Arash Dahi Taleghani

Contact Information

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Education

- Ph.D. in Petroleum Engineering, *The University of Texas at Austin*, Austin, TX, USA, 2009
- M.S. in Structural Mechanics and Material, *Sharif University of Technology*, Tehran, Iran, 2003
- B.S. in Civil Engineering, *Sharif University of Technology*, Tehran, Iran, 2001

License and Certificate

- Registered Professional Petroleum Engineer in the state of Texas (PE) since 2013
- Certified GARP Energy Risk Professional (ERP), 2016

Professional Experience

- Associate Professor of Petroleum Engineering, Department of Energy and Mineral Engineering, *Pennsylvania State University*, 2017–Present
- Associate Professor, Department of Petroleum Engineering, *Louisiana State University*, 2015–2017
- Assistant Professor, Department of Petroleum Engineering, *Louisiana State University*, 2009–2015
- Summer Intern, *Schlumberger Data and Consulting Services*, 2007
- Summer Intern, *Schlumberger Data and Consulting Services*, 2006
- Summer Intern, Asia Pacific Department, *International Monetary Fund*, 2002
- Research/Teaching Assistant, Petroleum Engineering, *The University of Texas at Austin*, 2004-2009
- Research/Teaching Assistant, Dept. of Civil Engineering, *Sharif University of Technology*, 2003-2004
- Engineer, *Ghana-Beton Construction Company* 2001-2003

Awards, Honors, and Appointments

- Editorial Board Member of the Journal of Multiscale Science and Engineering published by Springer
- SPE Eastern North America Regional Completion Optimization and Technology Award, 2017
- NCEES PE Petroleum Exam Committee member since 2017
- Recognized as a "Future Leader" by American Rock Mechanics Association
- Wellbore Stimulation and Production Enhancement Committee SPE ATCE 2017
- Co-director of Unconventional Oil and Gas Summer School, Dubrovnik, Summer 2016
- SPE Scholarship and Fellowship Committee (2015-2016)
- LSU Foundation Tigers Undergraduate Teaching Award, 2015
- Co-director of Petroleum Engineering Summer School, Dubrovnik, Summer 2015
- SPE Distinguished Achievement Award for Petroleum Engineering Faculty, 2014
- Associate Editor for ASME Journal of Energy Resources and Technology, since 2013
- SPE Petroleum Engineering Junior Faculty Research Initiation Award, 2012

Research Interest

- Injectivity changes and sand production in injector wells
- Drill bit and rock interactions
- Mechanics and oilfield application of shape memory polymers
- Development of loss circulation materials
- Wellbore integrity
- Generalized finite element methods
- Petroleum geomechanics
- Hydraulic refracturing materials (diverters)
- Petroleum geomechanics
- Enhanced geothermal systems
- Hydraulic fracturing simulation and design
- Atomistic modeling of fracture propagation in heterogeneous media

Patents

- Cement materials including shape memory polymer and methods of making cement materials, Filed September 2016
- Thermally triggered loss circulation materials (LCM) for efficient drilling in fractured reservoirs, Filed July 2016
- Methods of treating oil and gas well fractures, AD Taleghani, G Li - US Patent App. 15/668,957, 2018

Teaching

- Undergraduate level: Production Engineering, Numerical Methods; Well Logging, Mechanical Earth Modelling, Unconventional Reservoirs
- Graduate level: Advanced Wellbore Stimulation; Petroleum Rock Mechanics
- Industry Short Courses: Overview of the Hydraulic Fracturing Design, Rock Mechanics for Drillers, Sand production; Prediction and Mitigation

Consulting Service to the Industry

- Sonatrach, Algeria. 2018.
- INA, Croatia, 2016-2018.
- Shell, Houston, TX. 2015-2016
- Battelle, West Palm Beach, FL 2014
- Merlyn Energy, 2013
- PEMEX 2010-2013
- Expert witness in multiple legal mitigation since 2013

Invited Talks

- SMP Sealing Additives for Cementing Oil and Gas Wells, Halliburton Cement Leaders Forum, Houston, TX, October 5th, 2016.
- Smart Expandable Loss Circulation Materials, American Association of Drilling Engineering Technical Forum, New Orleans, September 9th, 2016.
- Hydraulic Fracturing Design, Petroleum Engineering Summer School (PESS), Workshop 37, June 15nd to June 19th 2015 in Dubrovnik by University of Zagreb.
- Failure Problems in Petroleum Geomechanics, Civil Engineering Department at Sharif University of Technology, April 12th, 2015.
- Hydraulic Fracturing With Special Focus on Treatments in Naturally Fractured Reservoirs, Petroleum Engineering Summer School (PESS), Workshop 37, June 2nd to June 6th 2014 in Dubrovnik by University of Zagreb.

- Geomechanics as a Tool for Better Understanding of Drilling Challenges, AADE New Orleans Chapter Technical Symposium, June 5th, 2014, New Orleans, LA.
- Failure Problems in Petroleum Geomechanics, University of Texas at Austin, April 2014, Austin, TX.
- Geomechanics: A New Look for Better Understanding of Drilling Challenges, AADE Deepwater and Emerging Technology Study Group Forum, March 20th, 2014, Houston, TX.
- Natural fractures interaction with hydraulic fractures: A Multi-scale problem, University of Southern California, March 13th, 2014, Los Angeles, CA.
- Interactions between natural fractures and growing hydraulic fracture network, presented at SPE Evangeline chapter, February 14th, 2014, Lafayette, Louisiana
- Opening of Cemented Natural Fractures in Hydraulic Fracturing: A length scale problem, Graduate seminar, University of Kansas, November 11th, 2013.
- Hydraulic fractures interaction with Natural fractures, 11-13 September, 2013 at the Terranea Resort in Palos Verdes, California, Hydraulic Fracturing Mechanics Considerations for Unconventional Reservoirs Workshop
- EPA technical workshop on Well Construction/Operation and Subsurface Modeling, April 16-17, 2013, DOE research triangle complex (RTP), NC
- Houston Geomechanics Group, Growth of Multi-Stranded Hydraulic Fractures and Its Implications on Frac Jobs Design and Implementation, April 2012.

Papers

Peer-Reviewed Publications

1. Puyang, P., A. Dahi Taleghani, B. Sarker, Optimal natural fracture realizations by minimizing least squared errors of distances from microseismic events, *Accepted for publication in Journal of Applied Geophysics*
2. Lui, K., D. Gao, A. Dahi Taleghani, Analysis on Integrity of Cement Sheath in the Vertical Section of Wells during Hydraulic Fracturing, *Accepted for publication in Journal of Petroleum Science and Engineering*.
3. Yu, H, A. Dahi Taleghani, Modelling Casing Wear at Doglegs by Incorporating Alternate Accumulative Wear, *Accepted for publication in Journal of Petroleum Science and Engineering*.
4. Santos, L., A. Dahi Taleghani, G. Li, 2018, Expandable Proppants to Moderate Production Drop in Hydraulically Fractured Wells, Journal of Natural Gas Science and Engineering, Volume 55, Pages 182-190.
5. Klimenko,D., A. Dahi Taleghani, 2018, A modified extended finite element method for fluid-driven fractures; Incorporating variable primary energy loss mechanism, International Journal of Rock Mechanics and Mining Sciences, Volume 106, June 2018, Pages 329-341.
6. Mansour, A., A. Dahi Taleghani, S. Salehi, Smart Lost Circulation Materials for Productive Zones, *Accepted for publication inJournal of Petroleum Exploration and Production Technology*.

7. Dahi Taleghani, A., M. Gonzalez, H. Yu, H. Asala, 2018, Numerical Simulation of Hydraulic Fracture Propagation in Naturally Fractured Formations Using The Cohesive Zone Model, Journal of Petroleum Science and Engineering 165, 42-57.

8. Jiang, Y., A. Dahi Taleghani, 2018, Modified Extended Finite Element Methods for Gas Flow in Fractured Reservoirs; a Pseudo-Pressure Approach, ASME Journal of Energy Resources Technology, 140(7), p.073101.

9. Bautista, J.F., A. Dahi Taleghani, 2017, Prediction of Damage at Water Injectors Wells in Unconsolidated Formations, Journal of Petroleum Science and Engineering, 164, pp.1-10.

10. Ahmadi, M., Dahi-Taleghani, A., 2017, Thermoporoelastic Analysis of a Single-well Closed-Loop Geothermal System, American Society of Civil Engineering, Poromechanics VI, pp. 602-609.

11. Sheikhrezaei, K., Dahi-Taleghani, A., 2017, Comparative Experimental Study of Rock Cutting Under High Confining Pressure and Atmospheric Conditions Using PDC Cutter, American Society of Civil Engineering, Poromechanics VI, pp 1900-1908.

12. Moayedi, M., A. Dahi Taleghani, G. Li, 2017, Smart Expandable Cement Additive to Achieve Better Wellbore Integrity, ASME. J. Energy Resour. Technol. 2017;139(6):062903-062903-8. doi:10.1115/1.4036963.

13. Wang W., A. Dahi Taleghani, 2017, Impact of Hydrauluc Fracturing on Cement Sheath Integrity; A Modelling Approach, Journal of Natural Gas Science and Engineering 44, 265-277.

14. Bautista, J.F., A. Dahi Taleghani, 2017, Dynamic Modeling of Injectivity Evolution in Unconsolidated Sands, Journal of Petroleum Science and Engineering 149, 256-269

15. Wang, W., Dahi-Taleghani, A., 2017, Emergence of Delamination Fractures around the Casing and Its Stability, Journal of Energy Resources Technology, Volume 39, Issue 1, Pages 012904-11. doi:10.1115/1.4033718.

16. Tabatabei, M., Dahi-Taleghani, A., 2017, Randomly distributed interfacial arc cracks within the inclusion-inhomogeneity-matrix system, Meccanica 52(4), 1123-1142, DOI 10.1007/s11012-016-0442-y

17. Bautista, J.F., A. Dahi Taleghani, 2016, The state of the art and challenges in geomechanical modeling of injector wells; a review paper, Accepted for publication in Journal of Energy Resources Technology.

18. Ahmadi, M., Dahi-Taleghani, A., 2016, Impact of Thermally Reactivated Micro-Natural Fractures on Well Productivity in Shale Reservoirs, a Numerical Study , Journal of Natural Gas Science and Engineering, Volume 35, Part A, September 2016, Pages 583-592.

19. Puyang, P., A. Dahi Taleghani, B. Sarker, 2016, An Integrated Modeling Approach for Natural Fractures and Post Treatment Fracturing Analysis: A Case Study, Journal of Interpretation November-January, Vol. 4, No. 4: pp. T493-T504.

20. Ahmadi, M., Dahi-Taleghani, A., and C. Sayers, 2016, The effect of fracture roughness on fracture compliance, Geophysical Journal International, Volume 205, Issue 1, Pp. 454-463.

21. Bedayat, H., Dahi Taleghani, A., Anisotropic Inhomogeneous Poroelastic Inclusions; with Application to Underground Energy related Problems, Journal of Energy Resources Technology, Volume 138, Issue 3, 032905.
22. Dahi Taleghani, A., A. Shojaei, M. Gonzalez, 2016, Overview of Numerical Models for Interactions between Hydraulic Fractures and Natural Fractures: Challenges and Limitations, Computers and Geotechnics, Volume 71, January 2016, Pages 361-368.
23. Dahi Taleghani, A., D. Klimenko, 2015, An Analytical Solution for Microannulus Cracks Developed Around the Wellbore, Journal of Energy Resources and Technology, 137(6):062901-062901-8.
24. Bedayat, H., Dahi Taleghani, A., 2015, Pressurized Poroelastic Inclusions: Short-term and Long-term Asymptotic Solutions, Journal of Rock Mechanics and Rock Engineering, pp. 1-9,10.1007/s00603-014-0705-7.
25. Bedayat, H., Dahi Taleghani, A., 2015, Eshelby Solution for Double Ellipsoidal Inhomogeneities: Applications in Geoscience, Computers & Geosciences, Volume 76, March 2015, Pages 72-79, ISSN 0098-3004, http://dx.doi.org/10.1016/j.cageo.2014.12.003.
26. Ameen, S., A. Dahi Taleghani, 2015, Dynamic Modeling of Channel Formation during Fluid Injection into Unconsolidated Formations, SPE Journal, 20(4) 689 - 700.
27. Gonzalez, M., A. Dahi-Taleghani, P. Puyang, J. Lorenzo and J. Le Calvez, 2014, Post-Treatment Assessment of Induced Fracture Networks, Hydraulic Fracturing Journal, Vol. 1, No 3, pp. 24-33.
28. Wang W., A. Dahi Taleghani, 2014, Three-Dimensional Analysis of Cement Sheath Integrity around Wellbores, Journal of Petroleum Science and Engineering vol. 121 p. 38-51.
29. Wang W., A. Dahi Taleghani, 2014, Simulating Multi-Zone Fracturing in Vertical Wells, Journal of Energy Resources and Technology, 136(4), 042902.DOI: 10.1115/1.4027691.
30. Shojaei, A., Dahi Taleghani, A., Li, G., 2014, A Continuum Damage Failure Model for Hydraulic Fracturing of Porous Rocks, International Journal of Plasticity, 59, 199-212. doi: http://dx.doi.org/10.1016/j.ijplas. 2014.03.003
31. Bedayat, H., Dahi Taleghani, A., 2014, Interacting Double Poroelastic Inclusions, Mechanics of Materials, 69(1), 204-212, doi: 10.1016/ j.mechmat. 2013.10.006
32. Ahmadi, M., Dahi-Taleghani, A., and C. Sayers, 2014, Direction Dependence of Fracture Compliance ratio induced by Slickensides, Geophysics, 79(4), C91-C96. doi: 10.1190/geo2013-0227.1
33. Dahi Taleghani, A., M. Ahmadi, J. Olson, W. Wang, 2014, Thermal Reactivation of Microfractures and its potential impact on Hydraulic Fractures Efficiency, SPE Journal 19 (05) pp. 761-770. doi: 10.2118/163872-PA
34. Dahi Taleghani, A., and J. Olson, 2013, How Natural Fractures Could Affect Hydraulic Fracture Geometry, SPE Journal Vol. 19, Issue 1, doi: 10.2118/167608-PA.
35. Dahi Taleghani, A., 2013, An Improved Closed-Loop Heat Extraction Method From Geothermal Resources. J. Energy Resources and Technology, 2013;135(4):042904-042904-7. doi:10.1115/1.4023175.

36. Dahi Taleghani, A. and J. Olson, 2011, Analysis of multi-stranded hydraulic fracture Propagation: an improved model for the interaction between induced and natural fractures, SPE 124884, SPE Journal, Volume 16, Number 3, September 2011.
37. Sayers, C., Dahi Taleghani, A., and J. Adachi, The Effect of Mineralization on the Ratio of Normal to Tangential Compliance of Fractures, Journal of Geophysical Prospecting, Geophysical Prospecting 57.3 (2009): 439-446.
38. Rafii-Tabar H., H.M. Shodja, M. Darabi and A. Dahi, 2006, Molecular Dynamics Simulation of Crack Propagation in Materials Containing Clusters of Impurities, Journal of Mechanics of Materials, Volume 38, Issue 3, March 2006, Pages 243-252.

SPE Conferences

39. Santos, L., A. Dahi Taleghani, G. Li, 2018, Smart Expandable Polymer Cement Additive to Improve Zonal Isolation, SPE-191822-MS presented at SPE Eastern Regional Meeting.
40. Yu, H., A. Dahi Taleghani, M. Gonzalez, Z. Lian, 2018, Is Complexity of Hydraulic Fractures tunable? A Question from Design Perspective, SPE-191809-MS presented at SPE Eastern Regional Meeting.
41. Liu, K., Gao, D.L., Taleghani, A. D., 2018. Integrity Failure of Cement Sheath Owing to Hydraulic Fracturing and Casing Off-Center in Horizontal Shale Gas Wells, SPE-191196-MS presented in SPE Trinidad and Tobago Section Energy Resources Conference, Port of Spain, Trinidad and Tobago.
42. Yu, H., A. Dahi Taleghani, 2018, Cement Placement in Severe Doglegs and Its Impact on Well Integrity: A Numerical Assessment, presented at the Unconventional Resources Technology Conference (URTeC) in Dallas, TX.
43. Mansour, A., A. Dahi Taleghani, 2018, Smart Loss Circulation Materials for Drilling Highly Fractured Zones, SPE-189413-MS, SPE/IADC Middle East Drilling Technology Conference and Exhibition, Abu Dhabi, UAE.
44. Mansour, A., A. Dahi Taleghani, G. Li, S. Salehi, 2017, Smart Lost Circulation Materials for Productive Zones, SPE-187099-MS presented in SPE Annual Technical Conference & Exhibition in San Antonio, TX.
45. Peyvandi, A, A. Dahi Taleghani, S. Soroushian, R. Cammatra, 2017, The Use of Low-Cost Graphite Nanomaterials to Enhance Zonal Isolation in Oil and Gas Wells, SPE-187105-MS presented in SPE Annual Technical Conference & Exhibition in San Antonio, TX.
46. Zhou, X., A. Dahi Taleghani, 2017, Imaging Three-Dimensional Complex Hydraulic Fracture Networks in Horizontal Wells Using Functionally-Graded Electromagnetic Contrasting Proppants, presented at the Unconventional Resources Technology Conference (URTeC) in Austin, Texas, 24-26 July 2017.
47. Santos, L., A. Dahi Taleghani, G. Li, 2017, Expandable Diverting Agents to Improve Efficiency of Refracturing Treatments, presented at the Unconventional Resources Technology Conference (URTeC) in Austin, Texas, 24-26 July 2017.

48. Watkins, T, J. Lorenzo, A. Dahi Taleghani, 2017, Recommendations from error analysis of single well microseismic data with full-wavefield moment tensor inversion: A case study, presented at the Unconventional Resources Technology Conference (URTeC) in Austin, Texas, 24-26 July 2017.

49. Mansour, A., A. Dahi Taleghani, G. Li, 2017, Smart Expandable LCM Materials; A theoretical and Experimental Study,presented in AADE National Technical Conference and Exhibition held April 11-12 in Houston, Texas.

50. Asala, H., M. Ahmadi, A. Dahi Taleghani, 2016, Why Re-fracturing works and Under what Conditions, SPE-181516-MS presented in SPE Annual Technical Conference & Exhibition in Dubai, UAE.

51. Dahi Taleghani, A., Li, G., Moayeri, M., 2016, The Use of Temperature-Triggered Polymers to Seal Cement Voids and Fractures in Wells, SPE-181384-MS presented in SPE Annual Technical Conference & Exhibition in Dubai, UAE.

52. Santos, L., A. Dahi Taleghani, Li, G., 2016, Smart Expandable Proppants to Achieve Sustainable Hydraulic Fracturing Treatments, SPE-181391-MS presented in SPE Annual Technical Conference & Exhibition in Dubai, UAE.

53. Bautista, J.F., A. Dahi Taleghani, 2016, Prediction of Formation Damage at Water Injectors Wells due to Channelization in Unconsolidated Formations, SPE-179032 presented in SPE International Conference and Exhibition on Formation Damage Control held in Lafayette, Louisiana.

54. Gonzalez, M., Dahi Taleghani, A., and P. Puyang, 2015, From Double-Cantilever Beam Test to Microseimic Maps: An Integrated Modeling Approach to Incorporate Natural Fractures Effect on Hydraulic Fracturing presentated at the Unconventional Resources Technology Conference held in San Antonio, Texas, USA, 20-22 July 2015.

55. Puyang, P., B. Sarker and A. Dahi Taleghani, 2015, Multi-Disciplinary Data Integration for Inverse Hydraulic Fracturing Analysis: A Case Study presented at the Unconventional Resources Technology Conference held in San Antonio, Texas, USA, 20-22 July 2015.

56. Gonzalez, M., Dahi Taleghani, A., and J. Olson, 2015, A Cohesive Model for Modeling Hydraulic Fracturing in Naturally Fractured Formations, SPE 173384-MS, presented at 2015 SPE Hydraulic Fracturing Technology Conference, 3-5 February, 2015 in The Woodlands, TX, USA

57. Hall, K., A. Dahi Taleghani, N. Dahi Taleghani, 2015, On Liability Issues Concerning Induced Seismicity in Hydraulic Fracturing Treatments and at Injection Disposal Wells: What Petroleum Engineers should know, SPE 173383-MS, presented at 2015 SPE Hydraulic Fracturing Technology Conference, 3-5 February, 2015 in The Woodlands, TX, USA

58. Hall, K., A. Dahi Taleghani, 2014, Using Technology to Avoid Trespass Liability Based on Subsurface Intrusions of Hydraulic Fractures, presented in 2014 Unconventional Resources Technology Conference (URTeC) in Denver, Colorado, 25-27 August 2014

59. Wang, W, and A. Dahi Taleghani, 2014, Cement Sheath Integrity During Hydraulic Fracturing; An Integrated Modeling Approach, SPE 168642-MS, SPE Hydraulic Fracturing Technology Conference in The Woodlands, TX, USA.

60. Dahi-Taleghani, A., P. Puyang, J. Le Calvez, J. Lorenzo, 2013, Post-Treatment Assessment of Induced Fracture Networks, SPE-166354-MS presented in SPE Annual Technical Conference & Exhibition in New Orleans, LA, USA.
61. Dahi-Taleghani, A., J. E. Olson, and W. Wang, 2013, Thermal Reactivation of Microfractures and its potential impact on Hydraulic Fractures Efficiency, SPE-163872-PP, presented at 2013 SPE Hydraulic Fracturing Technology Conference in The Woodlands, TX, USA.
62. Dahi Taleghani, A. and J.M. Lorenzo, 2011, An Alternative Interpretation of Microseismic Events during Hydraulic Fracturing SPE 140468-PP, presentation at the SPE Hydraulic Fracturing Technology Conference and Exhibition held in The Woodlands, Texas.
63. Dahi Taleghani, A. and J. Olson, 2009, Analysis of multi-stranded hydraulic fracture Propagation: an improved model for the interaction between induced and natural fractures, SPE MS. 124884, presented in SPE Annual Technical Conference & Exhibition in New Orleans, LA.
64. Olson, J., and A. Dahi Taleghani, Modeling simultaneous growth of multiple hydraulic fractures and their interaction with natural fractures, 2009 SPE 119739, SPE Hydraulic Fracturing Technology Conference in Woodlands, TX.
65. Sayers, C.M., S.M. Kisra, A. Dahi Taleghani, J. Adachi, Calibrating The Mechanical Properties and In-Situ Stresses Using Acoustic Radial Profiles, SPE-MS 110089 presented in SPE Annual Technical Conference & Exhibition in 2007, Houston.

Proceedings

66. Chebeir, J., Asala, H., Dahi-Taleghani, A., Romagnoli, J., 2017, The Application of Reservoir Simulation to the Optimization of Shale Gas Supply Chain Design and its Water Management Structure, Proceedings of the 27th European Symposium on Computer Aided Process Engineering, Vol. 40, 1st Edition, pp. 1435-1440, ISBN:9780444639707
67. Klimenko, D. , Dahi Taleghani, A., 2017, Modeling Hydraulic Fractures Propagation Considering Changing in the Primary Energy Loss Mechanism, presented in ARMA 51st U.S. Rock Mechanics/Geomechanics Symposium on 25-28 June in San Francisco, California, USA.
68. Mansour, A., Dahi Taleghani, A., 2017, Smart Lost Circulation Materials for Wellbore Strengthening, presented in ARMA 51st U.S. Rock Mechanics/Geomechanics Symposium on 25-28 June in San Francisco, California, USA.
69. Chebeir, J., Asala, H., Dahi-Taleghani, A., Romagnoli, J., 2017, The Application of Reservoir Simulation to the Optimization of Shale Gas Supply Chain Design and its Water Management Structure, Proceedings of the 27th European Symposium on Computer Aided Process Engineering, Barcelona, Spain, Oct. 1-5.
70. Chebeir, J.; Asala, H.; Geraili, A.; Dahi-Taleghani, A.; Romagnoli, J: Shale Gas Supply Chain Network Design and Operation, Incorporating Rigorous Well Simulation. Proceedings of the 2016 AIChE Annual Meeting, San Francisco, CA, Nov.13-18, 2016.
71. Chebeir, J, H. Asala, A. Dahi Taleghani and J. Romagnoli, 2017, Optimization of Shale Gas Supply Chain Network and Water Management Using Reservoir Simulation, presented at 13th Global Congress on Process Safety, San Antonio, TX.

72. Tabatabei, M., Dahi-Taleghani, A., 2016, Partial Annular Cracks Around Cemented Casing Interfaces, ARMA 16-0218, 50th US Rock Mechanics / Geomechanics Symposium held in Houston, TX, USA.
73. Ahmadi, M., Dahi-Taleghani, A., 2016, Feasibility Study of Heat Extraction from a Closed-loop Fractured Geothermal Reservoir; a Multiphysics problem, ARMA 16-0538, 50th US Rock Mechanics / Geomechanics Symposium held in Houston, TX, USA.
74. Bautista, J.F., A. Dahi Taleghani, 2016, The State of the Art and Challenges in Geomechanical Modeling of Injector Wells; A Review Paper, presented in OMAE ASME Conference, held in Busan South Korea.
75. Shojaei, A., A. Dahi Taleghani, 2015, A Continuum Damage Model with Application for Hydraulic Fractures Interaction with Natural Fractures, presented at 13th International Congress on Rock Mechanics (ISRM), Montréal, Canada.
76. Shojaei, A., A. Dahi Taleghani, 2015, A Continuum Damage Model to Predict Bit Performance Based on Single Cutter Experiments, presented at 13th International Congress on Rock Mechanics (ISRM), Montréal, Canada.
77. Dahi Taleghani, A., 2014, Overview of Models for Interactions Between Hydraulic Fractures and Natural Fractures: Challenges and Limitations, presented in International Conference on Recent Advances in Numerical Simulation of Hydraulic Fracture, held in Rzeszow, Poland, 14-16 July 2014.
78. Rostami, S., A. Dahi Taleghani, 2014, Modeling particle mobilization in unconsolidated formations due to fluid injection, at the 48th US Rock Mechanics/ Geomechanics Symposium held in Minnesota, USA.
79. Bedayat, H. and Taleghani, A., 2013, The Equivalent Inclusion Method for Poroelasticity Problems. Poromechanics V: pp. 1279-1288, doi: 10.1061/9780784412992.153
80. Dahi Taleghani, A. and P. Puyang, Efficiency of Multi-Zone Fracturing in Vertical Wells: A case study, Proceedings of the ASME 2013 32nd International Conference on Ocean, Offshore and Arctic Engineering, OMAE2013 June 9-14, 2013, Nantes, France.
81. Wang, W., Dahi Taleghani, A., 2012, Emergence and Propagation of Delamination Cracks along the Casing-Cement Interface, the 46th US Rock Mechanics / Geomechanics Symposium held in Chicago, IL, USA.
82. Bedayat, H., A. Dahi Taleghani , 2012, Drainage of Poroelastic Fractures and Its Implications on the Performance of Naturally Fractured Reservoirs, ARMA 12-562 at the 46th US Rock Mechanics / Geomechanics Symposium held in Chicago, IL, USA.
83. Rahmani, R., Smith, J.R., Dahi Taleghani, Analytical Modeling of PDC Single Cutter-Rock Interaction Under Confining pressure, ARMA 12-341 at the 46th US Rock Mechanics / Geomechanics Symposium held in Chicago, IL, USA.
84. Dahi Taleghani, A., 2011, Modeling Simultaneous Growth of Multi-branch Hydraulic Fractures. In 45th US Rock Mechanics/Geomechanics Symposium.
85. Dahi Taleghani, A., 2010, Fracture Re-Initiation as a Possible Branching Mechanism during Hydraulic fracturing, ARMA annual symposium, Salt Lake city, UT.
86. Sayers, C. M., J. Adachi, A. Dahi Taleghani, The effect of near-wellbore yield on elastic wave velocities in sandstones, SEG Annual Meeting Las Vegas, 2008.

Conferences without Proceedings

86. Yu, H., A. Dahi Taleghani, 2018, Coupled Modeling Of Complex Fracture Networks Induced During Hydraulic Fracturing Treatments, presented in 80th Annual conference of European Association of Geoscientists and Engineers.
87. Dahi Taleghani, A., 2017, On Modeling Sand Production in Water Injectors Operating in Unconsolidated Formations, presented in 2017 Deepwater Technical Symposium to be held on August 22 – 23, 2017 in New Orleans, LA.
88. Gonzalez-Chavez, M.A., Dahi Taleghani, A., 2016, Numerical Simulation of Hydraulic Fracture Propagation in Naturally Fracture Formations Using Cohesive Elements, South-Central Section, The Geological Society of America (GSA) 50th Annual Meeting, 21-22 March, Baton Rouge, LA, USA.
89. Klimenko, D., Dahi Taleghani, A., 2016, Hydraulic Fracturing Modeling by Utilizing Improved Extended Finite Element Method, South-Central Section, The Geological Society of America (GSA) 50th Annual Meeting, 21-22 March, Baton Rouge, LA, USA.
90. Ahmadi, M., Dahi Taleghani, A., 2016, Feasibility Study of Heat Extraction from a Closed-Loop Fractured Geothermal Reservoir; A Multiphysics Problem, South-Central Section, The Geological Society of America (GSA) 50th Annual Meeting, 21-22 March, Baton Rouge, LA, USA.
91. Watkins, T.L., Lorenzo, J., Dahi Taleghani, A., 2016, On Microseismic Events Associated with Fluid-Filled Fracture Propagation in Close Proximity to a Natural Fault, South-Central Section, Geological Society of America (GSA) 50th Annual Meeting, 21-22 March, Baton Rouge, LA, USA.
92. Bautista, J.F., A., Dahi Taleghani, 2015, Injectivity Changes During Injection in Poorly Consolidated Formations, presented in 2015 Deepwater Technical Symposium to be held on August 18 – 20, 2015 in New Orleans, LA.
93. Kilimenko, D., A., Dahi Taleghani, 2015, An Improved Extended Finite Element Method for Hydraulic Fracturing Propagation, 13th US National Congress on Computational Mechanics (USNCCM), July 26-30, San Diego, CA
94. Dahi Taleghani, A. and J.M. Lorenzo, 2014, Laboratory Experiments on Wave Emissions Generated by the Variable Viscosity of Fracturing Fluids, AGU Fall Meeting, 15-19 December, San Francisco, California.
95. Lorenzo J.M., A. Dahi Taleghani, 2014, Using Intermediate-Field Terms in Locating Microseismic Events, AGU Fall Meeting, 15-19 December, San Francisco, California.
96. Ahmadi, M., Dahi-Taleghani, A., 2014, Changes in Fracture Compliance Due to Roughness, AGU Fall Meeting, 15-19 December, San Francisco, California.
97. Gonzalez, M., A. Dahi-Taleghani, 2014, Influence of Natural Fractures Cohesive Properties on Geometry of Hydraulic Fracture Networks, AGU Fall Meeting, 15-19 December, San Francisco, California.
98. Shojaei, A., Dahi Taleghani, A., Interaction Analysis between Hydraulic Fractures and Natural Fractures, SIMULIA South Regional User Meeting October 21, 2014
99. Dahi Taleghani A., 2011, Fractures Interactions in Multistage Hydraulic Fracturing, presented at the AAPG 2011 Annual Convention & Exhibition in Houston, Texas, USA.
100. Olson, J., A. Dahi Taleghani, 2010, The Influence of Natural Fractures on Hydraulic Fracture Propagation, April 2010, AAPG Annual meeting, New Orleans, LA.
101. Colin M. Sayers, J. Adachi, A. Dahi Taleghani, 2008, The seismic response of partially mineralized fractures, presented in SEG Rock Physics Research Workshop, Galway, Ireland, 2008.

Book Chapters

102. Dahi-Taleghani and M. Ahmadi, 2013, Secondary Fractures and Their Potential Impacts on Hydraulic Fractures Efficiency, chapter in Effective and Sustainable Hydraulic Fracturing edited by Robert Jeffrey, published by InTech ISBN 980-953-307-651-0.

Departmental and University Service

- Elected to the LSU faculty Senate from College of Engineering, 2016.
- Elected to College Policy Committee at LSU College of Engineering, 2016.
- Search Committee, Department of Petroleum Engineering, LSU, 2010–2012.
- Faculty advisor for American Rock Mechanics (ARMA) chapter at LSU, 2012.
- Graduate Studies Examination Policy Committee, 2010.

Students Supervised

Main Advisor (Co-Advisor *)

- Houman Bedayat (PhD, Convergent Technologies)
- Milad Ahmadi (PhD, Chevron)
- Miguel Gonzalez (PhD, PEMEX)
- Wei Wang (PhD, Shell)
- Ting Tan*(PhD, Halliburton)
- Amir Shoajei (Postdoc, Halliburton)
- Volkan Kanat (M.E., Turkish Oil Co.)
- Ahmed Mansour (MS,)
- Mehdi Moayeri (MS,)
- Ping Puyang (MS, Hallburton)
- Trudy Watkins* (MS, Occidental)
- Chennu Fan (MS, U. of Min.)
- Sayamik Rostami-Ameen (MS, Weatherford)
- Livio Santos (MS, continue PhD)
- Juan Bautista (MS, EXA Co.)

Other Professional Activities

Referee	AAPG Bulletin, Journal of Energy Resources and Technology, SPE Journal, Journal of Petroleum Science and Technology, Journal of Transport in Porous media, Journal of Numerical and Analytical Methods in Geomechanics, Int. Journal of Fracture, Water Resources, Journal of Geophysical research, Geophysics, Int. Journal of Rock Mechanics and Mining Sciences, Energies, Geophysics Review Letters
Conference Topic Organizer	ASME OMAE 2014, ASME OMAE 2015, ARMA 2017, ASME OMAE 2017
Reviewer	National Science Foundation, American Chemistry Society, Department of Energy, Society of Petroleum Engineers
Membership	Society of Petroleum Engineers, American Rock Mechanics Association, American Association of Petroleum Geologists, Society of Exploration Geophysics, American Association of Mechanics Engineers

References

Available upon request.

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