Maria Pour
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Track Editor, IEEE Transactions on Antennas and Propagation
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Education

2012 Ph.D. University of Manitoba, Electrical Engineering
2006 M.Sc. University of Manitoba, Electrical Engineering
1997 B.Sc. Sharif University of Technology, Electrical Engineering

Positions

8/2021 – Present: Associate Professor, Department of Electrical and Computer Engineering, The University of Alabama in Huntsville, Huntsville, AL, USA
8/2015 – 8/2021: Assistant Professor, Department of Electrical and Computer Engineering, The University of Alabama in Huntsville, Huntsville, AL, USA

Professional Membership

- IEEE, senior member
- IEEE Antennas and Propagation Society, member
- IEEE Women in Engineering, member
- International Union of Radio Science (URSI), Commission B, full member

Research Expertise

- Antenna theory, design, and analysis
- Phase array antennas
- Wideband and reconfigurable antennas
- Electrically large antennas and their primary feeds
- Virtual aperture antennas
- Antenna measurement techniques
- Applied Electromagnetics

Honors & Awards

- Outstanding Associate Editor for *IEEE Transactions on Antennas and Propagation*, 2019-2022
- Joseph C. Dowdle Outstanding ECE Faculty Award, 2021
- UAH COE Outstanding Teaching Award, 2020
- The IET Outstanding Reviewer Awards 2019; *IET Microwaves, Antennas & Propagation*
- NSF CAREER Award, 2017 (awarded on my first attempt)
- ORAU Ralph E. Powe Junior Faculty Enhancement Award, 2017
- UAH New Faculty Research Award, 2017
- UAH COE Outstanding Research Award, 2017
- UAH COE Outstanding Junior Faculty Award, 2017

Selected Professional Activities

- Track Editor, *IEEE Transactions on Antennas and Propagation*, Sept. 2022-present (one of the 12 track editors worldwide)
- Member of the IEEE AP-S (Antennas and Propagation Society) Constitution and Bylaws Committee, March 2021-present
- Associate Editor, *IEEE Antennas and Wireless Propagation Letters,* July 2020-present
- Associate Editor, *IEEE Transactions on Antennas and Propagation,* Aug. 2016-Sept. 2022 (completed two terms)
- Co-chair of the Women In Engineering (WIE) for the 2023 *IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting.*
- Member of Technical Program Committees for several International Conferences
- NSF Review Panelist
- Technical Reviewer for several IEEE Journals, Letters, and National and International Conferences
- Chaired and co-chaired many technical sessions at the IEEE International Conferences
- Served in the COE Ad hoc committee for Leadership in Research, Spring 2020 and Spring 2022
- Member of the search committee: ECE Department, UAH, Fall 2015- Spring 2016 and Fall 2021-Spring 2022; the MAE Department, UAH, Fall 2019-Spring 2020 and Fall 2018-Spring 2019
- Member of the UAH Graduate Council, Fall 2022 to present
- UAH Faculty Senator, Fall 2021- Fall 2023
- Member of the EE Graduate Committee, Fall 2021-Fall 2022

Selected Publications

a. Refereed Journal Articles

- M. Pour, T. Mitha, and E. Brothers, "A Combined Electronic Position- and Partial Amplitude-Control Synthesis Technique for Sidelobe Reductions in Linear Array Antennas," *IEEE Transactions on Microwave Theory and Techniques,* vol. 71, no. 12, pp. 5074-5081, Dec. 2023.
- T. Mitha and M. Pour, "Null Steering in Linear Array Antennas with Electronically Displaced Phase Center Dual-Mode Antenna Elements," *IEEE Transactions on Antennas and Propagation,* vol. 71, no. 3, pp. 2843-2848, March 2023.
- T. Mitha and M. Pour, "Sidelobe Reductions in Linear Array Antennas Using Electronically Displaced Phase Center Antenna Technique," *IEEE Transactions on Antennas and Propagation,* vol. 70, no. 6, pp. 4369-4378, June 2022.
- T. Mitha and M. Pour, "Principles of Adaptive Element Spacing in Linear Array Antennas," *Nature, Scientific Reports*, 11, 5584, 2021.
- S. Radavaram and M. Pour, "A Wideband Coplanar L-Strip Fed Rectangular Patch Antenna," *IEEE Antennas and Wireless Propagation Letters,* vol. 20, no. 9, pp. 1779-1783, Sept. 2021.
- S. Radavaram, S. Naik, and M. Pour, "Stably Polarized Wideband Circular Microstrip Antenna Excited in TM_{12} Mode," *IEEE Transactions on Antennas and Propagation*, vol. 69, no. 4, pp. 2370–2375, Apr. 2021.
- Z. Iqbal, T. Mitha, and M. Pour, "Validation of Grating Lobe Reductions in a Dual-Mode Scanning Phased Array Antenna," *Progress In Electromagnetics Research M*, vol. 106, pp. 117-125, 2021.
- Z. Iqbal, T. Mitha, and M. Pour, "A Single-Layer Dual-Mode Microstrip Patch Antenna with Self-Scanning Radiation Patterns", *IEEE Antennas Wireless Propag. Lett*, vol. 19, no. 9, pp. 1506–1510, Sept. 2020.
- A. Alomari, M. Pour, and R. Lindquist, "Magnetic and Optical Study of Nematic Liquid Crystal E7 Mixed Fe_3O_4 Ferrofluid," *IEEE Transactions on Magnetics*, vol. 55, no. 12, Dec. 2019.

- Z. Iqbal and M. Pour, "Exploiting Higher Order Modes for Grating Lobe Reduction in Scanning Phased Array Antennas," *IEEE Transactions on Antennas and Propagation*, vol. 67, no. 11, pp. 7144-7149, Nov. 2019.
- M. Henley and M. Pour, "Reconfigurable Displaced Phase Center Reflector Antennas with Focal Plane Arrays," *IEEE Antennas and Wireless Propagation Letters*, vol. 18, no. 6, pp. 1298-1302, June 2019.
- M. Pour, M. Henley, A. Young, and Z. Iqbal, "Cross Polarization Reduction in Offset Reflector Antennas with Dual-Mode Microstrip Primary Feeds," *IEEE Antennas and Wireless Propagation Letters*, vol. 18, no. 5, pp. 926-930, May 2019.
- W. Ake, M. Pour, and A. Mehrabani, "Asymmetric Half-Bowtie Antennas with Tilted Beam Patterns," *IEEE Transactions on Antennas and Propagation*, vol. 67, no. 2, pp. 738-744, Feb. 2019.
- T. Mitha and M. Pour, "Investigation of Dominant Transverse Electric Mode in Microstrip Patch Antennas," *IEEE Transactions on Antennas and Propagation*, vol. 67, no. 1, pp. 643-648, Jan. 2019.
- Z. Iqbal and M. Pour, "Grating Lobe Reduction in Scanning Phased Array Antennas with Large Element Spacing," *IEEE Transactions on Antennas and Propagation*, vol. 66, no. 12, pp. 6965-6974, Dec. 2018.

b. Peer-Reviewed Conference Papers

- S. Naik and M. Pour, "A Dual-Band Circular Microstrip Patch Antenna with a Small Frequency Ratio," in the 2023 *IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting*, Portland, OR, July 23-28, 2023.
- S. Radavaram and M. Pour, "A Conformal Wideband Patch Antenna with an Integrated L-Strip Feed," in the 2023 *IEEE SoutheastCon*, Orlando, FL, Apr. 13-16, 2023.
- T. Mitha, J. Marquardt, and M. Pour, "E-DPCA Synthesis Technique in Small Linear Array Antennas with Tapered Edge Elements," in the 2022 *IEEE International Symposium on Phased Array Systems and Technology (PAST 2022)*, Waltham, MA, Oct. 11-14, 2022.
- T. Mitha and M. Pour, "Sidelobe Reductions in Rectangular-Lattice Planar Arrays with Reconfigurable Element Spacing," in the 2022 *IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting*, Denver, CO, July 10-15, 2022.
- S. Naik and M. Pour, "A TM_{31} Mode Circular Microstrip Patch Antenna with a Reduced Eigenvalue," in the 2022 *IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting*, Denver, CO, July 10-15, 2022.
- M. Adams and M. Pour, "On the Gain Loss of Wide-Angle Scanning Phased Arrays with Narrow- and Wide-beam Element Patterns," in the 2021 *IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting*, Marina Bay Sands, Singapore, Dec. 4-10, 2021.
- Z. Iqbal, T. Mitha, and M. Pour, "A Reconfigurable Radiation Pattern Microstrip Patch Antenna with High Mode Purity," in the 2021 *IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting*, Marina Bay Sands, Singapore, Dec. 4-10, 2021.
- S. Radavaram, S. Naik, and Maria Pour, "A Wideband Circular Patch Antenna Excited in the Broadside TM_{12} Mode," in the 2021 *IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting*, Marina Bay Sands, Singapore, Dec. 4-10, 2021.
- Z. Iqbal and M. Pour, "Grating Lobe Mitigation in Wide and Near Horizon Scanning Linear Arrays with One-Wavelength Element Spacing," in the 2021 *IEEE 19th International Symposium on Antenna Technology and Applied Electromagnetics (ANTEM)*, Winnipeg, MB, Canada, Aug. 8-11, 2021.
- Z. Iqbal, T. Mitha, and M. Pour, "Grating Lobe Reductions in a Planar Hexagonal Scanning Array with Large Element Spacing," in the 2020 *IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting*, Montreal, QC, Canada, July 5-10, 2020.
- Z. Iqbal and M. Pour, "Grating Lobe Mitigation in Scanning Planar Phased Array Antennas," in the 2019 *IEEE International Symposium on Phased Array Systems and Technology*, Waltham, MA, Oct. 15-18, 2019.
- A. Alomari, M. Pour, and R. Lindquist, "A Reconfigurable Microstrip Patch Antenna Using Liquid Crystals," in *IEEE International Conference on Wireless for Space and Extreme Environments* (*WISEE*), Dec. 11-13, 2018.