geochemical, U-Pb zircon and Sr–Nd–Pb isotopic constraints. *Lithos*, v. 184-187, PP. 324-345.
- Nabatian, Gh., Ghaderi, M., Corfu, F., Neubauer, F., Bernroider, M., Procofiv, V., **Honarmand, M.** 2014. Geology, alteration, age, and origin of iron oxide–apatite deposits in Upper Eocene quartz monzonite, Zanjan district, NW Iran. *Mineralium deposita* v. 49 PP. 217-234.
- **Honarmand, M.**, Rashidnejad Omran, N., Neubauer, F., Hashem Emami, M., Nabatian, G., Liu, X., Dong, Y., Quadt A.V. & Chen B. 2013. Laser-ICP-MS U–Pb zircon ages and geochemical and Sr–Nd–Pb isotopic compositions of the Niyasar plutonic complex, Iran: constraints on petrogenesis and tectonic evolution. *International Geology Review*, v: 56, 104-132.
- **Honarmand, M.**, Ahmadian, J., Nabatian, Gh. and Murata M., 2012, Reconstructing physicochemical conditions by application of mineral chemistry: a case study from the Natanz pluton, Central Iran, *Neues Jahrbuch für Mineralogie*, v. 189, 139–154.
- **Honarmand, M.**, Rashidnejad Omran, N., Corfu, F., Emami, M. H. and Nabatian, Gh., 2013, Geochronology and magmatic history of a calc-alkaline plutonic complex in the Urumieh–Dokhtar Magmatic Belt, Central Iran: zircon ages as evidence for two major plutonic episodes. *Neues Jahrbuch für Mineralogie*, DOI: 10.1127/0077-7757/2013/0230.

- **Honarmand, M.**, Rashidnejad Omran, N., Emami, M. H., Nabatian, Gh. 2015. Petrology and U-Pb Zircon Dating of Marfion Intrusive Complex, West of Kashan. Journal of Geosciences, v. 24, no.94, 3-16 (In Persian with English abstract).

- **Honarmand, M.**, Rashidnejad Omran, N., Emami, M. H., Nabatian, Gh. 2015. Application of amphibole and feldspar chemistry in the petrogenetic study of the Middle Miocene granitoid complex, West of Kashan. Iranian journal of crystallography and mineralogy, v. 23, no. 1, 147-158.

- **Honarmand, M.**, Moayed, M, Jahangiri.A, Ahmadian, J., Bahadoran, N. 2010, Study of Geochemical Characteristics of Natanz plutonic complex, North of Isfahan, Petrology, No.3, 65-88 (In Persian with English abstract).

- **Honarmand, M.**, Moayed, M., Jahangiri1, A., Ahmadian, J. 2009. Mineralogy, geothermobarometry and magmatic series of Natanz plutonic complex. Iranian journal of crystallography and mineralogy, v. 17, no. 3, 325-342.

- Nabatian, Gh., Ghaderi, M., **Honarmand, M.** 2015. Petrography and mineral chemistry of the Tarom plutonic complex, NE Zanjan. Petrology, *in press*, (In Persian with English abstract).

- Rashidnejad, N., **Honarmand, M.**, Mohajjel., 2012, Petrography, geochemistry and genesis of Alut plutonic complex, NW Saqqez, Iran. Quarterly Journal of Science Kharazmi University, v.12, no. 2, 345-460 (In Persian with English abstract).

### **Selected Conference papers**

- **Honarmand, M.**, "Cenozoic plutonism in the Urumieh-Dokhtar and Alborz zones, two important magmatic belts in the Zagros hinterland; Geochronology, geochemistry and isotope constraints", TRIGGER (International Conference Trans-Disciplinary Research on Iranian Geology, Geodynamics, Earthquakes and Resources), May, 6-7 2017 - Tehran, Iran, 107-110, (2017).

- Orberger, B., Wagner, Ch., Boudouma, O., Fialin, M., Derré, C., Nabatian, Gh., **Honarmand, M.**, Monsef, I., Ghods, A., "Iron-oxide mineralogy of banded iron formations in the Takab region, North Western Iran", TRIGGER (International Conference Trans-Disciplinary Research on Iranian Geology, Geodynamics, Earthquakes and Resources), May, 6-7 2017 - Tehran, Iran, 54-55, (2017).
  
- Orberger, B., Miska, S., Tudryn, A., Wagner, C., Michel Fialin, Boudouma, O., Derré, C., Nabatian, Gh., **Honarmand, M.**, Monsef, I. and Ghods, A. Iron-oxide mineralogy of banded iron formations in the Takab region, North Western Iran. 14th SGA Biennial Meeting (2017), v. 2. P. 809-812.
  
- **Honarmand, M.** 2017. "Cenozoic plutonism in the Urumieh-Dokhtar and Alborz zones, two important magmatic belts in the Zagros hinterland; Geochronology, geochemistry and isotope constraints", Trigger International Conference Trans-Disciplinary Research on Iranian Geology, Geodynamics, Earthquakes and Resources, May, 6-7 2017 - Tehran, Iran, 107-110.
  
- Ahrabian Fard, P., Nabatian, A., Mokhtari, M., **Honarmand, M.**, Kuhestani, H. 2016. Mineralization texture of Alam-Kandi Chromite, West of Zanjan. 8<sup>th</sup> Symposium of Iranian Society of Economic Geology, Zanjan (In Persian with English abstract).
  
- Abaspour, N. Ebrahimi, M., **Honarmand, M.**, Nabatian, Gh. 2016. Mineralogy and petrography of host rocks in the Gheshlagh Cu deposit, East of Zanjan. 8<sup>th</sup> Symposium of Iranian Society of Economic Geology, Zanjan (In Persian with English abstract).
  
- Mohammadi, M., Nabatian, Gh., **Honarmand, M.**, Ebrahimi, M. 2016. Geology, mineralization and mineralogy of the Dohneh Cu deposit, Northeast of Zanjan. 8<sup>th</sup> Symposium of Iranian Society of Economic Geology, Zanjan (In Persian with English abstract).
  
- Naderi, A., Nabatian, Gh., **Honarmand, M.**, Kuhestani, H. 2016. Geology, mineralogy, structure and texture of ore body in the Halab Mn deposit, SW Zanjan. 8<sup>th</sup> Symposium of Iranian Society of Economic Geology, Zanjan (In Persian with English abstract).

- Zolfaghari, M., Nabatian, Gh., Azimzadeh, A., **Honarmand, M.** Azizi, P. 2016. Geology, mineralization and mineralogy of the Pirgheshlagh Cu-Zn-Pb deposit, NW Zanjan. 8<sup>th</sup> Symposium of Iranian Society of Economic Geology, Zanjan (In Persian with English abstract).
  
- **Honarmand, M.**, Nabatian, Gh., Jiang, S. Y. 2015. Zircon U-Pb dating, geochemical and Sr–Nd–Pb isotopic compositions of shoshonitic intrusions, Western Alborz, NW Iran: petrogenesis and tectonic implications. Geophysical Research Abstracts, V. 17, EGU2015-843.
  
- **Honarmand, M.**, Nabatian, Gh., Aflaki, M. 2015. Zircon U-Pb geochronology and geochemistry of the Moghanlou granite and orthogneiss, west of Zanjan. 19<sup>th</sup> Symposium Geological Society of Iran, Tehran (In Persian with English abstract).
  
- Honarmand, M.**, Nabatian, Gh. 2015. Geochronology and geochemistry of the Taram-Olya pluton, north of Zanjan. 18<sup>th</sup> Symposium of Geological Society of Iran, Tehran (In Persian with English abstract).
  
- Jamalipour, S., Ebrahimi, M., Nabatian, Gh., Mokhtari, A., **Honarmand, M.** 2015. Mineralogy, Structure and Texture of the Laiswall -Type Sedimentary-Diagenetic Cherlanghoush Pb deposit, Northwest of Zanjan. 33<sup>th</sup>, Earth Science Congress, Geological Scocitey of Iran, Tehran (In Persian with English abstract).
  
- Ghadimi, S., Nabatian, Gh., **Honarmand M.**, Vanaei, M. 2014. Study of environmental effects of heavy metals on water reservoirs in the Divandareh area. 32<sup>th</sup> Earth Science Congress, Geological Society of Iran, Tehran (In Persian with English abstract).
  
- Ghadimi, S., Nabatian, Gh., **Honarmand M.**, Vanaei, M. 2014. Study of distribution of the heavy metals in Divandareh area and its effects on residents of this area. 32<sup>th</sup> Earth Science Congress, Geological Society of Iran, Tehran (In Persian with English abstract).

- Nabatian, Gh., **Honarmand, M.** 2013. Fe skarn mineralization in the Lamadan area, NE Yazd, Central Iran. 5<sup>th</sup> symposium of Economic Geology of Iran, Mashhad, Iran (In Persian with English abstract).
- **Honarmand, M.**, Ahmadian, J., Petrology and geochemistry of Natanz plutonic rocks, central Iran. Japan Geoscience Union Meeting, 16 – 21, May, 2009, Nakase, Japan.
- **Honarmand M.**, Ahmadian J. 2009. Geochemistry and tectonomagmatic setting of plutonic complex of Natanz (North of Esfahan). 3<sup>th</sup> Geology congress of Payam –e- Noor University, Esfahan (In Persian with English abstract).
- **Honarmand M.**, Ahmadian J. 2008. Mineral chemistry, geothermobarometry and oxygen fugacity of igneous rocks: Natanz complex, Central Iran. Russian Mineralogical Society, Fedorov Session 2008, Saint Petersburg, Russia.
- **Honarmand, M.**, Moaied, M, Jahangiri.A, Ahmadian, J. 2007. Study of chemical characterizes of mafic minerals in the Natanz plutonic complex, 11<sup>th</sup> Symposium of Geological Society of Iran, Mashhad, Iran (In Persian with English abstract).
- **Honarmand, M.**, Moaied, M, Jahangiri. A, Ahmadian, J., Study of petrography, petrogenesis and mineral-chemistry of plutonic rocks of west and southwest of Natanz, 10th Symposium of Geological Society of Iran, 2006, Tehran, Iran (In Persian with English abstract).
- **Honarmand, M.**, Moaied, M, Jahangiri. A, Ahmadian, J., Geochemistry and tectonomagmatic setting of plutonic complex of Natanz (North of Esfahan). 14th Symposium of Crystallography and Mineralogy of Iran, 2006, Birjand, Iran (In Persian with English abstract).