

SIMA MOHAMMADNEJAD

GENERAL INFORMATION

PhD of Mineral Processing Engineering - The University of Melbourne, Australia, 2014

MSc. of Mineral Processing Engineering - Tehran University, 2004

BSc of Mining Engineering – Amir Kabir University, 2001

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CAREER HISTORY

Sep 2014- present Lecturer at Tarbiat Modararres University (TMU)

Courses: Process Mineralogy, Hydrometallurgy, The principals of Mineral Processing Plant Design

Feb 2009- present Principal Metallurgical consultant- ParsAct Pty Ltd.

Analyzing and interpretation of mineralogical and metallurgical tests

Dec 2006 –Dec 2008 Process Mineralogist – Intellection Pty Ltd., Australia

A member of technical resources group and operation team on sample preparation, analyzing and consulting projects

2005-2006 Process Engineer- Namvaran Consulting Engineering Co.

Techno-economic study of mining and mineral processing projects, Design, flowsheet development and equipment sizing based on conducted analyzing tests for technical bids and projects

2003-2005 Process Mineralogist- Iranian Mineral Processing Research Centre (IMPRC)

Process mineralogy and advising customers for further studies and test methods

QUALIFICATION & PROFESSIONAL DEVELOPMENT

January 2010-Dec 2014 PhD Degree of Engineering- The university of Melbourne, Australia

A four years research degree, researching improved techniques for gold extraction from complex ores. Complexes involving a wide range of different gold-ligand interaction strengths including chloride, thiourea and thiosulphate are brought into contact with framework (quartz and feldspar) and layer silicates (kaolinite and pyrophyllite). Experimental data are correlated with information obtained from computational chemistry, to identify trends in their tendencies to associate with silicates and provide a fuller understanding of the role of silicates in gold processing.

March 2004 Master Degree of Mineral Processing Engineering- Tehran University, Iran

A two years course degree, which covered process mineralogy, mass balance calculation, flowsheet design and development, flotation and new technologies in mineral processing. A one-year research project was submitted as a part of degree entitled "Gold extraction form Zarshuran gold mine in Iran".

September 2001 Bachelor Degree of Engineering in Mining Engineering- Amir Kabir University, Iran

It was a four years course degree covered geology, petrology, exploration, extraction and mineral processing. Course work was covered through theory and practical experiments with examinations and a one-year project submitted for final evaluation and the end of the program.

PUBLICATION: ISI Journal Papers

- 1- Mohammadnejad, S., Provis, J. L. and Van Deventer, J. S. J. "Computational Modelling of Interactions between Gold Complexes and Silicates" Computational and Theoretical Chemistry, 2017, under press.
- 2- Mohammadnejad, S., Provis, J. L. and Van Deventer, J. S. J. "Computational modelling of gold complexes using density functional theory" Computational and Theoretical Chemistry, 2015, 1073, 45-54.
- 3- Mohammadnejad, S., Provis, J. L. and Van Deventer, J. S. J. "The effect of grinding on preg-robbing behavior of pyrophyllite." Hydrometallurgy, 2014, 146, 154–163.
- 4- Mohammadnejad, S., Provis, J. L. and Van Deventer, J. S. J. "The effect of grinding mechanism on the preg-robbing of gold onto quartz." International Journal of Mineral Processing, 2014, 128, 1-5.
- 5- Mohammadnejad, S., Provis, J. L. and Van Deventer, J. S. J. "Effects of grinding on the preg-robbing potential of quartz in an acidic chloride medium." Minerals Engineering, 2013, 52, 31-37.
- 6- Mohammadnejad, S., Provis, J. L. and Van Deventer, J. S. J. "Reduction of gold(III) chloride to gold(0) on silicate surfaces." Journal of Colloid and Interface, 2013, 389(1), 252-259.
- 7- Mohammadnejad, S., Provis, J. L. and Van Deventer, J. S. J. "Gold sorption by silicates in acidic and alkaline chloride media." International Journal of Mineral Processing, 2011, 100(3-4), 149-156.

Conference Presentation

- 8- Mohammadnejad, S.; Provis, J. L.; van Deventer, J. S. J., Gold preg-robbing by silicates. Precious Metals '12 Minerals Engineering, Cape Town, November 2012.
- 9- Mohammadnejad, S.; Provis, J. L.; van Deventer, J. S. J., Gold preg-robbing by silicates in acidic chloride media. MetSoc Gold 2011, Montreal, Canada, October 2011.
- 10- Torossian, A. and Mohammadnejad, S. "Techno-economical study of zeolite resources in south of Syria", International Zeolite Conference (IIZC 08)", Tehran, Iran, 1st May 2008
- 11- Oliazade, M., Mohammadnejad, S. and Mehrabi, B. "Ore Characterization of High Arsenic Refractory Gold Ores." Gold Treatment Conference, Alberta, Canada, August 2005.
- 12- Bolurforush, M.R., Oliazadeh M., Masinayii, M. and Mohammadnejad, S. "Zinc Extraction From Solutions Containing Iron And Manganese Ions." 20th World Mining Congress, Tehran, Iran, November 2005.