Amin Mehrabian

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Dr. Amin Mehrabian is Associate Professor at the Energy and Mineral Engineering Department of Pennsylvania State University, and a former Principal R&D Engineer at Houston Technology Center of Halliburton. He specializes in the mechanics and physics of porous media involving the coupled processes of deformation, fracture, creep, transport, sorption, and electrochemistry. Mehrabian's research applies to the subsurface and wellbore problems of energy and storage, as well as rock and biological tissue characterization. His research group has produced technologies and digital solutions that are used at major energy companies. Mehrabian has authored forty-four (44) peer-reviewed publications. He holds two US patent grants on managed pressure drilling and wellbore hydraulics.

Professional Experience

- Associate Professor, Pennsylvania State University, July 2023 – Present.
- Assistant Professor, Pennsylvania State University, October 2017 – June 2023.
- Principal R&D Engineer, Halliburton Energy Services, October 2013 – September 2017.
- Postdoctoral Research Associate, University of Oklahoma, May 2013 – October 2013.

Education

- PhD, Petroleum Engineering, University of Oklahoma, 2013.
- MSc, Mechanical Engineering, Sharif University of Technology, 2006.
- BSc, Petroleum Engineering, Sharif University of Technology, 2005.
- BSc, Mechanical Engineering, Sharif University of Technology, 2004.

Taught Courses

1. PNG 460, *Subsurface Storage Engineering*, 3 credits, Undergraduate level.
2. PNG 450: *Drilling Design*, 3 credits, Undergraduate level.
3. PNG 451: *Drilling Laboratory*, 1 credit, multiple sections, Undergraduate level.
4. PNG 502: *Coupled Flow & Deformation in Porous Media* (*Poromechanics*), 3 credits, Graduate level.

Patents

1. A. Mehrabian, W. Zhang, P. Khodaparast, 2024, Benchtop wellbore hydraulics similitude, U.S. Patent Grant US12152450B2.
2. A. Mehrabian, S.G. Teodorescu, D.E. Jamison, 2018, Closed-loop managed pressure drilling with hydraulic modeling that incorporates an inverse model, US Patent Grant US9909374B2.

Peer-Reviewed Journal Publications

1. E. Tavakol[*], A. Mehrabian, 2025, Poroelastic origins of the Noordbergum effect, *Water Resources Research*, 100282977.
2. X. Su[*], D. Li, S. Li, A. Mehrabian, 2025, Stability of infill wellbores in dissimilar layers of depleted and confining rock, *Rock Mechanics and Rock Engineering*, 1-19.
3. X. Su[*], A. Mehrabian, 2024, Poroelastic and viscoelastic hallmarks in the response of porous and transversely isotropic beams to harmonic excitation, *Journal of Applied Mechanics*, 91(10), 101005.
4. Y. Wu[*], A. Mehrabian, S. Chen, Y. Abousleiman, 2024, Drained solution for elastoplastic stress of compressible matrix around a growing poroelastic inhomogeneity inclusion. *Journal of Engineering Mechanics*, 150(10), 04024074.
5. Y. Wu[*], A. Mehrabian, S. Chen, Y. Abousleiman, 2024, Time-dependent elastoplastic stress of an infinite matrix around a growing poroelastic inhomogeneity inclusion, *Journal of Engineering Mechanics*, 150(3), 04024002.
6. M. Alarfaj[**], A. Mehrabian, 2024. Scaling equations for annular flow of yield-power law fluid and drill cuttings, *Society of Petroleum Engineers Journal*, 29(01),106-117.
7. K. Nguyen[*], A. Mehrabian, A. Santra, A. Bathija, D. Phan, 2023, Lost circulation material design for near-wellbore transverse fractures, *Geoenergy Science and Engineering*, 231(A), 212384.
8. W. Zhang[*], A. Mehrabian, 2023, Coupled poromechanics and adsorption in multiple-porosity solids. *Physical Mesomechanics*, 26(4), 402-414.
9. W. Zhang[*], A. Mehrabian, 2023, Poromechanics constitutive relations and analytical solution for nonlinear gas transport and sorption in deformable rocks, *Transport in Porous Media,* 149, 853-890.
10. X. Su[*], A. Mehrabian, 2023, Variations of the in-situ stress within nonhomogeneous layers of the subsurface rock induced by changes in pore fluid pressure, *International Journal for Numerical and Analytical Methods in Geomechanics*, 47(9), 1637-1657.
11. X. Su*, K. Nguyen[*], A. Mehrabian, 2023, Cross-scale geomechanics of wellbores in depleted reservoirs, *Rock Mechanics and Rock Engineering*, 56, 4089-4107.
12. W. Zhang[*], A. Mehrabian, 2022, Full coupling of CO_2-CH_4 transport and sorption with solid deformation in gas shale enhances natural gas recovery and geological CO_2 storage capacity, *Journal of Natural Gas Science and Engineering*, 106, 104736.
13. K. Nguyen[*], A. Mehrabian, A. Bathija, A. Santra, 2022, Compression of particulate materials in wellbore fractures and enhancement of the wellbore breakdown limit, *Journal of Applied Mechanics*, 89(10): 101002.
14. X. Su[*], A. Mehrabian, 2022, The poroviscoelastodynamic solution to Mandel's problem, *Journal of Sound and Vibration*, 530, 116987.
15. X. Su[*], A. Mehrabian, 2022, The viscoelastic solution to Geertsma's subsidence problem, *Journal of Applied Mechanics*, 89(5), 051009.
16. K. Nguyen[*], A. Mehrabian, A. Santra, D. Phan, 2022, Tensile failure and fracture width of partially permeable wellbores with applications in lost circulation material design, *Society of Petroleum Engineers Journal*, 27(01), 465-487.

[*] Graduate research advisee

[**] Undergraduate research advisee

17. W. Zhang*, A. Mehrabian, 2021, Nonlinear and non-local analytical solution for Darcy–Forchheimer flow through a deformable porous inclusion within a semi-infinite elastic medium, *Journal of Fluid Mechanics*, 911, A49.
18. X. Su*, A. Mehrabian, 2021, Coupled poroelastic solutions for the reservoir and caprock layers with the overburden confinement effects, *Geomechanics for Energy and the Environment*, 25, 100215.
19. W. Zhang*, A. Mehrabian, 2021, Dimensionless solutions for the time-dependent and rate-dependent productivity index of wells in deformable reservoirs, *Society of Petroleum Engineers Journal*, 26(05), 2814-2836.
20. K. Nguyen*, A, Mehrabian, 2021, Method of images solution for an edge dislocation and a circular cavity in crystalline solids, *Physical Mesomechanics*, 24 (1), 20-31.
21. W. Zhang*, P. Khodaparast, A. Mehrabian, A. Shojaei, 2021, Scale model equations and optimization for annular flow of non-Newtonian fluids between eccentric and rotating cylinders, *Progress in Scale Modeling, an International Journal*, 2(1), 2.
22. A. Mehrabian, C. Liu, 2021, Mandel's problem reloaded, *Journal of Sound and Vibration*, 492, 115785.
23. W. Zhang*, A. Mehrabian, 2020, Poroelastic solution for the nonlinear injectivity of subsurface rocks with strain-induced permeability variations, *Water Resources Research*, 56(08), e2020WR027620.
24. W. Zhang*, A. Mehrabian, 2020, Poroelastic solution for the nonlinear productivity index of wells in stress-sensitive reservoir rocks, *Society of Petroleum Engineers Journal*, 26(1), 68-82.
25. A. Mehrabian, Y. Abousleiman, 2019, Poroelastic Solution to the Brazilian Test, *International Journal of Rock Mechanics and Mining Sciences*, 126, 104201.
26. A. Mehrabian, A.D. Perez, C. Santana, 2018, Wellbore stability analysis considering the weak bedding planes effect - a case study, *Society of Petroleum Engineers Drilling & Completion*, 33(4), 377-384.
27. C. Liu, A. Mehrabian, Y.N. Abousleiman, 2018, Poroelastic dual-porosity/dual-permeability after-closure pressure-curves analysis in hydraulic fracturing, *Society of Petroleum Engineers Journal*, 22 (01), 198-218.
28. A. Mehrabian, 2018, The poroelastic constants of multiple-porosity solids, *International Journal of Engineering Science*, 132, 97-104.
29. C. Liu, A. Mehrabian, Y. Abousleiman, 2018, Theory and analytical solutions to coupled processes of transport and deformation in dual-porosity dual-permeability poro-chemo-electro-elastic media, *Journal of Applied Mechanics*, 85(11), 111006-111018.
30. A. Mehrabian, Y.N. Abousleiman, 2018, Theory and analytical solution to Cryer's problem of N-porosity and N-permeability poroelasticity, *Journal of the Mechanics and Physics of Solids*, 118, 218-227.
31. A. Mehrabian, Y.N. Abousleiman, 2017, Letter to the Editor regarding "A fully dynamic multi-compartmental poroelastic system: Application to aqueductal stenosis", by D. Chou, JC Vardakis, L. Guo, BJ Tully, and Y. Ventikos, *Journal of Biomechanics*, 58, 241-242.
32. A. Mehrabian, Y.N. Abousleiman, 2017, Wellbore geomechanics of extended drilling margin and engineered lost circulation solutions, *Society of Petroleum Engineers Journal*, 22(04), 1178-1188.
33. A. Mehrabian, 2016, The stability of inclined and fractured wellbores, *Society of Petroleum Engineers Journal*, 21(05), 1518-1536.
34. A. Mehrabian, Y.N. Abousleiman, 2015, Geertsma's subsidence solution extended to layered stratigraphy, *Journal of Petroleum Science and Engineering*, 130, 68-76.

35. A. Mehrabian, D.E. Jamison, S.G. Teodorescu, 2015, Geomechanics of lost-circulation events and wellbore strengthening operations, *Society of Petroleum Engineers Journal*, 20(6), 1305-1318.
36. A. Mehrabian, Y.N. Abousleiman, 2015, Gassmann equations and the constitutive relations for multiple-porosity and multiple-permeability poroelasticity with applications to oil and gas shale, *International Journal for Numerical and Analytical Methods in Geomechanics*, Poromechanics Special Issue, 39(14), 1547-1569.
37. A. Mehrabian, Y.N. Abousleiman, T.B. Mapstone, C.A. El-Amm, 2015, Dual-porosity poroviscoelasticity and quantitative hydromechanical characterization of the brain tissue with experimental hydrocephalus data, *Journal of Theoretical Biology*, 384, 19-32.
38. A. Mehrabian, Y.N. Abousleiman, 2014, Generalized Biot's theory and Mandel's problem of multiple-porosity and multiple-permeability poroelasticity, *Journal of Geophysical Research: Solid Earth*, 119 (4), 2745-2763.
39. A. Mehrabian, Y.N. Abousleiman, 2013, Generalized poroelastic wellbore problem, *International Journal for Numerical and Analytical Methods in Geomechanics*, 37(6), 2727-2754.
40. A. Mehrabian, Y.N. Abousleiman, 2011, General solutions to poroviscoelastic model of human brain tissue, *Journal of Theoretical Biology*, 291(6), 105-118.
41. A. Mehrabian, F. Crespo, 2011, A new multi-sample EOS model for the gas condensate phase behavior analysis, *Oil & Gas Science and Technology–Revue d'IFP Energies Nouvelles*, 66(6), 1025-1033.
42. A. Mehrabian, Y.N. Abousleiman, 2009, The dilative intake of poroelastic inclusions an alternative to Mandel-Cryer effect, *Acta Geotechnica*, 4(4), 249-259.
43. M.T. Ahmadian, A. Mehrabian, 2006, Design optimization by numerical characterization of fluid flow through the valveless diffuser type micropumps, *Journal of Physics, Conf. Series*, 34, 379-384.

Peer-Reviewed Book Chapters

44. A. Mehrabian, V. Nguyen, Y. Abousleiman, 2019, Wellbore mechanics and stability in shale, In: *Sub-surface Science and Engineering of Shale*, Edited by: T. Dewers, M. Sanchez, and J. Heath, American Geophysical Union (AGU) Books: Wiley and Son.

Proceedings Publications

1. S. Alsadoon[**], A. Mehrabian, 2025, Porosity compaction and mean effective stress: suggested revisions for pore pressure and fracture gradient analysis through well logs, *SPE Annual Technical Conference and Exhibition*, 20–22 October, Houston, Texas.
2. E. Tavakol[*], A. Mehrabian, 2025, The role of geomechanics in pressure transient analysis for reservoir evaluation, *SPE Annual Technical Conference and Exhibition*, 20–22 October, Houston, Texas.
3. A. Mehrabian, Y. Wu[*], P. Khodaparast, 2024, Similitude-based technology to study wellbore hydraulics, *SPE Annual Technical Conference and Exhibition*, September 23-25, New Orleans, Louisiana.
4. A. Mehrabian, Y. Wu[*], SL Chen, Y. Abousleiman, 2024, Plastic deformation and resulting enhancement in caprock failure limit, *SPE Annual Technical Conference and Exhibition*, September 23-25, New Orleans, Louisiana.
5. K. Nguyen[*], A. Mehrabian, A. Santra, A. Bathija, D. Phan, 2024, *International Petroleum Technology Conference*, February 12-14, Dhahran, Kingdom of Saudi Arabia.

6. X. Su[*], A. Mehrabian, Stress Path of heterogenous rock layers within the subsurface, *SPE Annual Technical Conference and Exhibition*, October 16- 18, Houston, Texas.
7. K. Nguyen[*], A. Mehrabian, A. Santra, D. Phan, A. Bathija, 2023, Lost circulation material design for highly inclined or horizontal well sections, *Middle East Oil, Gas and Geosciences Show*, February 19-23, Manama, Bahrain.
8. X. Su[*], K. Nguyen[*], A. Mehrabian, 2022, Wellbore survey and drilling margin optimization for in-situ stress change and rotation around depleted reservoirs, *SPE Annual Technical Conference and Exhibition*, October 3- 5, Houston, Texas.
9. W. Zhang[*], A. Mehrabian, The Positive Effect of Geomechanics on Adsorption and Transport Processes During Co 2 Huff-N-Puff in Organic Shale, 2022, *SPE Annual Technical Conference and Exhibition*, October 3- 5, Houston, Texas.
10. K. Nguyen[*], A. Mehrabian, A. Santra, D. Phan, 2022, Lost circulation material design for engineered fracture gradient of drilling, *SPE Annual Technical Conference and Exhibition*, October 3- 5, Houston, Texas.
11. M. Alarfaj[**], W. Zhang[*], A. Mehrabian, 2022, Scaling equations for benchtop laboratory simulator of the wellbore hydraulics, *SPE Eastern Regional Meeting*, October 18-20, Wheeling, West Virginia.
12. T. Nosar[**], P. Khodaparast, W. Zhang[*], A. Mehrabian, 2021, Scaling formulae for the wellbore hydraulics similitude with drill pipe rotation and eccentricity, *SPE Middle East Oil & Gas Show and Conference*, May 24-27, Sanabis, Bahrain.
13. K. Nguyen[*], A. Mehrabian, 2020, A. Santra, Multi-modal particle size distribution of lost circulation material blend for controlling fluid losses from multiple fractures around inclined wellbores, *SPE Asia Pacific Oil & Gas Conference and Exhibition*, November 17-19, Virtual.
14. W. Zhang[*], A. Mehrabian, 2019, Poroelastic solution to the nonlinear productivity index of stress-sensitive reservoir rocks, *SPE Annual Technical Conference and Exhibition*, Sep 29 – Oct 02, Calgary, Alberta, Canada.
15. A. Mehrabian, A.D. Perez, and C. Santana, 2018, Wellbore stability solution incorporating the weak bedding planes effect with field case study, *IADC/SPE Drilling Conference and Exhibition*, 6-8 March, Fort Worth, Texas.
16. A. Mehrabian, S. Savari, D. Whitfill, Y. Abousleiman, 2017, Geomechanics of wellbore strengthening revisited: A combined theoretical and experimental approach with field case studies, *IADC/SPE Drilling Conference and Exhibition*, 14-16 March, Amsterdam, Netherlands.
17. A. Mehrabian, Y.N. Abousleiman, 2017, Multiple-porosity and multiple-permeability: Theory and benchmark analytical solution, *6th Biot Conference on Poromechanics*, July 9-13, Paris, France.
18. A. Mehrabian, Y. Abousleiman, 2016, Wellbore geomechanics of extended drilling margins and engineered lost circulation solutions, *50th US Rock Mechanics/Geomechanics Symposium*, 26-29 June, Houston Texas.
19. A. Mehrabian, Y. Abousleiman, 2012, Realizations of experimental hydrocephalus data through the analytical model of poroviscoelastic brain tissue, SBC2012-80192, *ASME Summer Bioengineering Conference*, June 20-23, Fajardo, Puerto Rico.
20. M.T. Ahmadian, A. Mehrabian, 2006, A new model for dynamic analysis of side mounted diffuser valve micropumps, ESDA2006-95038, ASME *8th Biennial Conference on Engineering Systems Design and Analysis*, July 4-7, Torino, Italy.

[**] Undergraduate research advisee

21. M.T. Ahmadian, M. H. Saidi, Amin Mehrabian, M. Bazargan, S. D. Kenarsari, 2006, Performance of valveless diffuser micropumps under harmonic piezoelectric actuation, ESDA2006-95281, *ASME 8th Biennial Conference on Engineering Systems Design and Analysis*, July 4-7, Torino, Italy**.**
22. A. Mehrabian, M. T. Ahmadian, Effect of actuation frequency on the performance of diffuser micropumps, ICNMM2006-96008, *ASME 4th Conference on Micro, Mini and Nano-Channels*, June 19-21, Limerick, Ireland.
23. M. H. Saidi, A. Mehrabian, 2005, Analysis of two-phase flow across a normal shock wave and relaxation zone with drift velocity effects, *IIR International Conference on Refrigeration*, August 30-31., 703-711, Vicenza, Italy

Invited Talks

1. Mehrabian A. 2025, Engineered fracture gradient of drilling through LCM compression testing and fractured wellbore stress solutions, TotalEnergies, Peau, France.
2. Y. Wu*, A. Mehrabian, S. Chen, Y. Abousleiman, 2023, Analytical solution for a poroelastic inclusion embedded within an elastoplastic matrix, Engineering Mechanics Institute Conference, June 6-9, Atlanta, Georgia.
3. Mehrabian A. 2022. Gas flow and sorption in deformable porous media, Hosted by the Poromechanics Committee of the Engineering Mechanics Institute of the American Society of Civil Engineers, Remote-Virtual.
4. A. Mehrabian, Cross-scale geomechanics of infill wellbores, 2022, Shell plc, October 4, Houston, Texas.
5. W. Zhang*, A. Mehrabian, 2021, Dimensionless solutions for the time-dependent and rate-dependent productivity index of wells in deformable reservoirs, Society of Petroleum Engineers Reservoir Simulation Conference, Oct 4-6, Galveston, Texas.
6. W. Zhang*, A. Mehrabian, 2021, The rate-dependent productivity index of wells in stress-sensitive reservoirs, Petroleum Engineering Department Heads Association, Virtual.
7. A. Mehrabian, 2019, Poroelastic solution to the Brazilian test, J. L. Corky Frank 58 Graduate Seminar Series, Texas A&M University, College Station, Texas.
8. Mehrabian, A., 2018, Engineered fracture gradient of drilling, Aramco Services Company, Houston, Texas.

Conference Presentations

1. A. Mehrabian, Y. Wu*, 2024, Scale Modeling of wellbore hydraulics: from theory to technology development, *SPE/PEDHA Workshop: Fueling the Future: Petroleum Engineering Industry/Education in a New Era*, Houston, Texas, August 8-9.
2. E. Tavakol*, A. Mehrabian, 2024, Poroelastic origins of the Noordbergum effect, *Engineering Mechanics Institute Conference***,** May 28-31, Chicago, Illinois.
3. W. Zhang*, A. Mehrabian, 2022, Full coupling of CO_2-CH_4 diffusion and sorption with solid deformation in gas shale enhances natural gas recovery and geological CO_2 storage capacity, *Engineering Mechanics Institute Conference***,** May 31, June 3, John Hopkins University, Maryland.
4. X. Su*, A. Mehrabian, 2020, Coupled poroelastic solutions for the reservoir and caprock layers with the overburden confinement effects, *American Geophysical Union Fall Meeting*, Virtual, Dec 1-17.
5. W. Zhang*, A. Mehrabian, 2019, Poroelastic solution to the nonlinear productivity index of stress-sensitive reservoir rocks, *Engineering Mechanics Institute Conference*, June 18-21, CalTech, Pasadena, CA.

6. A. Mehrabian, Y. Abousleiman, 2019, Poroelastic solution to the generalized Brazilian test, *Engineering Mechanics Institute Conference*, June 18-21, CalTech, Pasadena, CA.
7. A. Mehrabian, 2018, Geertsma's subsidence solution extended to layered stratigraphy, *Engineering Mechanics Institute Conference*, May 29- June 01, MIT, Massachusetts.
8. A. Mehrabian, 2018, Multiple-porosity and multiple-permeability poroelasticity of organic-rich shale, *Engineering Mechanics Institute Conference*, May 29- June 01, MIT, Massachusetts.
9. A. Mehrabian, Y. Abousleiman, 2015, Dual-porosity and dual-permeability poroelastic integrity analysis of naturally fractured shale in CO2 sequestration operations, *Engineering Mechanics Institute Conference*, June 16-19, Stanford University, California.
10. A. Mehrabian, Y. Abousleiman, 2010, The poroviscoelastic response of brain tissues during ventriculostomy treatments, *IV European Conference on Computational Mechanics,* May 16-21, Palais des Congrès, Paris, France.

Awards

- SPE Technical Reviewer Outstanding Service Award, 2023, Society of Petroleum Engineers Journal.
- SPE Technical Reviewer Outstanding Service Award, 2022, Society of Petroleum Engineers Journal.

PhD Research Advisees

1. *Wei Zhang*, Graduated in May 2022.
2. *Kien Nguyen*, Graduated in May 2023.
3. *Xing Su*, Graduated in May 2024.
4. *Yidi Wu*, Completed the PhD comprehensive exam in April 2023.
5. *Ehsan Tavakol*, Completed the PhD comprehensive exam in November 2024.

Undergraduate Research Advisees

1. *Thad Nosar*, Graduated in May 2021.
2. *Mohammed Alarfaj*, Graduated in May 2022.
3. *Shahad Alsadoon*, Graduated in May 2025.

Service to the Discipline and Profession

- *Vice Chair*, Poromechanics Committee, Engineering Mechanics Institute of the American Society of Civil Engineers, October 2023 – Present.
- *Chair*, Poromechanics Student Paper Competition, Engineering Mechanics Institute Conference, October 2023-Present.
- *Poromechanics Committee*, Engineering Mechanics Institute of the American Society of Civil Engineers, March 2015 – Present.
- *Program Committee*, IADC/SPE International Drilling Conference and Exhibition, Galveston, Texas, March 17-19, 2026.
- *Associate Editor*, Journal of Petroleum Exploration and Production Technology (Springer). April 2018 – April 2020.

- *MiniSymposium Chair* (MS 801), Geomechanics of Geological Carbon Storage and Enhanced Hydrocarbon Recovery, 2022 Engineering Mechanics Institute Conference, John Hopkins University, Baltimore, Maryland, May 31–June 3, 2022.
- *Minisymposium Chair* (MS 205), Petroleum Geomechanics Problems, 2021 Engineering Mechanics Institute Conference, Columbia University, Virtual, May 26 – 28, 2021.
- *Session Chair*, Experimental and theoretical advancements in shale mechanics, American Geophysical Union Fall Meeting, Virtual, Dec 1–17, 2020.
- *Session Chair*, Experimental and Theoretical advances in shale, American Geophysical Union Fall Meeting, San Francisco, CA, Dec 9–13, 2019.
- *Minisymposium Chair* (MS 89), Analytical and numerical solutions to petroleum geomechanics problems, 2018 Engineering Mechanics Institute Conference, MIT, Boston, Massachusetts, May 29 – June 2 2018.
- *Minisymposium Chair* (MS 104), Multiscale mechanics and physics of shale, 2017 Engineering Mechanics Institute Conference, USC, San Diego, June 4–7, 2017.

Service to University

- *Faculty Advisor*, The student chapter of the American Association of Drilling Engineers (AADE), Pennsylvania State University, October 2017 – Present.
- *Graduate Education Committee*, Energy and Mineral Engineering Department, Pennsylvania State University, August 2024 – Present.
- *Promotion and Tenure Committee*, Energy and Mineral Engineering Department, Pennsylvania State University, July 2023 – June 2025.
- *Search Committee,* Petroleum and Natural Gas Engineering Labs Instructor, Energy and Mineral Engineering Department, Pennsylvania State University, August 2023-May 2024.
- *Director,* Drilling Laboratory, Energy and Mineral Engineering Department, Pennsylvania State University, October 2017 – August 2024.
- *Graduate Admissions Committee*, Energy and Mineral Engineering Department, Pennsylvania State University, August 2021 – May 2023.
- *PhD Qualifying Exam Committee*, Energy and Mineral Engineering Department, Pennsylvania State University, May 2022 – May 2023.
- *Faculty Advisor*, Undergraduate students of the Petroleum and Natural Gas Engineering Program, Pennsylvania State University, August 2020 – December 2021.

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