

1. Personal Information:

Full name: Sepideh Javanshir

Date of Birth: 21/9/1982

Place of Birth: Birjand, Iran

Marital Status: Married

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2. Educational Records:

- Ph.D. in Mineral Processing Engineering with thesis entitled: The hydrodynamic and kinetic study of gold extraction by Dibutyl carbitol in mixer settler extractor, 2007-2011. Tarbiat Modares University, Tehran, Iran.
- Sabbatical Fellowship: Department of Chemical Engineering, Instituto Superior Técnico, 2009-2010, Lisbon, Portugal.
- M.Sc. in Mineral Processing Engineering with thesis entitled: Gold extraction from copper anode slime Mineral Processing Engineering, 2005-2007. Tarbiat Modares University, Tehran, Iran.

- Top student in Ph.D. in mineral processing (GPA: 19.14 out of 20)
- Top student in MSc. in mineral processing (GPA: 17.34 out of 20)
- Top student in BSc. in mining engineering (GPA: 17.14 out of 20)

3. Academic Experiences:

Assistant professor, University of Birjand, Iran, (Since 2011).

4. Referee for Journal Papers:

1. Iranian journal of mining engineering
2. Separation Science and Technology
3. Journal of Mining and Environment
4. Iranian Journal of Materials Science and Engineering
5. International Journal of Nanoscience and Nanotechnology
6. Journal of Separation Science and Engineering

5. Research Interests:

1. Hydrometallurgy (leaching, solvent extraction, precipitation, simulation and modelling)
2. Recovery of valuable material from industrial waste

3. Adsorption of hazardous material from wastewater

6. Journal Papers

- 1- S. Javanshir, M. Abdollahy, H.abolghasemi, A.Khodadadi, *Kinetics of Au (III) extraction by DBC from hydrochloric solution using Lewis cell*, International journal of mineral processing Volume 98, Issues 1–2, 17 January 2011, Pages 42-47.
- 2- S. Javanshir, M. Abdollahy, H.abolghasemi, A.Khodadadi, *The effect of kinetics parameters on gold extraction by Lewis cell: Comparison between synthetic and leach solution*, Iranian journal of chemical& chemical engineering, Vol. 31, No. 4, 2012.
- 3- S. Javanshir, M. Abdollahy, H. Abolghasemi, *Drop size distribution in a Mixer- settler reactor for the gold chloride/DBC system*, Chemical Engineering Research and Design, Volume 90, Issue 10, October 2012, Pages 1680-1686.
- 4- S. Javanshir, M. Abdollahy, H. Abolghasemi, *A modified correlation for drop size distribution at different gold concentration in Chloroauric acid/ DBC system*, Indian Journal of Chemical Technology Vol. 20, July 2013, pp. 259-264.
- 5- S. Javanshir, H. Izadi, M.R. Tavakoli Mohamadi, *A modified correlation for drop size distribution by using Particle Swarm Optimization algorithm*, Separation Science and Technology, 49: 553–561, 2014.
- 6- S.A. Hashemi, B. Rezai, M.R. Tavakoli Mohammadi, S. Javanshir, *Characterization and Concentration Studies of Jalal Abad Iron Mine*, Journal of Mining Science, Vol. 58 (2013), No 3, p. 635–651.
- 7- M.R. Mohamadi, S.M. J.Koleini, S.Javanshir, H. Abolghasemi, M. Abdollahy, *Extraction of rubidium from gold waste: Process optimization*, Hydrometallurgy 151 (2015) 25–32.
- 8- M.R. Mohamadi, S.M. J.Koleini, S. Javanshir, H. Abolghasemi, M. Abdollahy, *Solvent extraction of rubidium from gold waste using conventional SX and new CFE Methods*, RARE METALS, vol 34(2015) 818-828 .
- 9- S. Javanshir, M. Abdollahy, H. Abolghasemi, *Study of effecting operating condition on solvent extraction of gold in continuous process in experimental mixer settler*, Iranian journal of mining engineering, issue 15(2012) 57-66 (in Persian).
- 10- S. Javanshir, Z. Heidari Mofrad, *Effect of Physical and chemical properties of diluent on copper solvent extraction by CP150*, Iranian journal of mining engineering11(13), 2016, 21-31 (in Persian).

- 11- Sh. Naderi and S. Javanshir, *Reduction –precipitation of gold from chloride media by using ferrous oxalate*, Iranian journal of mining engineering 12 (34), 2016, 105-114 (in Persian).
- 12- Sepideh Javanshir, Zahra Heidari, Ahmad Azargoon, Atmospheric pressure leaching of nickel from a low-grade nickel-bearing ore, *Physicochemical Problems of Mineral Processing*, 54(3), 2018, 890-900.
- 13- Rasool Alaei, Sepideh Javanshir, Ali Behnamfard, Preparation and evaluation of Hydrotalcite-type anionic clay for effective removal of free cyanide from synthetic and real solutions (accepted).

7. Selected Papers Presented in Conferences

1. *Reduction of gold from DBC by Oxalic acid solution: Kinetic parameters*, Balkan mineral processing congress, pp. 566-571, Bucharest, Romania 2009.
2. *The solvent extraction of $HAuCl_4$ from Chloride solutions by diethylene glycol dibutyl ether (DBC)*, 21th international mining congress and exhibition of turkey pp. 249-256, Antalya, Turkey, 2009.
3. *Gold recovery from leach solution of Sarcheshmeh copper anode slime*, International Mineral Processing Technology, Bam Bai, India, 2007.
4. *Gold powder precipitation from organic phase*, 2009's fifth international conference on hydrometallurgy, china.
5. *Kinetics model for extraction of gold from chloride solutions*, 13th Conference on Environment and Mineral Processing & Exhibition, Czech, 2009.
6. *Kinetics of Au (III) extraction by DBC from hydrochloric solution*, International mineral processing conference, Australia 2010.
7. *The kinetics study of gold stripping by oxalic acid in modified Lewis cell*, ISEC' 2011, Chile.
8. *The role of modified and dynamic interfacial tension in the kinetics of a copper liquid-liquid system*, ISEC' 2011, Chile.
9. *The effect of hydrodynamical parameters on gold extraction in laboratorial mixer settler*, 22th World mining congress, page 283-286, Istanbul 2011, Turkey.
10. *A new correlation for drop size distribution at different gold concentration in Chloroauric acid/ DBC system*, Chempor 2011, Lisbon, Portugal.
11. *Artificial neural network for modeling the extraction of gold in the mixer settler* IMPC 2012, Newdelhi, India.

12. *Kinetic study of the bioleaching process of Miduk copper sulfide minerals by modeling*, IMPC 2012, Newdelhi, India.
13. *Comminution modeling of primary ball mills of Miduk copper mine using MATLAB software*, IMPC 2012, Newdelhi, India.
14. *Experimental modelling for mass transfer coefficient of dispersed phase in gold extraction by mixer settler*, mining engineering conference, 2013, Tehran, Iran.
15. *Rubidium extraction from gold waste, part I: acid washing-roasting and leaching*, mining engineering conference, 2015, Tehran, Iran.
16. *Rubidium extraction from gold waste, part II: solvent extraction and CFD methods*, mining engineering conference, 2015, Tehran, Iran.
17. *Recovery of zinc from copper furnace slag by sulfuric acid*, mining engineering conference, 2015, Tehran, Iran.
18. *Reduction - precipitation of gold from Sarcheshmeh copper anode slimes: Effect of different reductants*, 34th National and international geosciences congress, 2016, Tehran, Iran
19. *Recovery of zinc from Sarcheshmeh SX raffinat by solvent extraction using D2EHPA*, 34th National and international geosciences congress, 2016, Tehran, Iran
20. *Cyanide removal from aqueous solution by layered double hydroxide (LDH)*, Fourth International Mine and Mining Industries Congress and Sixth Iranian Mining Engineering Conference, 2016, Tehran, Iran.
21. *Thermodynamic study of Cyanide removal from aqueous solution by layered double hydroxide (LDH)*, The 8th National Conference on Environmental Engineering, 2016, Tehran, Iran.
22. *Application of Computational fluid dynamics (CFD) as a modern tool in the mineral processing*, The 36th National and the 3rd International Geosciences Congress Tehran, 25th to 27th February 2018.

8. Research projects coordination

- 1- Co-operation on the project “*The proper Hydrometallurgical method for partial removing of barite and gold recovery from SAR-CHESHMEH copper anode slimes*” 2007 -2009.
- 2- Project Coordinator in “*Determination of drop size distribution in mixer settler by using PSO algorithm*”, 2012-2013.
- 3- Project Coordinator in “*Rubidium recovery from tailing of Muteh gold processing plant by solvent extraction methods*”, 2013-2015.

9. Research students supervised

Master Theses:

- 1- Leaching and recovery of zinc from copper smelter slag in Sarcheshmeh copper mine, 2014
- 2- The effect of diluent on solvent extraction of copper/ iron in Sarcheshmeh SX plant, 2014.
- 3- Improving the kinetic of gold stripping in gold extraction by DBC from copper anode slime, 2014.
- 4- Characterization and recovery of silver from spent zinc-silver oxide batteries, 2015.
- 5- Synthesis of Nano layered double hydroxide for removal of cyanide from gold processing wastewater, 2016.
- 6- The simulation of ball milling circuit at Hamadan iron ore concentrate plant, 2018.
- 7- Improvement of flotation circuit efficiency in Sangan iron ore complex (SIOC),2018.
- 8- Evaluating of arsenic adsorption from the aqueous solutions using porous nano-structures, 2018.
- 9- Recovery of copper sulfate (blue vitriol) from copper oxide ore,2018
- 10- Leaching of chalcopyrite concentrate using a new aliphatic ion liquid, 2018.
- 11- Recovery of Nano selenium from copper anode slimes, 2019.
- 12- Solvent extraction of zinc from bioleaching solution of Bama's low-grade concentrate by emulsion liquid membrane method, 2019.

10. Courses Taught:

- 1- Applied Hydrometallurgy (graduate)
- 2- Advanced Hydrometallurgy (graduate)
- 3- Chemistry of Hydrometallurgy (graduate)
- 4- Processing of industrial minerals(graduate)
- 5- Mineral processing plant design(graduate)
- 6- Thermodynamic (Under graduate)
- 7- Mineral application (Under graduate)
- 8- Physical chemistry (Under graduate)
- 9- Surveying in mining engineering (Under graduate)

11. Skills

- 1- English (good)
- 2- Software (Ansys Fluent, Gambit, Modsim, JKSimMet, KMPC Sim, RTDwin, Microsoft office, Endnote, DX7, Eviews)
- 3- Instruments (AAS, UV-VIS, PH- EH meter, Batch reactors, Flotation, grinding and crushing equipments, Tensiometer, Incubator shaker, Hot plate, Water bath, Filter press, Hydrocyclone, Lewis cell, Mixer settler, Leaching facility, Vacuum pump, Oven, Centrifuge, Magnetic separator, ...)

12. Personal Interests and Hobbies

- Traveling
- Photographing

- Gardening
- Music
- Hiking and Camping