Seyed Mohammad Razavian

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Professional Summary:

Assistant Professor in Mineral Processing Engineering, University of Kashan

Education:

Ph.D. of Mineral Processing Engineering (*Sep 2009-Feb 2014***)**

AmirKabir University, Tehran-IRAN
Thesis Title:
Effect of High Voltage Electric Pulses on Phosphate Ore Comminution

M.Sc. of Mineral Processing Engineering (*Sep 2002-Apr 2005***)**

AmirKabir University, Tehran-IRAN
Thesis Title:
Steady-State Simulation of milling circuits using spreadsheets

B.Sc. of Mining Engineering (*Sep 1995-Aug 2000***)**

Isfahan University of Technology, Isfahan-IRAN
Thesis Title:
Novel technology of iron ore beneficiation

Research Interests:

- **Mineral Processing Modelling, Simulation and Control**
- **Comminution (High voltage Electric pulse fragmentation)**
- **Mineral Processing Methods (Physical Separation)**

Teaching Experiences:

- **Basic of Mineral Processing and Lab.**
- **Mining Economy**
- **Research Methods and Presentation**
- **Minerals Application**
- **Comminution Engineering**
- **Mineral Processing Modelling, Simulation and Control**
- **Design and Analysis of Experiments**
- **Mass and Heat Transfer**
- **New Progresses in Mineral Processing Equipment**

SKILLS

- **Technical Software: USIM PAC, MODSIM, COMSIM (Programmed by Myself), DX7, Minitab 18, WinCC, PLCS7 (300).**
- **General Software: Microsoft Office (Word, Excel, PowerPoint), MATLAB. VBA.**
- **Operating PSA (Laser particle seizer: (Malvern 2000)**
- **Certificate of Participation: 1-day workshop "Mill Liner Design Using MillTraj", 16 January 2017, Presented by: Prof. Malcolm Powell.**

- **Mineral Processing Expert and Assistant of Iran Mineral Processing Research Center (IMPRC) 2006-now.**

Publications:

Journals Articles:

Abolhasani A., Pachenari A., **Razavian S.M**., Abolhasani M.M., 2022, Towards new generation of electrode-free conductive cement composites utilizing nano carbon black, Construction and Building Materials 323.

Sfaram Jooneghani M., **Razavian, S.M.**, Ghorbannejad M., 2021, Investigation of the Effect of Various Parameters on the Ore Hardness of Gole-Gohar's No. 1 Mine, Journal of Mineral Resources Engineering.

Banihashemi, S.R., Taheri. B., **Razavian, S.M**., Soltani. F., 2020, Nitrophosphate Solution Purification by Calcium Precipitation as Gypsum, JOM.

Banihashemi, S.R., Taheri. B., **Razavian, S.M**., Soltani F., 2019, Selective nitric acid leaching of rare earth elements from Ca and phosphate in a fluorapatite concentrate, JOM.

Hoseini Jirdehi. M., **Razavian, S.M**., 2019, Development of Minerals Liberation Spectrum Simulator in Ball Mills, Journal of Mineral Resources Engineering, Vol. 4 (2), pp. 93-106.

Razavian, S.M., Rezai, B., Irannajad, M, 2015, Finite Element Method Based Simulation of Electrical Breakage of Iron-Phosphate Ore, PPMP Journal, Vol 51 (1), pp. 137-150.

Razavian, S.M., Rezai, B., Irannajad, M, Ravanji, M.H., 2015, Numerical Simulation of High Voltage Electric Pulse Comminution of Phosphate Ore, IJMST, Vol. 25 (3), pp. 473-478.

Razavian, S.M., Rezai, B., Irannajad, M., 2014, Investigation on Pre-weakening and Crushing of Phosphate Ore Using High Voltage Electric Pulses, Advanced Powder Technology, Vol. 25, pp. 1672-1678.

Razavian, S.M, Irannajad M., Farzanegan A., 2008, Simulation of Closed Ball Milling Circuits in Spread-Sheet using COMSIM Software, Iranian Journal of Chemistry & Chemical Engineering, Vol. 27 (2), pp. 77-86.

Irannajad M., Farzanegan A., **Razavian S.M**, 2006, Spreadsheet-Based Simulation of Closed Ball Milling Circuits, Minerals Engineering Vol. 19, pp. 1495-1504.

Conferences Articles:

Esfaram jouneghani M., **Razavian S.M**., Ghorbannejad M., Amiri Hoseini M., 2022, Investigating the possibility of determining the hardness of ores by Los Angeles test and its relationship with SPI test, 3th Iran Mining Technologies Conference, Yazd-Iran.

Rezaei K., **Razavian S.M**., 2020, Steady-State Simulation and Optimization of Ball mill of Hamedan Iron Ore Complex, 8th Iran Mining Engineering Conference, Birjand-Iran.

Zolfaghari A., **Razavian S.M**., Gharedaghi M., 2020, Optimization of Parameters Affecting Solid Particle sedimentation Process in Line 5,6,7 Thickeners of Gol-e-Gohar Company, 8th Iran Mining Engineering Conference, Birjand-Iran.

Zolfaghari A., **Razavian S.M**., Gharedaghi M., 2020, Investigation of The Effect of Different Parameters on The Thickener Behavior of The Line 7 of Golgohar Concentrate Plant, 8th Iran Mining Engineering Conference, Birjand-Iran.

Esfaram jouneghani M., **Razavian S.M**., Ghorbannejad M., Javedani N., 2020, Block No. 1 of Gol-e-gohar mine based on hardness using SPI test, 8th Iran Mining Engineering Conference, Birjand-Iran.

Rostamiraja M.A., Taheri B., **Razavian S.M**., Ghorbannezhad M., 2020, Optimization of the 4th Gole-e-Gohar separation circuit based on the sensitivity of magnetic separation circuit to particles size, 8th Iran Mining Engineering Conference, Birjand-Iran.

Zolfaghari A., **Razavian S.M**., Gharedaghi M., 2019, Investigating Effect of the Solid Percent of Feed of Thickener on Sedimentation Rate of Solid Particles: A Case Study of Waste Thickener in Line 7 Production of Concentrate of Gol-e-gohar Complex, 2th Iranian Conference of Green Mining&Mine Industry, Zanjan-Iran.

Karampoori Kolahkaj F, **Razavian, S.M**., 2018, Kinetic design of Closed Ball mill-Hydrocyclone circuit to Produce Iron Ore Concentrate, 1th National conference of Modelling in Mining Engineering, Ghazvin- Iran.

Razavian, S.M., Karampoori Kolahkaj F., 2018, Kinetic design of Ball mill, Case-study; Golestan Iron Ore Mine, Ghamsar-Kashan, 36th National and the 3rd International Geosciences Congress of Iran, Tehran- Iran.

Banihashemi, S.R., Taheri. B., **Razavian, S.M**., Soltani F., 2018, Selective nitric acid leaching of rare earth elements from Ca and phosphate in a fluorapatite concentrate, 36th National and the 3rd International Geosciences Congress of Iran, Tehran- Iran.

Razavian, S.M., Rezai, B., Irannajad, M, 2016, Effect of High Voltage Electric Pulse on Specific Rate of Breakage of Phosphate Ore, Proceeding of International seminar on mineral processing technology-innovations in mineral processing (MPT2016), Pune-India, pp. 381-390.

Razavian, S.M., Rezai, B., Irannajad, M, 2014, Comparison of the Weight and Volume Particle Size Analysis in Mineral Processing, proceeding of fifth Iran Mining Engineering Conference. Tehran- Iran, pp. 1469-1473.

Razavian, S.M., Rezai, B., Irannajad M, 2014, effect of High Voltage Electric Pulse on DOL and Beneficiation of Phosphate Ore, 32th National and the 1rd International Geosciences Congress of Iran, Tehran- Iran.

Razavian, S.M., Rezai, B., Irannajad M, Aram. M., 2012, Investigation of Relation between Static and Dynamic Media S.G. in Cyclone-DMS, Proceeding of 4st Iranian Mining Technologies conference, Tehran- Iran, pp. 79-85.

Razavian, S.M., Rezai, B., Irannajad M, 2012, Simulation of Rod Mill of Esfordi Phosphate Complex using USIMPAC Software, 1st Iranian Mining Technologies conference, Yazd- Iran.

M. Irannajad, A. Farzanegan, **S.M. Razavian**, 2006, Computer Simulation of Ball Mill-Hydrocyclone Closed Circuit in Spreadsheets, 6-7 June Sudbury Canada, MPMSC Proceeding, pp. 111-124.

M. Irannajad, A. Farzanegan, **S.M. Razavian**, 2006, Recent Research in Mathematical Modelling and Computer Simulation of Comminution Processes and Circuits, MPMSC Proceeding,6-7 June, Sudbury Canada, pp.169-174.

Farzanegan A, Irannajad, M., **Razavian,S.M**, 2006, Spreadsheet-Based Simulation of Closed Ball Milling Circuits, Proceeding of Comminutio06 Conference, Australia, MEI online.

Irannajad, M, Farzanegan A,., **Razavian,S.M**., 2005, Computer Simulation of Tumbling Ball Mills in Excel Spreadsheet, 7-11 Nov. Tehran- Iran.

Irannajad M., Farzanegan A., **Razavian S.M**, 2005, Simulation of Hydrocyclone in Excel spreadsheet, Proceeding of 1st Iran Mining Engineering Conference, Tarbiat Modarres Uni. Tehran- Iran, pp. 811-821.

SELECTED RESEARCH EXPERIENCE

- Investigation on Mineralogy and Beneficiation of Jalal Abad Iron Ore (Laboratory and Pilot Plant Scale), 2007-2008.
- Investigation on Mineralogy and Beneficiation of Jahannemo Iron Ore (Laboratory and Pilot Plant Scale), 2010.
- Grinding and Upgrading of Sangan Iron Ore (Pilot Plant Scale), 2008.

- Investigation on Column Flotation of Nakhlak Lead-Zinc Ore (Laboratory and Pilot Plant Scale), 2011.
- Investigation on Filteration of Sangan Iron Ore, 2009.
- Investigation on Cyclone Dense Media of Venarg Manganese Ore, 2012.
- Design and Carrying out of Pilot Scale Grinding Circuit of Esfordi Phosphate Ore to Reduce Slime, 2012.
- Simulation, Design and Carrying out of Grinding and Beneficiation of Sangan Iron Ore to produce Pelletizing Circuit, 2012.
- Design and Installation of Laboratory High Voltage Electric Pulse Crusher, 2013.
- Design and Installation of 5 t/h Cyclone Media Separation, 2016.
- Investigation and Beneficiation of Tang-e-Zagh Iron Ore to achieve Proper Concentrate, 2017.