

Executive Manner Summary

- Motivated Engineer offering a strong work ethic and positive attitude
- Enthusiastic Engineer who is a fast learner and can deliver results quickly
- Highly Formative and Influential
- Engineer who enjoys assisting others requiring extra support to complete tasks and create new concepts
- Perceptive Manager with a profound economic approach



Education

Master: Mining Engineering (Mineral Processing), 2013-2015, **Amirkabir University of Technology (Tehran Polytechnic)**

Thesis: Characterization, Preconcentration and Cyanidation Leaching of Gold from Copper Anodic Slime of Sarcheshmeh Copper Mine (Score: 19.5/20 or 97.5/100)

Bachelor: Mining Engineering (Exploitation), 2008-2013, **Imam Khomeini International University (IKIU)**

Thesis: Chromite Beneficiation Methods with a focus on Magnetic Separation (Score: 19.5/20 or 97.5/100)

Work Experience

Sormak Company - Lead and Zinc Concentration Corporation (*R&D Manager*), Jul 2017 – Now

Role: Consulting several Mining and Metallurgical Projects to Optimize Production Processes, also research for new methods of Iron Ore Processing

Sazmayeh Construction Company (*Mining Technical Supervisor of Sand Mine*), Apr 2017 – Apr 2018

Role: Mining Engineer and Supervisor of Forunabad Sand Mine

Khorshid Kouhestan Arij - Lead and Zinc Concentration Complex (*Mining Technical Supervisor*), Nov 2016 – Mar 2017

Role: Mining Engineer and Supervisor of Tappeh Sorkh Lead and Zinc Mine

Sormak Company - Lead and Zinc Concentration Corporation (*Mining Engineer*), May 2011 – Feb 2016

Role: Mining Engineer and also Engineer Technologist to research about the best available technologies (BAT) of producing Zinc Concentrate, Lead Concentrate, Iron Ore and Chromite

Sazmayeh Construction Company (*Mining Technical Supervisor of Sand Mine*), Jan 2015 – Oct 2015

Role: Mining Engineer and Supervisor of Forunabad Sand Mine

Babak Powder Company – Barite & Bentonite Powder Production (*Mining Consulting Engineer*), Jun2013 – Jul2013

Role: Mining Engineer who consults about mine projects of company

Khoon Sorkh Company - Lead and Copper mine (*Mining Engineer*), Oct 2012 – Jan 2013

Role: Mining Engineer and Consulting Engineer to get best available technology for lead concentrate production, this project was as a co-project with Sormak Company

Naddaf Sang Company - Sheshab Iron Placer Mine (*Mining Consulting Engineer*), Feb 2012 – Jun 2012

Role: Mining Engineer and Consulting Engineer for a Placer Iron Ore Mine in Sangan Region, mainly focus on exploitation methods and also beneficiation methods

Torabsang Company - Taybad Iron Mine (*Mining Consulting Engineer*), Apr 2012 – May 2012

Role: Mining Engineer and Consulting Engineer for Three Hematite mine's in Khorasan region, East of Iran to evaluate mine and potential of area for writing feasibility study report

Karizshahr Company - Foroumad Chromite Mine (*Mining Consulting Engineer*), Jan 2012 – Apr 2012

Role: Mining Engineer and Consulting Engineer to get best available technology for chromite concentrate production, this project was as a co-project with Sormak Company

Work Experience as a Student

Young Earth Scientists (YES) Network (*Member of the Board in Iran Unit*), Aug 2015 – Aug 2017

Student Science Association of Amirkabir University of Technology, (*Responsible of Ideas, Innovation and Olympiad Sector of Mining Engineering Science Association*), Feb 2015– Oct 2015

Student Science Association of Imam Khomeini International University, (*Head of Science Association in – Head of Mining and Petroleum Engineering Science Association for 3 years*), Sep 2009 - Jul 2012

International NANO conference (*Executive Member*), Nov 2009 - May 2010

International Collaborations (*Sabbatical Studies*)

Kazzinc Multimetal Pyrometallurgy Plants (Lead, Zinc, Copper Smelting and Purification Plants, Kazakhstan)

Title: Researcher and Intern, Jul 2012

Role: Research and Study about different processes of base metals production besides minor & valuable metals

Kazzinc Sulfuric Acid Plant (Kazakhstan)

Title: Researcher and Intern, Jul 2012

Role: Research and Study about processes of Sulfuric Acid production

Ust-Kamengorsk Titanium Ingot and Sponge Production Plant (UKTM, Kazakhstan)

Title: Researcher and Intern, Aug 2012

Role: Research and Study about processes of Titanium and Magnesium production

East Kazakhstan University Mining - Geology Department (IAESTE program, Kazakhstan)

Title: Researcher and Intern, Jul 2012 – Aug 2012

Role: Research and Study about Geology of Southern Siberia

Arcelor Mittal Buvac Hematite - Goethite Iron Mine (the Largest Iron Mine in the Europe - Bosnia and Herzegovina)

Title: Researcher and Intern, Sep 2011- Oct 2011

Role: Research and Study about Iron Ore Mining Methods

Arcelor Mittal Omarska GMS site (Gravity Magnetic Separation - Bosnia and Herzegovina)

Title: Researcher and Intern, Sep 2011- Oct 2011

Role: Research and Study about Iron Ore Processing Methods

Internships

Alborz Iron Mine (*Placer Mine*), May 2012 - Jun 2012

Baghestan Sand and Gravel Mine, Aug 2011 - Sep 2011

Sira Tuff Mine, Jul 2011 - Aug 2011

Membership

Iranian Mining Engineering Organization IMEO (Member from Aug 2014)

TMS (The Minerals, Metals & Materials Society /Member from Jan 2017)

YES Network (Young Earth Scientists /Member from Feb 2015)

Top Skills

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|-----------------------------------|-------------------------------|------------------------|
| • Mineral Processing Plant Design | • Iron Ore (Hard Rock&Placer) | • Project Management |
| • Mine Exploitation & Excavation | • Chromite | • Process Engineering |
| • Extractive Metallurgy | • Zinc Oxide | • Supervisory Skills |
| • Hydrometallurgy | • Base Metals | • Business Strategy |
| • Research and Development | • Copper Anode Slime | • Team Leadership |
| • Gemology | • Industrial Minerals | • Recycling Technology |

Language Skills

Persian: Native language, **English:** Proficient, **Arabic:** Familiar, **Russian:** Beginner

⊕ TOEFL 18Feb2017 R27 – L21 – S23 – W25 – Total: 96

Software Skills

Solcalc (Advanced), **Modsim 3.6.22** (Moderate), **Design Expert 7** (Moderate), **HSC 5.11** (Moderate), **Qualitek-4** (Moderate), **Datamine Studio 3** (Familiar), **Arc GIS 10.2** (Familiar), **AutoCAD** (Familiar)

Patents

- New Aero-Separator with Horizontal Air Flow (*Patent Number IR139450140003003733*), Issue Date: 28Jun2015
- New Grizzly Screen Feeder with Spring System (*Patent Number IR139450140003003732*), Issue Date: 28Jun2015
- Gold Recovery from Copper Anodic Slime via Cyanidation method (*Patent Registration in Process*)

Publications

1. Sh.Khakmardan, Ar.Shirazi, Ad. Shirazi, H. Hosseingholi, **Copper Oxide Ore Leaching Ability and Cementation Behavior, Mesgaran Deposit in IRAN**, Open Journal of Geology, 2018, ISSN 2161-7589
2. Sh.Khakmardan, Ar.Shirazi, Ad. Shirazi, **Chemical Refined Production from Plastics Wastes Recycling**, Bolour Journal, Apr 2017
3. Ar.Shirazi, Ad. Shirazi, Sh.Khakmardan, A. Hezarkhani, **Chromite Geology to Exploration – a review**, *The 3rd International Conference on Modern Finding in Science and Technology*, Jan 2017, Iran
4. Ar.Shirazi, Ad. Shirazi, Sh.Khakmardan, A. Hezarkhani, **Perlite Geology to Application – a review**, *The 3rd International Conference on Modern Finding in Science and Technology*, Jan 2017, Iran
5. Sh. Khakmardan, A.Ebrahimzadeh, R. Khakmardan, **Opportunities and Threats of Paper Recycling Industry**, *Seventh National Conference of planning and urban management*, Oct 2015, Mashhad, Iran
6. A. Naghibzadeh, E. Mozaffari, Gh. Karimi, Sh. Khakmardan, **Nano Alumina production Industry in Iran - a review**, *International Nano Conference*, May 2010, Qazvin, Iran
7. A. Naghibzadeh, E. Mozaffari, S. Senemary, Sh. Khakmardan, **Identify and Measure Nanoparticles and Minerals by Polarized Light**, *International Nano Conference May 2010*, Qazvin, Iran
8. Shayan Khakmardan, Bahram Rezai, Gh. Karimi, E. Mozaffari, **A Study on minimalization of ash from Iranian West Gilsonites via Flotation method**, *Journal of Research-Paper Mineral Resources Engineering (JMRE)*, 2018, (under process for publish)
9. Shayan Khakmardan, Gh. Karimi, E. Mozaffari, **Beneficiation of Iranian Chromite Tailing of Shaking Table via Magnetic method**, *Journal of Research-Paper Mineral Resources Engineering (JMRE)*, 2018, (under process for publish)
10. Shayan Khakmardan, Gh. Karimi, Bahram Rezai, **Global Comparison of Iranian Chromite Deposits for Extraction of Platinum Group Metals**, *Journal of Research-Paper Mineral Resources Engineering (JMRE)*, 2018, (under process for publish)

Honors and Awards

1. Awarded as the Best Manager of Student Science Associations in 4th Harkat Conference, **2012**, Iran
2. Best Student Science Association (Mining Engineering of IKIU) in 4th Harkat Conference **2012**, Iran
3. Ranked Honorable Mention in the SME Photo Contest **2015**, USA
4. One of 14 students among all Iranian students that selected for sabbatical studies in **2011 & 2012**, Iran
5. Ranked Third in 1st Iranian Mining Engineering Contest **2014**, Iran
6. Selected Paper on 1st Harkat University Festival **2011**, Qazvin, Iran
7. Ranked 11th in Mining Engineering Master Entrance Exam (Konkur) among more than 2,500 participants **2013**

Research Interests

- Innovative Pyrometallurgy and Hydrometallurgy methods for metals and metalloids production
- Mineral Waste Treatment and Recovery
- Precious Metal Recovery from PCBs and CRT glass and electro-winning slimes
- Applied Separation Science (Physical & Chemical Separation Methods)
- Sustainable Raw Materials Production
- Energy and Mineral Resource Policy
- Iron Ore and Titanomagnetite and Titanium bearing Minerals Beneficiation methods
- Industrial Minerals Beneficiation methods and Ultrafine grinding
- Surface Chemistry of Flotation
- Micro-bubble Flotation and Fine Coal Flotation (Nano Flotation, ...)
- Continuous Centrifugal Gravity Concentration for Gold Placers
- Design and Control of Mineral Processing Plants
- World Mineral Market Analysis
- Environmental Recovery of Wastes such as Pyrolysis of Waste Tire and Waste Plastics
- Paper Recycling (esp. deinking by flotation)

Attended Workshops and Seminars

- Rare Earth Elements Geology to Processing – **2018** (*Iranian Mining Engineering Organization*)
- Project Management – **2018** (*Iranian Mining Engineering Organization*)
- New Mining Laws Evaluation in Iran – **2018** (*Iranian Mining Engineering Organization*)
- The customs Protocols Seminar – **2016** (*Iran Chamber of Commerce, Industries, Mines and Agriculture*)
- Analysis on Complex Structures of Six Recession Layers of Iran Economy Seminar – **2016** (*Iran Chamber of Commerce, Industries, Mines and Agriculture*)
- Expert Meeting of the water's role in development of the mining industry in Iran – **2016** (*Iran Chamber of Commerce, Industries, Mines and Agriculture*)
- Expert Meeting on Project Development methods and Budgeting from Government in Iran – **2016** (*Iran Chamber of Commerce, Industries, Mines and Agriculture*)
- Training Seminar on Iron ore and other mineral commodities exporting – **2016** (*IROPEX*)
- Introduction to Local and International Patent Registration Process – **2014** (*Amirkabir University of technology*)
- Arc GIS 10.2 – **2014** (*Amirkabir University of technology*)
- DATAMINE STUDIO 3 – **2014** (*Amirkabir University of technology*)
- Gemstones Gemology Workshop – **2013** (*Sekkeh Institute*)
- Petro Fifty (Conference on Iran's Petrochemical Industries Experts) - **2013**
- Workshops on Time Management and Creativity in Management – **2011** (*Ministry of Science, Research and Technology*)
- Check the Window of Opportunities and Threats – **2011** (*Ministry of Science, Research and Technology*)
- Optimal Student Science Forum Workshop – **2011** (*Ministry of Science, Research and Technology*)
- Principles of Management Workshop – **2011** (*Ministry of Science, Research and Technology*)
- Effective Communication Workshop – **2011** (*Ministry of Science, Research and Technology*)
- SWOT Workshop – **2011** (*Ministry of Science, Research and Technology*)
- Iranian Iron Mines Seminar – **2010** (*Imam Khomeini International University*)
- Iranian Copper Mines Seminar – **2010** (*Imam Khomeini International University*)
- Analytical measurement of particles (surface tension, angle of attachment) – **2009** (*International Nano Conference, Qazvin*)
- Safety in NANO materials and environmental impacts – **2009** (*International Nano Conference, Qazvin*)
- Nano in Super Insulation Industry – **2009** (*International Nano Conference, Qazvin*)
- Quantum dot production – **2009** (*International Nano Conference, Qazvin*)
- RAMAN Spectroscopy – **2009** (*International Nano Conference, Qazvin*)

References

Professor Bahram Rezai rezai@aut.ac.ir - Professor at Amirkabir University of Technology

Dr. Ezatollah Mozaffari e.mozaffari@eng.ikiu.ac.ir - Assistant Professor at Imam Khomeini International University

Hassan Hosseingholi hassanh@sormakmine.com - CEO of Sormak Mine Company