



CV

Personal Details

Name: **Alireza Javadi**
Date of Birth: 03 September 1985, Iran
Marital status: married and one child
Tel. +98 9133619836
E-mail: alireza.javadi@kashanu.ac.ir,
javadi64@gmail.com

Education

2012- 2015

PhD. Chemistry Engineering (Mineral Processing)

Luleå University of Technology, Sweden

Dissertation: "Sulphide Minerals: Surface Oxidation and Selectivity in Complex Sulphide Ore Flotation"

2011-2012

Licentiate Chemistry Engineering (Mineral Processing)

Luleå University of Technology, Sweden

Thesis: "Sulphide Mineral Flotation: A New Insight into Oxidation Mechanisms"

2008-2010

MSc. Mineral Processing

University of Kashan

Thesis: "Recovery of magnesium chloride from Salt Lake brine"

2004-2008

B.Sc Mining Engineering

University of Kashan

Thesis: "using image analysis for Fragment Size Distribution in Blasting".

Academic Experience

2018 - present

Head of International Scientific Cooperation Office

<https://intl.kashanu.ac.ir/en/page/4260/head-of-international-scientific-cooperation-office>

2016- present

Assistant prof. University of Kashan, Iran

Independent research group on mineral processing

Supervised 4 PhD students and more than 12 Master students

Teaching courses on: Advanced flotation, advanced hydrometallurgy,

Nanotechnology in mineral processing, biotechnology in mineral processing, etc.

2015-2016

postdoc Degree, University of Tehran, Iran

project: 1-"Using Nanoparticle in flotation of ultra-fine chalcopyrite"

- 2-"Using Nanoparticle in flotation of ultra-fine galena"
- 3-"Using Nanoparticle in flotation of ultra-fine sphalerite"

Occupation:

- ❖ Head of research team «Cobalt recovery from zinc leaching waste» in Yazd company,
- ❖ Head of research team «Antimony oxide processing » in IMPASCO company
- ❖ Head of research team «synthesis of collector for potash flotation» at IMIDRO Company,
- ❖ Head of research team and Implementing the chromite processing plan of Chaman-e-Chabahar Company
- ❖ Head of research team «the processing of Titanium» at IMIDRO Company.
- ❖ Head of research «hematite processing » moman-omrane-Chabahar Company
- ❖ Head of research «Phosphate ore Beneficiation» in Impasco Company
- ❖ Director of program “chrome and ferrochrome plant”.
- ❖ Director of program “Salt lake Mineral Processing”
- ❖ Director of program “salt-metal reductive extraction”

Awards

2008	Honours Award, First rank, BSc University of Kashan, Iran,
2011	PhD scholarship from Ministry of Science, Iran.
2012	The best licentiate Thesis in Luleå Tekniska Universitet
2015	Fellowship from the Boliden AB company, Sweden.
2019	Honours Award, Best reasecher in University of Kashan.
2020	Honours Award, Best technology reasecher in University of Kashan.
2022	Honours Award, Best technology reasecher in University of Kashan.

Fund raising

2012	100000 US Dollar, Boliden Co., sulfide mineral flotation project, Sweden.
2016	35000 US Dollar, Iranian Mines and Mining Industries Development and Renovation Organization (IMIDRO), Iran, " synthesis of collector for carnallite flotation ".
2017	20000 US Dollar, Iran National Science Foundation, Iran. "processing of cobalt in Golestan iron-cobalt mine in Kashan city".
2017	20000 US Dollar, Omran Moman Chabahar Co., Iran. " processing iron ore in Tang-e-Zagh mine ".
2018	20000 US Dollar, Kashan Amir Kabir Steel Co., Iran, "New method of acid recycling in acid washing line and replacement with fluidized bed".
2019	55000 US Dollar, Iranian Mines and Mining Industries Development and Renovation Organization (IMIDRO), Iran, " magnesium production from bichofilte and carnallite compounds ".

- 2019 70000 US Dollar, Minerals Production and Supply Company (IMPASCO), Iran, "flotation of antimony oxide from sefidabeh mine " .
- 2020 50000 US Dollar, Iran alumina Co., Iran, "synthesis of flocculant for alumina " .
- 2021 50000 US Dollar, Minerals Production and Supply Company (IMPASCO), Iran, " using of nanoparticle on flotation of ultrafine zinc oxide " .
- 2019 55000 US Dollar, Iranian Mines and Mining Industries Development and Renovation Organization (IMIDRO), Iran, " magnesium production from bichofilte and carnallite compounds " .
- 2022 60000 US Dollar, Iranian Mines and Mining Industries Development and Renovation Organization (IMIDRO), Iran, " magnesium production from sea water " .

Book

1. **Alireza Javadi**, Fatemeh Sadat Hosseinian,(2023), using of nanotechnology in ultrafine processing, 2020, university of Kashan. In press.
2. **Alireza Javadi**, (2023), using of biotechnology in ultrafine processing, 2020, university of Kashan. In press.

Peer reviewed

1. **Alireza Javadi**, A. A. Abdullah Zadeh, Recovery of Bischofite from Salt Lake Brine by Solar Evaporation and Organic Solvent Leaching, Journal of Iranian Chemical Engineering, 2012, (Issue 61).
2. **Alireza Javadi**, A. A. Abdullah Zadeh, recovery of bischofite from salt lake brine by Ion flotation, Journal of Iranian Chemistry and Chemical Engineering, Winter 2011, 30 (4 (63)) :113-120.
3. **Alireza Javadi**, Anna-Carin Larsson, Kota Hanumantha Rao, 2013, Formation hydrogen peroxide by pyrite and its influence on flotation, Journal of Minerals Engineering, 49 , P. 128-134.
4. **Alireza Javadi**, Kota Hanumantha Rao. Formation hydrogen peroxide by chalcopyrite and its influence on flotation –Journal of Minerals and Metallurgical processing, 2013, 30 (4), 212-219.
5. **Alireza Javadi**, Kota Hanumantha Rao. Formation hydrogen peroxide by sphalerite – International Journal of Mineral Processing, 2013, 125, 78-85.
6. **Alireza Javadi**, Kota Hanumantha Rao, 2014. Formation hydrogen peroxide by galena and its influence on flotation – Advanced Powder Technology, 25, 832-839.
7. **Alireza Javadi**, Kota Hanumantha Rao. Formation hydrogen peroxide by sulphide minerals –Journal of Hydrometallurgy, 2014. 141, 82-88.
8. Hanumantha Rao K, **Javadi A**, Karlkvist T, Patra A, Vilinska A, et al. Revisiting Sulphide Mineral (Bio) Processing: A Few Priorities and Directions. J Powder Metall Min. 2013. 4 (2).

9. Fatemeh Sadat Hoseinian, Mehdi Irannajad, **Alireza Javadi**, Ion flotation for removal of Ni(II) and Zn(II) ions from wastewaters, *International Journal of Mineral Processing*, 2015, 143, 131–137.
10. **Alireza Javadi**, Kota Hanumantha Rao, Effect of grinding environment on galena flotation. *The Open Mineral Processing Journal*, 2015, 8, 1 -6.
11. **Alireza Javadi**, Kota Hanumantha Rao. Complex Sulphide ore flotation, Effect of depressants addition during grinding on formation Hydrogen peroxide – *International Journal of Mineral Processing* 157 (2016) 89–97
12. **Alireza Javadi**, New Reagents for Controlling of H₂O₂ By Metal Sulfide and Its Effect in Sulfide Mineral Flotation – *International Journal of Mining and Geo-Engineering* 55 (2021) 29–32.
13. **Alireza javadi**, Carnallite Flotation of Khur Biabanak Potash Complex using kimiaflot 619 as a New Collector – *Journal of Mining and Environment (JME)* Vol. 12, No. 3, 2021, 815-823.
14. Sara Azimi, Alireza Abolhasani, Seyed Masoud Moosavi, Fateme Vanaei, Amirhossein Jafari, Ehsan Samimi-Sohrforozani, Mohammad Taghi Rayati, Elham Noori, Ezzat Rafiee, **Alireza Javadi**, and Mohammad Mahdi Abolhasani, Development of a Vehicle Passage Sensor Based on a PVDF Nanogenerator- *Journal of ACS Appl. Electron. Mater.* Publication Date: October 18, 2021 <https://doi.org/10.1021/acsaelm.1c00474>.
15. **Alireza javadi**, Control of Sulfide Oxidation and its Effect in Galena Flotation – *Journal of Brilliant Engineering*, No. 4, 2021, 5-9.
16. **Alireza Javadi**, New Method of acid regeneration in Amirkamir steel pickling plants– *Energy Engineering & Management*, 2022, Volume 12, Issue 2 (8-2022) .
17. **Alireza Javadi**, Effect of Water Quality on Formation of Hydrogen Peroxide and Its Behavior on Flotation–*International Journal of Mining and Mineral Engineering*, 2022, Volume 56, Issue 3, 219-223.
18. **Alireza javadi**, Mohammadreza Alipour Feasibility Study of Processing of Choram Sedimentary phosphate ores by Flotation Method, – *Journal of Mining Engineering*, 2022. Volume 17, Issue 55, Pages 38-46.
19. Z. K. Coguplugil, M. Akin, R. Bayat, M. Bekmezci, H. Karimi-Maleh, **Alireza Javadi**, Fatih Sen, Synthesis and Characterization of Pt/ZnO@SWCNT/Fe₃O₄ as a powerful Catalyst for Anodic Part of Direct Methanol Fuel Cell Reaction, *International Journal of Hydrogen Energy*, Available online 24 November 2022.

20. F. Karimi, E.E. Altuner, F. Gulbagca, R. N. Elhouda Tiri, F. Sen, **Alireza Javadi**, E. N. Niculina Dragoi, Facile bio-fabrication of ZnO@AC nanoparticles from chitosan: characterization, hydrogen generation, and photocatalytic properties, Environmental Research, Volume 216, Part 4, 1 January 2023, 114668.

Submitted and in preparation paper

21. **Alireza javadi**, Extraction of cobalt in Golestan Ghamsar mine using leaching method—under review to Journal of Mineral Resources Engineering (JMRE), 2023.

22. **Alireza Javadi**, flotation of sefidabeh antimony oxide ore—under review to Journal of Mineral Engineering, 2023.

Conference peer reviewed proceedings

1. **Alireza Javadi**, A. A. Abdullah Zadeh, using image analysis to determine the freedom degree of Qom Vnarch manganese minerals, Twenty-Seventh Conference Geoscience and thirteenth Conference of Geological Society, **2010**.
2. **Alireza Javadi**, A. A. Abdullah Zadeh, a new method in determining the grade garnet of Yazd Hassan Abad skarn, Twenty-Seventh Conference Geoscience and thirteenth Conference of Geological Society, **2010**.
3. **Alireza Javadi**, recovery of bischofite from Salt Lake brine by sodium stearate, Twenty-ninth Conference Geoscience, **2011**.
4. Kota Hanumantha Rao, **Alireza Javadi**, Tommy Karlkvist, Anuttam Patra, Annamaria Vilinska, Irina Chernyshova. Revisiting sulphide mineral (bio) processing: a few priorities and directions – Proceedings of XV Balkan Mineral Processing Congress. M. Grigorova (Ed), St. Ivan Rilski, Sofia, **2013**, 51-56 pp.
5. **Alireza Javadi**, Kota Hanumantha Rao. Sulphide mineral flotation: a new insight into the oxidation mechanisms – invited key-note paper, MPT **2013**, 12-14 November 2013, India. 169-182 pp.
6. **Alireza Javadi**, Kota Hanumantha Rao. Sulphide mineral flotation: Formation of hydrogen peroxide by chalcopyrite and pyrite – 32nd national and The 1st International Geosciences Congress, Mineral processing, 16-19 February **2014**, Iran.

7. **Alireza Javadi**, Kota Hanumantha Rao. Sulphide mineral flotation: Effect of grinding environment on galena flotation – 32nd national and The 1st International Geosciences Congress, Mineral processing , 16-19 February **2014**, Iran.
8. **Alireza Javadi**, Kota Hanumantha Rao. A New Insight into Oxidation of Sulphide Minerals – IMPC 2014, 20-24 October **2014**, Chile.
9. **Alireza Javadi**, Kota Hanumantha Rao. A New Insight into Oxidation of Sulphide Minerals – invited speaker paper, IMEC 2014, 21-24 September **2014**, Chile.
10. **Alireza Javadi**, Kota Hanumantha Rao. What are the implications in sulphide mineral processing underlying new insights into oxidation mechanisms?, Cairo International Convention Center, El-Nasr Rd, Nasr City, Cairo, 7-8 April **2015**, Egypt.
11. **Alireza Javadi**, Kota Hanumantha Rao. Formation of H₂O₂ by metal sulfides and its effect in sulfide mineral flotation – IMPC **2016**, September 11 -15, Québec City Convention Center
12. **Alireza Javadi**. Investigating the optimal conditions for cobalt leaching of Golestan mine Qamsar, Second National Conference on Materials Engineering, Metallurgy and Mining Iran, Shahid Chamran University of Ahvaz, **2019**,
13. Reza Eskandari , Ali A. Abdollahzadeh, **Alireza Javadi**, M. Javad Mozaffarpour. Feasibility study of copper ore pre-processing by gravity methods at Midok Copper Complex, Second National Conference on Materials Engineering, Metallurgy and Mining Iran, Shahid Chamran University of Ahvaz, **2019**.
14. **Alireza Javadi**, Aliakbar Dehghanzadeh, Alireza Ghorbanian. Feasibility study of Serahan iron ore processing, The Second International Conference on the Development of Materials Engineering Technology, Mining and Geology, Tehran, **2020**.
15. **Alireza Javadi**, Kota Hanumantha Rao. New reagents for controlling of H₂O₂ by metal sulfide and its effect in galena flotation – IMPC **2020**, XXX International Mineral Processing Congress, Cape town, South Africa, October 18-22.

Supervising activity

PhD. Students:

- 1- **Mrs. Zahmatkeshan.**
- 2- **Mr. Alidokht.**

3- Mr. Yosefi.

4- Mrs. Akram Ram

MSc. Students:

5- Mr. skandari.

Thesis: Feasibility study of using of pre-concentration systems in Miduk Copper plant, 2017-2018.

6- Mr. ghorbanian.

Thesis: Iron ore processing from iron kashan ores, 2018-2019.

7- Mr. Alipour.

Thesis: Flotation of phosphate from lar ores, 2019.

8- Mr. rostami.

Thesis: Antimony oxide floatation from sefidabeh ores, 2019.

9- Mr. Yosefi.

Thesis: Feasibility study of molibden ore processing from mianeh ores., 2019.

10- Mr. hashmi.

Thesis: Sntesis of Flocculant for alumina plant, 2020.

11- Mr. shahian.

Thesis: Magnesium production from karnalite and bischofite, 2021.

12- Mr. Atashgahi

Thesis: Magnesium metal from sea water, 2022.

Teaching Experience

1. Mineral processing, **Bachelor course**
2. Sustainable Mining, **Bachelor course**
3. Mineralogy and Mineral Processing, **Bachelor course**
4. Mineral Resources management, **Bachelor course**
5. HSE, **Bachelor course**
6. Advanced Flotation, **Master course,**
7. Environment and Mineral Processing, **Master course,**
8. Advanced Hydrometallurgy, **Master course,**
9. Electrochemistry in sulphide mineral, **Master course,**
10. Bioprocessing and Bio flotation, **Master course,**
11. Oxidation and Acid mine drainage, **Master course,**
12. Nanotechnology in Flotation, **Master course,**
13. Surface Chemistry, **PhD course**
14. waste management and recycling, **PhD course**
15. Advanced flotation, **Master course,**

Referrer

- K. Hanumantha Rao, Professor, Minerals Engineering, Department of Geology and Mineral Resources Engineering, NTNU - Norwegian University of Science and Technology, Trondheim, Norway, hanumantha.rao.kota@ntnu.no.