Behzad Tokhmechi
Associate Professor

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University Address: School of Mining, Petroleum and Geophysics
Engineering, University of Shahrood, Shahrood, Iran.

Education:

2005-2009	PhD, Mining Engineering, University of Tehran, (GPA: 17.75 /20). Thesis title: Identification and categorization of joints using data fusion approach, emphasizing on Asmari Formation.
1995-1997	M.Sc., Mining Engineering, Amirkabir University of Technology, (Top student with best GPA: 16.67 /20). Thesis: Geostatistical studies and ore reserve evaluation of Mehdi Abad barite deposit, Yazd province, Iran.
1991-1995	B.Sc., Mining Engineering, Amirkabir University of Technology, (GPA: 15.53 /20). Thesis: Estimation of Gheshlagh coal deposits, Semnan province, Iran.

Sabbatical Period:

2008-2009	**Associate Researcher**: Petroleum Engineering Department, Curtin University of Technology, Australia.

Job Experiences:
Full Time:

1998-Present	**Associate Professor, Assistant Professor and Lecturer**: School of Mining and Petroleum and Geophysics Engineering, University of Shahrood.
	Teaching: Data Processing in Exploration Engineering, Simulation and Modeling in Exploration Engineering, Reservoir Engineering, Advanced Reservoir Engineering, Geostatistics, Feasibility Studies, Principles of Exploration, Evaluation of Mineral Reserves, Oil and Gas Resources, Structural Geology, Geology Surveying, General Surveying, Mining Surveying.
	Supervising: Supervising and Counseling four PhD and more than 30 M.Sc. and 60 B.Sc. theses.

Part Time:

2006-2008	**Teaching**: Geostatistics in Department of Petroleum Engineering, Amirkabir University of Technology.
2009-Present	**Teaching**: Data Processing in Exploration Engineering, Simulation and Modeling in Exploration Engineering in School of Mining Engineering, University of Tehran.
2003-Present	**Workshops**: Geostatistics, Feasibility Studies, Evaluation of Mineral Reserves, Surveying, Geological Survey, Mineral Exploration.

1998- Present	Member of the managing committee and director of the mining section of following companies in different periods: Zamin Kav Gostar Co. (a mining and geophysical consulting company). Madan Negar Novin Co. (a drilling and blasting company). Madan Felez Pasargad Co. (an international mineral trading company). Zamin Jouyan Pasargad Co. (an oil and gas consulting company). Zamin Negar Pasargad Co. (a mining extracting and mineral laboratory company). Delkan Kavan Pasargad Co. (an mining extracting and mineral refinery company)

Invention Registration:

Algorithm of fractured zone detection from petrophysical logs.

Academic Activities and Editorship:

Editorial Board Member in Science Publishing Group, USA.

Vice President and Member of Managing Committee, Iranian Petroleum Geomechanics Association.

I have been selected as one of the 10 committee member for Petroleum and Energy in all over the country by Iranian Ministry of Science, Research and Technology (MSRT).

Reviewer of the Journals:

Computer and Geosciences

Journal of Petroleum Science and Engineering

Scientific Quarterly Journal, GEOSCIENCES

Esteghlal (Amir Kabir University of Technology)

Iranian Journal of Mining Engineering (IRJME)

Scientia Iranica

Iranian Journal of Geology

Earth and Space Physics

JMM Section A Mining

Rock Mechanics and Rock Engineering

International Journal of Physical Sciences

International Journal of Mining and Geoengineering

Journal of Mining and Environment

Journal of Petroleum Exploration and Production Technology

Journal of Petroleum and Gas Engineering

Journal of African Earth Sciences

Marine and Petroleum Geology

Arabian Journal of Geosciences

Journal of Science Kharazmi University

Computer Skills:

Matlab, AutoCAD, Surfer, Stereo net, SPSS, Geoeas, SGeMS, CorelDraw, Jundle, Microsoft Office Software.

Professional Skills:

Geostatistics and Reserve Estimation, Reservoir Simulation, Exploration Data Processing, Data Fusion, Pattern Recognition, Signal Processing, Feasibility Studies.

Research Projects:

2013 – 2014	Crashed rock materials quality classification using image processing approach
2011 – 2012	Manager of manufacturing a water flooding instrument for University of Shahrood
2011 – 2012	Identification of fractures in well logs using wavelet and data fusion techniques, with special emphasize on Asmari Formation
2010 – 2011	Possibility of using microorganisms for gold resources exploration
2010 – 2011	Clustering of chitinolytic enzymes based on sequence similarity using different mathematical methods
2009 – 2010	Wavelet Application in Petroleum Engineering
2002 – 2004	Ranking of investments in mining projects and products, Amirkabir University of Technology
2001 – 2003	Investigating the possibility of using fractal geometry in surveying data processing, University of Shahrood

Affiliations:

Member of Society of Petroleum Engineers, Member No: 4089787.

Vice President of Society of Iranian Petroleum Geomechanics.

Member of the mining branch of Iranian Engineers Association.

Member of the central scientific committee of Jahad Daneshgahi in mining and geology.

Member and treasurer of the Society of Mining, Metallurgy and Petroleum Graduates of Amirkabir University of Technology.

Professional Experiences:

1995 - 2008   Collaboration as Research Engineer or Supervisor in more than 50 Projects in Iran.

Publications:

Books:

Tokhmechi B. Khobani A., 2014, *Physical Modeling and Evaluation of Mineral Resources*, University of Shahrood Press, ISBN: 978-600-7153-04-8, 426 pages.

Tokhmechi B. Afsharnia E., 2004, *Fractal Concepts in Surface Growth*, University of Shahrood Press, ISBN: 964-7637-22-5, 470 pages.

Papers:
Journal Papers:

1. Velayati A. *Tokhmechi B.* Soltanian H. Kazemzadeh E., 2015, *Cement slurry optimization and assessment of additives according to a proposed plan*, Journal of Natural Gas Science and Engineering, Vol. 23, pp 165-170.

2. Javid M. Memarian H. Aghaeizadeh Zrofi R. *Tokhmechi B.* Khoshbakht F. Mazhari S.M., 2015, *Fracture detection from resistivity image logs using a hybrid artificial bee colony and image processing method,* Scientific Quarterly Journal, GEOSCIENCES, In Press (in Persian).

3. *Tokhmechi B.* Azizi H. Memarian H., 2014, *Fourier based investigation of deficiency of well logs processing methods,* Scientific Quarterly Journal, GEOSCIENCES, Vol. 24, No. 93, pp. 253-258 (in Persian).

4. Granian H. *Tokhmechi B.* Heidari A., 2014, *Plotting Grade-Tonnage Curves with Fractal Methods and Comparing them by Geostatistical Methods; a Case Study: Koh-e-Zar Gold Deposit in Torbat-e-Heydaryeh,* Journal of Analytical & Numerical Methods in Mining Engineering, Vol. 6, pp. 11-22.

5. Shakiba S. Asghari O. Keshavarz N. *Tokhmechi B.* Saralllah Zabihi S., 2014, *Detecting Fault and Non-Fault on Seismic Data through MaxMin Autocorrelation Factor and Fuzzy Method Based,* Journal of Geophysics and Engineering, In Press.

6. Khojaste P. Ahmadyfard A. *Tokhmechi B.* Mirmahdavi S.A., 2014, *Automatic detection of formations using images of oil well drilling cuttings,* Journal of Petroleum Science & Engineering, In Press.

7. Ghoreishi F. *Tokhmechi B.* Roshandel Kahoo A. Ahmadi Noubari H., 2014, *Presenting an improved approach for optimum mother wavelet selection in geosciences,* Iranian Journal of Geology, In Press, (in Persian).

8. Asgarinezhad Y. *Tokhmechi B.* Kamkar Rouhani A. Sherkati S. Kavousi K. Jamali A., 2014, *A combined Parzen-wavelet approach for detection of vuggy zones in fractured carbonate reservoirs using petrophysical logs,* Journal of Petroleum Science & Engineering, Vol. 119, pp. 1-7.

9. Velayati A. *Tokhmechi B.*, 2014, *Freeing stuck pipe probability and estimation of fishing success in Iranian southwestern fields,* Journal of Current Research in Science, Vol. 2, No. 4, pp 514-520.

10. Masoudi P. Asgarinezhad Y. *Tokhmechi B.*, 2014, *Feature Selection for Reservoir Characterization by Bayesian Network,* Arabian Journal of Geosciences, 13 pages, Published online: 2 April 2014.

11. Hemmatian M. *Tokhmechi B.* Rasouli V. Gholami R., 2014, *The impact of poor cementing casing damage: A numerical simulation study,* Journal of Mining and Environment, Published online, 20 December 2014.

12. Afzal P. Alhoseini S.H. *Tokhmechi B.* Kaveh Ahangran D. Yasrebi A.B. Wetherelt A., 2014, *Outlining of high quality coking coal by Concentration-Volume (CV) fractal Model in East-Parvadeh Coal Deposit, Central Iran,* International Journal of Coal Geology, Vol. 127, pp. 88-99.

13. Nikogoftar H. Mehrgini B. Bahroodi A. *Tokhmechi B.* Norouzi G.H., 2014, *Proposing new approach for litho-facies modeling by use of Markov Chain method, an Iranian oil field,* Journal of Iranian Petroleum Geology, In Press, (in Persian).

14. Jalili S. Memarian H. Rasaei M.R. *Tokhmechi B.*, 2014, *Numerical calculation of permeability tensor in fractured reservoirs,* Journal of Iranian Petroleum Geology, In Press, (in Persian).

15. Nikogoftar H. Mehrgini B. Bahroodi A. *Tokhmechi B.* Norouzi G.H., 2014, *Introducing Markov Chain as a method for litho-facies modeling of an Iranian South-West oil field,* Applied Geology, Vol. 9, No. 1, pp. 65-77, (in Persian).

16. Nikogoftar H. Mehrgini B. Bahroodi A. *Tokhmechi B.*, 2013, *Optimization of the Markov chain for lithofacies modeling: an Iranian oil field,* Arabian Journal of Geosciences, 10 pages, Published online: 8 November 2013.

17. Khojaste P. Ahmadyfard A. *Tokhmechi B.* Shekarifard A., 2013, *An image processing approach for geological formations recognition based on thin section of drilling cuttings,* Energy Exploration & Exploitation, In Press.

18. Alhoseini S.H. Afzal P. *Tokhmechi B.* Kaveh Ahangran D., 2013, *Delineation of High Quality Coking Coal by Concentration-Number Fractal Model in B2 Seam of East Parvadeh Coal Deposit, Central Iran,* Universal Journal of Geosciences, Vol. 1, No. 2, pp. 99-105.

19. Mollajan A. Javid M. Memarian H. *Tokhmechi B.*, 2013, *Reservoir fluid contact detection using resistivity log continues wavelet transform*, Journal of Iranian Petroleum Geology, In Press, (in Persian).

20. Nikogoftar H. Bahroodi A. *Tokhmechi B.* Norouzi A. Mehrgini B., 2013, *Utilizing Markov chains methodology for modeling litho-facies in an hydrocarbon reservoir, SW Iran*, Scientific Quarterly Journal, GEOSCIENCES, In Press, (in Persian).

21. Mollajan A. Memarian H. *Tokhmechi B.*, 2013, *Proposing a new integral method for fluid type identification from petrophysical logs in a carbonate reservoir*, Energy, Exploration & Exploitation, Vol. 31, No. 6, pp. 895-908.

22. *Tokhmechi B.* Mamarabadi M., 2012, *Using Bacillus cereus as a geo-biological marker for gold prospecting in Iran*, International Journal of Mining and GeoEngineering, Vol 4.6, No. 1 pp. 103-115.

23. Mollajan A. Memarian H. *Tokhmechi B.*, 2012, *Reservoir fluid type identification from petrophysical logs using pattern recognition methods*, Journal of Iranian Petroleum Geology, Vol. 2, No. 2, pp. 20-34 (in Persian).

24. Asgarinezhad Y. *Tokhmechi B.* Sherkati S., 2012, *Using signal processors for better discrimination of vuggy porosity from other porosities*, Exploration and Production, Vol. 96, pp. 91-98 (in Persian).

25. Asgarinezhad Y. Sherkati S. *Tokhmechi B.*, 2011, *Differentiation between vugular porosity and other kinds of porosities using signal processing operators,* Exploration and Production, Vol. 85, pp. 67-71 (in Persian)

26. Javid M. *Tokhmechi B.*, 2012, *Formation interface detection using Gamma Ray log, A novel approach,* Journal of Mining and Environment, Vol. 3, No. 1, pp. 31-40.

27. Shademan M. *Tokhmechi B.* Khayrollahi H., 2012, *Presenting a valid approach for drawing pseudo geological maps using airborne geophysical data clustering,* Iranian Journal of Mining Engineering, Vol. 7, No. 16, pp. 1-12 (in Persian).

28. Shademan M. *Tokhmechi B.*, 2012, *Comparison of Clustering Methods in Mineral Potential Mapping,* Scientific Quarterly Journal, GEOSCIENCES, In Press (in Persian).

29. Shiri Y. *Tokhmechi B.* Zarei Z. Koneshloo M., 2012, *Self-Affine and ARX-Models Zonation of Well Logging Data,* Physica A: Statistical Mechanics and its Application, Vol. 391, No. 21, pp. 5208-5214.

30. Mamarabadi M. *Tokhmechi B.*, 2012, *Signal processing approaches as novel tools for the clustering of enzymes,* Iranian Journal of Biothechnology, Vol. 10, No. 3, pp. 175-183.

31. Masoudi P. *Tokhmechi B.* Ansari Jafari M. Zamanzadeh M. Sherkati S., 2012, *Application of Bayesian in determining productive zones by well log data in oil wells,* Journal of Petroleum Science & Engineering, Vol. 94-95, pp. 47-54.

32. Masoudi P. *Tokhmechi B.* Ansari Jafari M. Bashari A., 2012, *Identifying productive zones of Sarvak Formation by integrating outputs of different classification methods,* Journal of Geophysics & Engineering, Vol. 9, pp. 282-290.

33. Khorram F. Memarian H. *Tokhmechi B.* Soltanian Zadeh H., 2012, *Limestone Chemical Component Estimation using Image Processing & Pattern Recognition Techniques,* Journal of Mining and Environment, Vol. 2, No. 2, pp. 49-58.

34. Shafiezadeh M. Ziaee M. *Tokhmechi B.*, 2012, *A new method for fracture identification of image logs in hydrocarbon reservoirs,* Petroleum and Energy, Vol. 64, pp. 58-67 (in Persian).

35. Masoudi P. *Tokhmechi B.* Ansari Jafari M. Zamanzadeh M., 2011, *Application of fuzzy classifier fusion in determining productive zones in oil wells,* Energy Exploration & Exploitation, Vol. 30, No. 3, pp. 403-416.

36. Khorram F. Memarian H. *Tokhmechi B.* Soltanian Zadeh H., 2011, *Image processing, A tool for identification of mineral properties,* Journal of Iranian Mining Engineering Organization, Vol. 13, pp. 3-13 (in Persian).

37. Javid M. Memarian H. Aghaeizadeh Zrofi R. *Tokhmechi B.* Khoshbakht F. Mazhari S.M., 2011, *Fracture detection from resistivity image logs using image processing and genetic algorithm techniques,* Petroleum Research, Vol. 72, pp. 85-98, (in Persian).

38. ***Tokhmechi B.*** Memarian H. Rasouli V. Ahmadi Noubari H. Moshiri B., 2011, *Investigating the validity of conventional joint set clustering methods,* Engineering Geology, Vol. 118, pp. 75-81.

39. Masoudi P. ***Tokhmechi B.*** Zahedi A. Ansari Jafari M., 2011, *Developing a Method for Identification of Net Zones Using Log Data and Diffusivity Equation,* Journal of Mining and Environment, Vol. 2, No. 1, pp. 53-60.

40. Azizi H. ***Tokhmechi B.*** Ahmadi Noubari H. Jabedar Maralani P. Memarian H., 2011, *The importance of optimum mother wavelet selection for data decomposition in earth sciences,* Iranian Journal of Geology, Vol. 15, pp. 63-76, (in Persian).

41. Mazaheri A. Memarian H. ***Tokhmechi B***. Moshiri B., 2011, *Porosity estimation with data fusion (Bayesian theory) approach in one of the wells of Azadegan oil field, Iran,* Journal of Iranian Petroleum Geology, Vol. 1, pp. 89-106 (in Persian).

42. Mazaheri A. Memarian H. ***Tokhmechi B***. Moshiri B., 2011, *Porosity estimation with data fusion (Bayesian theory) approach and comparison with multi layer neural network and multiple linear regression techniques in one of the wells of Azadegan oil field, Iran,* Journal of Iranian Petroleum Geology, Vol. 1, No. 1, pp. 89-106, (in Persian).

43. *Soroush H. Rasouli V.* ***Tokhmechi B.*** 2010, *A data processing algorithm proposed for identification of breakout zones in tight formations: A case study in Barnett gas shale***,** Journal of Petroleum Science and Engineering, Vol. 74, pp. 154-162.

44. ***Tokhmechi B.*** Memarian H. Rezaee M.R., 2010, *Estimation of the fracture density in fractured zones using petrophysical logs*, Journal of Petroleum Science and Engineering, Vol. 72, pp. 206-213.

45. *Soroush H. Rasouli V.* ***Tokhmechi B.*** 2010, *A combined Bayesian-Wavelet-Data Fusion approach proposed for borehole enlargement identification in Carbonates***,** Journal of Rock Mechanics and Mining Sciences, Vol. 47, pp. 996-1005.

46. ***Tokhmechi B.*** Memarian H. Ahmadi Noubari H. Moshiri B., 2010, *A new method for joint set classification based on Bayesian optimum classifier,* Scientific Quarterly Journal, Geosciences, Tehran, Iran, Vol. 71, pp. 115-122, (in Persian).

47. ***Tokhmechi B.*** Memarian H. Ahmadi Noubari H. Moshiri B., 2009, *A novel approach for fracture Zone detection using petrophysical logs,* Journal of Geophysics and Engineering, Vol. 6, pp. 365-373.

48. ***Tokhmechi B.*** Memarian H. Rasouli V. Ahmadi Noubari H. Moshiri B., 2009, *Fracture Zones Detection Using Wavelet Decomposition of Water Saturation Log,* Journal of Petroleum Science and Engineering, Vol. 69, pp. 129-138.

49. ***Tokhmechi B.*** Memarian H. Moshiri B. Ahmadi Noubari H., 2009, *New technique for joint set classification based on MLP neural network method,* The Journal of Earth, Vol. 4, No. 1, pp. 11-27, (in Persian).

50. Eskandari S. Madani H. Rasouli V. ***Tokhmechi B.***, 2008, *Optimization of future drilling points in No. 3 Gol Gohar Iron mine using fractal-Gaussian sequential simulation method*, Iranian Journal of Mining Engineering, Vol. 3, No. 5, pp. 11-19, (in Persian).

51. Jalali M.M. ***Tokhmechi B.,*** 2005*, Using of fractal concepts for study of effectiveness,* The Journal of Managment Studies, Vol. pp., (in Persian).

52. ***Tokhmechi B.***, 2004*, The use of the fractal method for simulation of the topographic surfaces,* The Journal of Amir Kabir, Vol. 59.D, pp. 41 – 52, (in Persian).

Conference Papers:

1. Moradi M. **Tokhmechi B.** Masoudi P., 2015, *A discussion about validity and adaptation between electrofacies and geological facies*, 33th Symposium on Geosciences, Geological survey of Iran, 7 pages.

2. Moradi M. **Tokhmechi B.** Masoudi P. Ramezani O., 2015, *Evaluation of production capability of the reservoir using clustering techniques*, 33th Symposium on Geosciences, Geological survey of Iran, 7 pages.

3. Moradi M. **Tokhmechi B.** Masoudi P., 2014, *Reservoir facies detection using KNN classifier*, 2nd Iranian National Oil and Gas Conference, Kerman, Iran, 4 pages.

4. Sedigh M. **Tokhmechi B.** Rasuli V. Bahreini R, 2014, *Selection a fine equation for Uniaxial compressive Rock Strength Estimation without core tests*, Third National Conference of Hydrocarbon Reservoirs and Upstream, Tehran, Iran, 12 pages.

5. Sedigh M. **Tokhmechi B.** Rasuli V. Gity M.M, 2014, *Effect of Formation Resisitivity on Modifying Shear Wave Velocity Estimation*, Third National Conference of Hydrocarbon Reservoirs and Upstream, Tehran, Iran, 13 pages.

6. Velayati A. Soltanian H. **Tokhmechi B.** Kazemzadeh A. Pourmazaheri Y., 2014, *Investigation the effect of decreasing filter and cement free water in gas migration*, Third National Conference of Hydrocarbon Reservoirs and Upstream, Tehran, Iran, 13 pages.

7. Velayati A. Soltanian H. **Tokhmechi B.** Kazemzadeh A. Pourmazaheri Y., 2014, *Investigation the gas migration in cement and effective parameters*, Third National Conference of Hydrocarbon Reservoirs and Upstream, Tehran, Iran, 13 pages.

8. Ahmadi M. *Tokhmechi B.* Koneshloo M. Mazhari M. MohammadNia M., 2014, *A backtracking search algorithm for fractured zone identification in Bangestan formation using petrophysical logs,* 32th Symposium and 1st International Congress on Geosciences, Geological survey of Iran, 7 pages.

9. Masoudi P. *Tokhmechi B.* Memarian H. GhiasiNasab M., 2014, *Development of Scale-based Categorization of Geoscience Projects in Iran,* 32th Symposium and 1st International Congress on Geosciences, Geological survey of Iran, 8 pages.

10. Tirdad S. *Tokhmechi B.* Doulati Ardejani F. HajiAbadi A., 2014, *Lithological Units Detection Using K-means clustering algorithm, Case Study: Eastern Alborz, Iran,* 32th Symposium and 1st International Congress on Geosciences, Geological survey of Iran, 5 pages.

11. Gheiratmand H. Koneshloo M. Rezaee H. *Tokhmechi B.*, 2014, *A methodology to construct training image for dykes of sungun copper mine deposit in 2D geostatistical simulation study,* 32th Symposium and 1st International Congress on Geosciences, Geological survey of Iran, 5 pages.

12. Pirgharebagh M. *Tokhmechi B.* Eskandari M.M. Baziar H., 2014, *Experimental investigation of temperature effect on performance of water – based glycol drilling mud,* National Reservoir Conference, Tehran, Iran, 5 pages.

13. AmirShakoori A. Jalali A. Bamdad M. *Tokhmechi B.*, 2013, Classification of Cardiac arrhythmia with the approach of optimization of classifiers and ordered weighted averaging parameters, 5th Iranian Conference on Electrical and Engineering (ICEEE2013), Gonabad, Iran, 8 pages.

14. Ghoreishi F. *Tokhmechi B.* Roshandel Kahoo A. Ahmadi Noubari H., 2013, *A critical viewpoint on upscaling of signals in oil industry*, 1st National Conference on Novelty in Computer and Information Technology, Tonekabon, Iran, 7 pages.

15. Masoudi P. *Tokhmechi B*. Memarian H. Ghiasi Nasab M., 2013, *Scale-based Categorization of Geoscience Projects in Iran*, 1st National Conference on Exploration Engineering of Underground Resources, Shahrood, Iran, 7 pages.

16. Keshavarz A. Hasanpour H. *Tokhmechi B*., 2013, *Intelligent Detection of Fracture Zone Using Petrophysical Logs*, 1st National Conference on Exploration Engineering of Underground Resources, Shahrood, Iran, 6 pages.

17. Seifollahi M. *Tokhmechi B*. Soleimani A. Ahmadyfard A., 2013, *Intelligent detection of fractures in carbonate borehole using image logs*, 1st National Conference on Exploration Engineering of Underground Resources, Shahrood, Iran, 7 pages.

18. Alhoseini S.H. Afzal P. **_Tokhmechi B._** Kaveh Ahangran D., 2013, _C-N and C-V Multifractal Modelling for delineation of proper parts of C₁ Coking coal seam in North block of East-Parvade coal deposit_, 1st National Conference on Exploration Engineering of Underground Resources, Shahrood, Iran, 6 pages.

19. Sahragard E. **_Tokhmechi B._** Memarian H. Koneshloo M., 2013, _Evaluation of the fracture intensity in fracture modeling using petrophysical logs_, 1st National Conference on Exploration Engineering of Underground Resources, Shahrood, Iran, 7 pages.

20. Ghoreishi F. **_Tokhmechi B._** Roshandel Kahoo A. Ahmadi Noubari H., 2013, _A critical viewpoint on common upscaling techniques_, 1st National Conference on Exploration Engineering of Underground Resources, Shahrood, Iran, 7 pages.

21. Khayer K. Moradzadeh A. **_Tokhmechi B_**., 2013, _Determination of Archie's coefficients in a carbonate reservoir in southern Iran_, 1st National Conference on Exploration Engineering of Underground Resources, Shahrood, Iran, 6 pages.

22. Khayer K. Moradzadeh A. **_Tokhmechi B_**., 2013, _Determination of Archie's tortuosity factor from Stanley waves in carbonate reservoirs_, 1st National Conference on Exploration Engineering of Underground Resources, Shahrood, Iran, 6 pages.

23. Tirdad S. **_Tokhmechi B_**. Doulati Ardejani F. Hajiabadi A., 2013, Detecting Lithological Boundaries of a Satellite Image Using Wavelet Transform and SVM, 1st National Conference on Exploration Engineering of Underground Resources, Shahrood, Iran, 6 pages.

24. Faramarzi A. **_Tokhmechi B._** Ansari Jafari M. Heidari A., 2013, _Interpretation of natural fractures using image logs in one of Iranian south oil fields,_ The First Iranian National Oil and Gas Symposium, Kerman, Iran, 4 pages.

25. Pirgharebagh M. **_Tokhmechi B._** Bazyar H., 2013, _Experimental study of glycol effect and its cloudy point on swelling of active shale on water-based drilling glycol muds compatible with environment,_ The First International Conference on Mining, Mineral Processing, Metallurgical and Environmental Engineering, Zanjan, Iran, 6 pages.

26. Pirgharebagh M. **_Tokhmechi B._** Eskandari M.M., 2013, _Experimental investigation of Potassium Chloride and Sodium Chloride effect in drilling of swelling shales in water-based glycol muds compatible with environment,_ The First International Conference on Mining, Mineral Processing, Metallurgical and Environmental Engineering, Zanjan, Iran, 5 pages.

27. Hematian M.R. **_Tokhmechi B._** Rasouli V. Gholami R., 2013, _Investigation the effect of formation on ultimate strength of casing in oil wells,_ The First International Conference on Mining, Mineral Processing, Metallurgical and Environmental Engineering, Zanjan, Iran, 7 pages.

28. Hematian M.R. **_Tokhmechi B._** Rasouli V. Gholami R., 2013, _Determination Strength, elastic and in-situ stress parameters using the well_ logs for wellbore stability, The First International Conference on Mining, Mineral Processing, Metallurgical and Environmental Engineering, Zanjan, Iran, 7 pages.

29. Nasiri J. **_Tokhmechi B._** Rezaee M.R., 2013, _Determination of Pay Zones and Potential Areas for Hydraulic Fracturing in Shale Gases by TOC Estimator Model._ The First International Conference on Mining, Mineral Processing, Metallurgical and Environmental Engineering, Zanjan, Iran, 6 pages.

30. Vaezian S. **_Tokhmechi B._** Rezaei M.R. Vaezian A., 2013, _TOC estimation using ΔlogR and neural network method in Kockatea shale formation_, The First International Conference on Mining, Mineral Processing, Metallurgical and Environmental Engineering, Zanjan, Iran, 7 pages.

31. **_Tokhmechi B._** Mamarabadi M. Abdollahi M., 2013, _Using Bacillus cereus as a geo-biological marker for Iranian gold prospecting_, 3rd National Congress of Agriculture Biotechnology, 3 Pages.

32. Nikogoftar H. Bahroodi A. **_Tokhmechi B._** Norouzi A. Mehrgini B., 2012, _Markov chain a tool for litho-facies modeling in hydrocarbon reservoirs,_ 31th Symposium on Geosciences, Geological survey of Iran, 10 pages.

33. Sedigh S. Memarian H. **_Tokhmechi B._**, 2012, _Selection of optimum lithology clustering method in oil sequences,_ 31th Symposium on Geosciences, Geological survey of Iran, 9 pages.

34. Masoudi P. Mazaheri A. **Tokhmechi B.** Moshiri B. Memarian H., 2012, *Application of data fusion in exploration of optimum pay zone*, Third National Congress of Iranian Petroleum Engineering, Tehran, Iran, 8 Pages.

35. Khorram F. Memarian H. **Tokhmechi B.** Soltanian Zadeh H., 2012, *Lithological Classification Using Image Processing Technique,* SME Annual Meeting and Exhibition, Washington, USA, 8 pages.

36. Asgarinezhad Y. **Tokhmechi B.** Kamkar Roohani A. Sherkati S., 2012, *The role of vuggy porosity in the rate of recovery of hydrocarbons in fractured carbonate reservoirs*, The First National Conference of Hydrocarbon Reservoir Engineering, Related Sciences and Industries, Tehran, Iran, 11 pages.

37. Seifallahi M. **Tokhmechi B.** Soleamani A. Ahmadi Fard A., 2012, *A novel methodology for fracture extraction from Borehole image logs*, The First International Conference of Oil, Gas, Petrochemical and Power Plant, Tehran, Iran, 6 pages.

38. Majlesi Koupaei M.J. **Tokhmechi B.** Rezaee M.R. Fathianpour N. Jodi M., 2012, *Formation separation using frequency properties of Neutron log*, The First International Conference of Oil, Gas, Petrochemical and Power Plant, Tehran, Iran, 7 pages.

39. Majlesi Koupaei M.J. **Tokhmechi B.** Rezaee M.R. Fathianpour N. Jodi M., 2012, *Formation detection by distinguishing frequency behavior of layers in well logs*, 4th Iranian Mining Engineering Conferences, University of Tehran, Tehran, Iran, 6 pages.

40. Nasiri J. **Tokhmechi B.** Rezaee M.R., 2012, *Designing a modeling machine in homogenous subspaces in order to estimation of TOC*, 4th Iranian Mining Engineering Conferences, University of Tehran, Tehran, Iran, 7 pages.

41. Nasiri J. **Tokhmechi B.** Rezaee M.R., 2012, *TOC estimation using wavelet neural network from well log data*, The First International Conference of Oil, Gas, Petrochemical and Power Plant, Tehran, Iran, 10 pages.

42. Rahimzadeh M. Azadeh Monfared H. **Tokhmechi B.** Rezaee M.R., 2012, *Kerogen type Evaluation of Source Rocks in Perth Basin in Western Australia*, Conference of Zagros Oil Geology, Dareh Shahr, Ilam, Iran, 6 pages.

43. Rahimzadeh M. **Tokhmechi B.** Rezaee M.R. Azadeh Monfared H., 2012, *Kerogen type and Hydrocarbon Potential Evaluation Using by of Rock Eval Parameters in Formation with the Coal vein*, 1st Iranian Coal Congress, Shahrood, Iran, 7 pages.

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