

Curriculum Vitae
Dr. Mohammad A. Saed
Electrical and Computer Engineering - TTU

I. RESEARCH AREAS OF INTEREST

Applied electromagnetics with emphasis on antennas, RF/Microwave circuit design, microwave imaging and nondestructive testing, terahertz applications, and computational electromagnetics.

II. EDUCATION

Ph.D. - December 1987, Department of Electrical Engineering, Virginia Tech University, Blacksburg, Virginia.

M.S. - December 1984, Department of Electrical Engineering, Virginia Tech University, Blacksburg, Virginia.

B.S. - July 1983, Department of Electrical Engineering, Middle East Technical University, Ankara, Turkey.

III. EMPLOYMENT HISTORY

- *January 2001 - present:* Associate Professor (tenured), Department of Electrical and Computer Engineering, Texas Tech University, Lubbock, Texas.
- *September 1995 – December 2000:* Associate Professor (tenured), Department of Electrical Engineering, State University of New York, New Paltz, New York.
- *September 1989 - August 1995:* Assistant Professor, Department of Electrical Engineering, State University of New York, New Paltz, New York.
- *December 1987 - August 1989:* Research Associate, Department of Electrical Engineering, Virginia Tech, Blacksburg, Virginia.
- *September 1986 - November 1987:* Research Assistant, Department of Electrical Engineering, Virginia Tech, Blacksburg, Virginia.
- *March 1984 - August 1986:* Teaching Assistant, Department of Electrical Engineering, Virginia Tech, Blacksburg, Virginia.

IV. GRANTS

1. “Carbon nanotube detection in plants through microwave-induced heating,” PI: M. Green, Co-PIs: Jaclyn Canãs and **M. Saed** (25%), funded by National Science Foundation (NSF), period: 9/1/2011 - 8/31/2014, **amount: \$300,001.**
2. “Curricular Development, Multidisciplinary Team Internships, and Undergraduate Peer-Mentors for West Texas Students,” PI: B. Nutter, Co-PIs: M. Baker and **M. Saed** (33%), funded by Texas Engineering and Technical Consortium (TETC), period: 3/1/2006 - 8/31/2008, **amount: \$304,157.**
3. “Recruiting and Retention Efforts to Increase Electrical and Computer Engineering Graduates – State Portion,” PI: **M. Saed** (100%), funded by Texas Engineering and Technical Consortium (TETC), period: 5/1/2005 - 8/31/2008, **amount: \$182,454.**
4. “Recruiting and Retention Efforts to Increase Electrical and Computer Engineering Graduates – Federal Portion,” PI: **M. Saed** (100%), funded by U.S. Department of Education through Texas Engineering and Technical Consortium (TETC), period: 9/14/2005 - 10/1/2006, **amount: \$52,714.**

5. "Electrical Engineering Recruitment and Retention at Texas Tech – State Portion," PI: **M. Saed** (90%), Co-PI: J. Bredeson, funded by Texas Engineering and Technical Consortium (TETC), period: 1/1/2004 - 8/31/2007, **amount: \$185,636.**
6. "Electrical Engineering Recruitment and Retention at Texas Tech – Federal Portion," PI: **M. Saed** (90%), Co-PI: J. Bredeson, funded by U.S. Department of Education through Texas Engineering and Technical Consortium (TETC), period: 9/1/2004 - 8/31/2006, **amount: \$69,926.**
7. "Electrical Engineering Workforce Development at Texas Tech - State Portion," PI: **M. Saed** (75%), Co-PI: J. Bredeson, funded by Texas Engineering and Technical Consortium (TETC), period: 1/1/2002 - 3/31/2007, **amount: \$230,640.**
8. "Electrical Engineering Workforce Development at Texas Tech - Federal Portion," PI: **M. Saed** (75%), Co-PI: J. Bredeson, funded by U.S. Department of Education through Texas Engineering and Technical Consortium (TETC), period: 9/1/2004 - 8/31/2006, **amount: \$86,878.**
9. "Near-Field Microwave Imaging for Early Stage Breast Cancer Detection", funded by the College of Engineering, Texas Tech University, 5/6/2006 – 8/6/2006, **amount: \$23,912.**
10. RFIC Course Development, funded by AESE M.S. Program in the ECE Department, Texas Tech University (program is funded by Texas Instruments), spring 2006, **amount: \$10,000.**
11. "NASA/University Joint Venture in Space Science (JOVE Program)," Co-PI (with three other Co-PIs), January 1997 - May 1999, **amount: \$469,990.**
12. "Phased Array Project - Design of Angle Diversity Antenna," PI: **M. Saed**, Co-PI: K. Audenaerde, funded by Cablewave Systems, A Division of Radio Frequency Systems, North Haven, CT, March 1, 1990 - January 2, 1992, **amount: \$92,277.**

V. HONORS / AWARDS

1. Received the Charles L. Burford Faculty Award in 2010.
2. Received TTU College of Engineering Tau Beta Pi Professor of the Year Award, 2008-2009.
3. Received TTU IEEE Student Branch Outstanding Professor of the Year Award, 2008-2009.
4. Received Texas Tech President's Excellence in Teaching Award in 2007.
5. Received the Lockheed Martin Excellence in Teaching Award for the College of Engineering in 2006.
6. Granted membership to Texas Tech University's Teaching Academy in 2005.
7. Received Texas Tech President's Excellence in Teaching Award in 2003.
8. Summer Faculty Fellow at NASA's Jet Propulsion Laboratory, Pasadena, CA, summer 1996.
9. Senior Member of IEEE since 1994.

VI. EDUCATIONAL ACTIVITIES

1. Course Development:

At Texas Tech:

Developed the freshman ECE course Introduction to Electrical and Computer Engineering and redesigned the second freshman course Introduction to Engineering and Computer Programming, in collaboration with Dr. Sari-Sarraf. Developed three graduate level courses, Radio Frequency Integrated Circuits, Microwave Engineering, and Computational Electromagnetics.

At SUNY New Paltz:

Developed the following courses: microwave fundamentals and its lab, microwave circuit design and its lab, antennas and its lab, and satellite communications. Setup microwave and antenna laboratories equipped with state of the art measurement equipment and software for education and research.

2. Undergraduate Research: Created undergraduate research programs (summer and academic year) for TTU Electrical and Computer Engineering students supported by TETC grants (listed in the grants section) in 2002-2008. A total of 75 students participated in the program supervised by 9 faculty members.
3. Tutoring / Help Sessions / Help Desk: Organized tutoring to electrical engineering students in calculus, physics, chemistry, and core courses in Electrical Engineering. Organized weekly problem-solving lectures in calculus, physics, and chemistry (fall 2005). Setup a tutoring office to help undergraduate students in most core ECE courses (spring 2006). The office was staffed by senior and graduate students supported by the TETC grants.
4. Recruiting / Outreach / Scholarships: Awarded 27 scholarships totaling \$50,000, funded by the TETC grants to incoming freshman to help recruit qualified students. Visited several high schools and attended recruiting events to promote the ECE programs. Collaborated with Dr. Nutter and Dr. Baker to create summer internships for teams consisting of students from high schools, community colleges, and TTU (2006-2008).
5. ABET Accreditation: Led the ABET preparations for the 2011 review cycle of the electrical engineering and the computer engineering programs at Texas Tech. Prepared both self-study reports and led all the preparations including assessment methods and data collection and analysis. Served as the ECE ABET Coordinator and served as a member of the College of Engineering ABET team. While at SUNY New Paltz, wrote a major portion of the Self Study Report for the fall 1999 accreditation review of the Electrical Engineering program.
6. Senior Design Projects: Supervised a large number of senior design projects at SUNY New Paltz and senior project labs at Texas Tech.

VIII. THESES / STUDENT SUPERVISION

- Served as the thesis advisor for the following graduate students at Texas Tech:
 1. Lakshmikanth Adiraju, "Class-F RF Power Amplifiers Using Coplanar Waveguides for Wireless Communications", M.S. thesis, fall 2003.
 2. Brandon Nance, "Reconfigurability of Frequency Band and Polarization in Broadband Log-Periodic Slot Antennas", M.S. thesis, spring 2004.
 3. Prashant Ulavapalli, "An Active Subharmonic Retrodirective Array Using Dual Polarized Microstrip Antennas", M.S. thesis, spring 2004.
 4. Bharatha Yajaman, "FDTD Modeling of RF and Microwave Circuits with Active and Lumped Components", M.S. thesis, fall 2004.
 5. Yadla Rohini, "Novel Designs for Broadband and Compact Dielectric Resonator Antennas", M.S. thesis, fall 2004.
 6. Mamatha Madupu, Portfolio in Interdisciplinary Studies (M.S. in interdisciplinary studies), fall 2005.
 7. Faris Alhorr, "UWB Spiral Antenna on EBG Substrate", M.S. thesis, fall 2007.
 8. Spurthi Yenreddy, "Automation Development for Video Post-Processing Technology Design Verification/Validation", M.S. thesis, fall 2007.
 9. Avinash Madadi, "Highly Directive Aperture Antenna Based on a Compact Woodpile Electromagnetic Bandgap Structure", M. S. thesis, fall 2007.
 10. Vikram Hegde, "Miniaturization of Waveguide Antennas Using Electromagnetic Metamaterials", M.S. thesis, fall 2007.
 11. Rajnish Kumar, "Design Of Class F Power Amplifier Using Composite Right/Left Hand Metamaterial", M. S. thesis, summer 2009.

12. Subash Vegesna, "Miniaturized Coupled Filters Using Microstrip Split- Ring Resonators", M.S. thesis, summer 2009.
 13. Charles Kleuser, "Electromagnetic Beam Forming Lens with Split Ring Resonators", M.S. thesis, summer 2010.
 14. Jason Durbin, "Filtenna Using Ultra-Wideband Fed Varactor Tuned Frequency Selective Surface", M.S. thesis, spring 2011.
 15. Amy Fleischmann, "An Active Retrodirective Antenna Array", M.S. thesis, summer 2011.
 16. Subash Vegesna, Ph.D. dissertation in progress.
 17. Cemile Bardak, PhD. dissertation in progress.
 18. Mohammad Fairuz, PhD. dissertation in progress.
- Served as advisor for the undergraduate honors thesis for Muneem Shahriar, "Microwave Imaging Techniques for Early-Stage Breast Cancer Detection", summer 2005.
 - Served as thesis/dissertation committee member for the following graduate students.
1. J. He, "Finite Difference Time Domain Simulation of Subpicosecond Semiconductor Optical Devices", Ph.D. dissertation, fall 1993 (Virginia Tech).
 2. J. Harris, "Coded and Filtered Quadrature Amplitude Modulation Signaling", M.S. thesis, fall 2009.
 3. R. Casey, "Efficient Realization of Biorthogonal Fixed Point Cosine Modulated Filter Banks", Ph.D. dissertation, fall 2002.
 4. A. Ramalingam, "Application of Frequency-Time Coding to Multicarrier Modulation Schemes", M.S. thesis, spring 2004.
 5. A. Kassar, "Design Methodology for Optimization of the Low-Power Monolithic Synchronous Buck Converter", M.S. thesis, spring 2007.
 6. V. Pendharkar, "Design Analysis and Performance of Rake Receivers", M.S. thesis, summer 2007.
 7. N. Nawas, "Patient Smart Radio Frequency Identification System", M.S. thesis, fall 2007.
 8. M. Shahriar, "Machine Vision System for Quantification of Cotton Fiber Length and Maturity", M.S. thesis, summer 2008.
 9. K. Akrofi, "EEG-Based Early Alzheimer's Disease Detection", Ph.D. dissertation, fall 2008.
 10. E. Briggs, "A Feedback Controlled Impedance Matching System for Ultrasonic Transducers", M.S. thesis, fall 2009
 11. N. Ramaiah, "Signal and Power Integrity issues in high speed operational amplifier testing and characterization", M.S. thesis, fall 2009.
 12. A. Brakash, "Design of a Controllable Electronic Load Circuit Enabling Multisite Testing for Buck Power Converters", M.S. thesis, spring 2010.
 13. K. Yargaladda, "Techniques to Analyze the Terahertz Data for the Detection of Explosives", M.S. thesis, fall 2010.
 14. C. Robinson, "Conversion and Testability of Digital Circuitry for Servo Motor Controller Devices", M.S. thesis, spring 2011.
 15. P. Kelly, "A Passive Limiter for HPM Protection using Tunable Metamaterials", M.S. thesis, fall 2011.
 16. B. Bryant, "IT-SNAPS multi-user implementation utilizing NVIDIA's compute-unified device architecture and Java XML Web Services", M.S. thesis, spring 2012.
 17. Yanhan Zhu, Ph.D. dissertation in progress.
 18. Charles Regan, Ph.D. dissertation in progress.
 19. Changzhan Gu, Ph.D. dissertation in progress.
 20. Li Lu, Ph.D. dissertation in progress.

IX. PUBLICATIONS

(A) Papers Published in Refereed Journals:

1. M. A. Saed, S. M. Riad, and A. Elshabini-Riad, "Wideband Measurement of the Complex Permittivity of Dielectric Materials Using a Wideband Cavity," *IEEE Transactions on Instrumentation and Measurement*, Vol. 38, No. 2, April 1989, pp. 488-495.
2. M. A. Saed, S. M. Riad, and W. A. Davis, "Wideband Dielectric Characterization Using a Dielectric Filled Cavity Adapted to the End of a Transmission Line", *IEEE Transactions on Instrumentation and Measurement*, Vol. 39, No. 3, June 1990, pp. 485-491.
3. M. A. Saed, "A Method of Moments Solution of a Cylindrical Cavity Placed Between Two Coaxial Transmission Lines," *IEEE Transactions on Microwave Theory and Techniques*, Vol. 39, No. 10, October 1991, pp. 1712-1717.
4. M. A. Saed, "An Optimization Procedure for a Probe-Fed Rectangular Microstrip Patch Radiator," *Microwave Journal*, Vol. 36, No. 1, January 1993, pp. 116-124.
5. M. A. Saed, "Efficient Method for Analysis and Design of Aperture-Coupled Rectangular Microstrip Antennas," *IEEE Transactions on Antennas and Propagation*, Vol. 41, No. 7, July 1993, pp. 986-988.
6. M. A. Saed, "Measurement of the Complex Permittivity of Planar Microwave Substrates Using Aperture-Coupled Microstrip Resonators," *IEEE Transactions on Microwave Theory and Techniques*, Vol. 41, No. 8, August 1993, pp. 1343-1348.
7. M. A. Saed, "Computer-Aided Design of Probe-Fed and Aperture-Coupled Rectangular Microstrip Antennas," *International Journal of Microwave and Millimeter-Wave Computer-Aided Engineering*, Vol. 3, No. 4, October 1993, pp. 378-385.
8. M. A. Saed and J. Fredrick, "A New Uniplanar Coplanar Waveguide / Slotline Balanced Mixer," *Journal of Electromagnetic Waves and Applications*, Vol. 13, pp. 1531-1537, 1999.
9. M. Saed, "Reconfigurable Broadband Microstrip Antenna Fed by a Coplanar Waveguide," *Progress in Electromagnetics Research*, PIER 55, pp. 227-239, 2005.
10. M. Saed and R. Yadla, "Microstrip – Fed Low Profile and Compact Dielectric Resonator Antennas", *Progress in Electromagnetics Research*, PIER 56, pp. 151-162, 2006.
11. M. Saed "Broadband CPW-Fed Wide Rectangular Slot Antennas with Various Tuning Stubs," *Progress in Electromagnetics Research*, PIER 66, pp. 199-212, 2006.
12. S. Vegesna and M. Saed, "Novel Compact Dual-Band Bandpass Microstrip Filter," *Progress in Electromagnetics Research B*, Vol. 20, pp. 245-262, 2010.
13. Y. Zhu, S. Vegesna, V. Kuryatkov, M. Holtz, M. Saed, and A.A. Bernussi, "Terahertz bandpass filters using double-stacked metamaterial layers", *Optics Letters*, vol. 37, pp. 296-298, 2012.
14. J. Durbin and M. Saed, "Tunable Filtenna Using Varactor Tuned Rings Fed with an Ultra Wideband Antenna," *Progress in Electromagnetics Research Letters*, Vol. 29, pp.43-50, 2012.
15. S. Vegesna and M. A. Saed, "Compact Two-Layer Microstrip Bandpass Filters Using Broadside-Coupled Resonators," *Progress in Electromagnetics Research B*, Vol. 37, pp. 81-102, 2012.
16. S. Vegesna and M. A. Saed, "Microstrip Dual-Band Bandpass and Bandstop Filters," *Microwave and Optical Technology Letters*, Vol. 54, No. 1, pp. 168-171, January 2012.
17. S. Vegesna, Y. Zhu, A. Bernussi, and M. Saed, "Terahertz Two-Layer Frequency Selective Surfaces with Improved Transmission Characteristics", *IEEE Transactions on THz Science and Technology*, vol. 2, pp. 441-448, July 2012.
18. F. Irin, B. Shrestha, J. Cañas, M. Saed, and M. Green, "Detection of Carbon Nanotubes in Biological Samples through Microwave-Induced Heating", *Carbon*, 50, 4441-4449, 2012.
19. S. Vegesna and M. Saed, "Microwave Dual-Band Bandstop Filter with Improved Spurious Resonance Behavior", accepted in *International Journal on RF and Microwave Computer Aided Engineering*, 2012.

(B) Papers at International Conferences:

1. M. A. Saed, S. M. Riad, and W. A. Davis "Dielectric Spectroscopy Using a Cavity-Like Sample Holder," IEEE International Symposium on Antennas and Propagation and URSI Radio Science Meeting, Blacksburg, Virginia, June 15-19, 1987. (Digest page 93)
2. S. M. Riad and M. A. Saed, "Some Frequency Domain Measurement Considerations for Time Domain Signal Processing," IEEE International Symposium on Antennas and Propagation and URSI Radio Science Meeting, Blacksburg, Virginia, June 15-19, 1987. (Digest page 88).
3. M. A. Saed and S. M. Riad, "Dielectric Spectroscopy Using a Wideband Dielectric Filled Cavity," URSI Radio Science Meeting, Boulder, Colorado, January 5-8, 1988. (Digest page 157)
4. M. A. Saed and S. M. Riad, "Time Domain Dielectric Spectroscopy Using a Wideband Dielectric Filled Cavity," International Conference on Precision Electromagnetic Measurements (CPEM), Tokyo, Japan, June 7-10, 1988. (Digest pages 149-150)
5. M. A. Saed, A. Y. Almazroo, A. Elshabini-Riad, and S. M. Riad, "Wideband (DC-10 GHz) Characterization of Thick Film Dielectric and Ferrite Materials," International Society for Hybrid Microelectronics (ISHM) Symposium, Seattle, Washington, Oct. 17-19, 1988. (Proceedings pages 340-344)
6. M. A. Saed, S. M. Riad, A. Elshabini-Riad, and A. Y. Almazroo, "Characterization of Materials at Microwave Frequencies: Dielectrics, Ferrites, and Conductors," 3rd International SAMPE (Society for the Advancement of Materials and Process Engineering) Electronic Materials and Processes Conference, Los Angeles, California, June 20-22, 1989.
7. S. Riad, W. Davis, A. Elshabini-Riad, K. Fidanboyly, S. Bucca, W. Su, M. Saed, D. Amey, J. Curilla, J. Lyles, A. Murphy, and T. Poulin, "Wideband and Material Characterization," ASM International Electronic Materials and Processing Conference, Los Angeles, California, August 19-22, 1991.
8. M. A. Saed, "Slot-Coupled Circular Microstrip Antenna having a Symmetric Radiation Pattern," IEEE International Symposium on Antennas and Propagation and URSI Radio Science Meeting, Ann Arbor, Michigan, June 27 - July 2, 1993. (proceedings pages 1204-1207)
9. M. A. Saed, "Tapered Coplanar Waveguide Antenna," IEEE International Symposium on Antennas and Propagation and URSI Radio Science Meeting, Seattle, Washington, June 19-24, 1994. (Digest page 486)
10. M. A. Saed, "The Sinusoidal Microstrip Patch Antenna," IEEE International Symposium on Antennas and Propagation and URSI Radio Science Meeting, Newport Beach, California, June 18-23, 1995. (Digest page 281)
11. M. A. Saed, "Source Modeling in the Finite-Difference Time-Domain Method," IEEE International Symposium on Antennas and Propagation and URSI Radio Science Meeting, Montreal, Canada, July 13-18, 1996. (Digest page 130)
12. M. A. Saed, "CPW-Fed Microstrip Antenna using a Slot/Loop Combination," IEEE International Symposium on Antennas and Propagation and URSI Radio Science Meeting, San Antonio, Texas, June 16-21, 2002.
13. M. Saed, "Multilayer Meander Loop Antennas," IEEE International Symposium on Antennas and Propagation and URSI Radio Science Meeting, San Antonio, Texas, June 16-21, 2002.
14. M. Saed, "Broadband Planar Antenna Using CPW-Fed Monopoles in a Rectangular Aperture," IEEE International Symposium on Antennas and Propagation and URSI Radio Science Meeting, Columbus, Ohio, June 22-27, 2003.
15. B. Nance and M. Saed, "Reconfigurable Planar Log Periodic Antenna," IEEE International Symposium on Antennas and Propagation and URSI Radio Science Meeting, Columbus, Ohio, June 22-27, 2003.
16. M. Saed, "Reconfigurable and Broadband Microstrip Antennas Using Patches of Various Shapes," IEEE International Symposium on Antennas and Propagation and URSI Radio Science Meeting, Columbus, Ohio, June 22-27, 2003.

17. M. Baker, B. Nutter, and M. Saed, "Development of a Freshman and Pre-Freshman Research and Design Program in Electrical Engineering," ASEE Annual Conference & Exposition, Pittsburgh, PA, June 22-25, 2007.
18. M. A. Saed and A. Adcock, "A Novel Tapered Slotline Antenna," IEEE AP-S International Symposium and URSI Radio Science Meeting, San Diego, CA, July 5-12, 2008.
19. M. A. Saed and V. Hegde, "Miniaturized Waveguide Probe Using Electromagnetic Metamaterials," IEEE AP-S International Symposium and URSI Radio Science Meeting, San Diego, CA, July 5-12, 2008.
20. M. A. Saed, "Ultra Wideband Low Profile Single-Arm Spiral Antenna Using Electromagnetic Bandgap Structures," European Electromagnetics Conference (EUROEM 2008), Lausanne, Switzerland, July 21-25, 2008.
21. M. A. Saed, "A Slotline Antenna Using a Taper Based on a Bessel Function," European Electromagnetics Conference (EUROEM 2008), Lausanne, Switzerland, July 21-25, 2008.
22. S. Vegesna and M. Saed, "Compact Microwave Filters Using Metamaterial Resonators," IEEE AP-S International Symposium and URSI Radio Science Meeting, Toronto, Canada, July 11-17, 2010.
23. A. Ali and M. Saed, "Metamaterial Ground Planes for Low Profile Ultra Wideband Antennas," IEEE AP-S International Symposium and URSI Radio Science Meeting, Toronto, Canada, July 11-17, 2010.
24. Z. Yanhan, S. Vegesna, V. Kuryatkov, M. Holtz, M. Saed, and A. Bernussi "THz time-domain spectroscopy of multilayer filters," Infrared, 36th International Conference on Millimeter and Terahertz Waves (IRMMW-THz), Houston, Texas, October 2-7, 2011.

(C) Papers at Regional conferences and Meetings:

1. M. A. Saed, A. Elshabini-Riad, and S. M. Riad, "Wideband Characterization of Thick Film Dielectric and Ferrite Materials," 14th Annual Northern California Chapter of ISHM Symposium, San Jose, California, November 3, 1988.
2. B. Nance and M. A. Saed, "Reconfigurable Log Periodic Antenna," presented at the TxTEC Annual Conference, Arlington, Texas, January 2003.
3. M. A. Saed, "Introduction to Electrical and Computer Engineering Course to Improve Retention," TETC Best Practices Conference, Dallas, Texas, January 10-11, 2006.
4. M. A. Saed, "Introduction to Electrical and Computer Engineering Course for Freshmen," TETC Best Practices Conference, Austin, Texas, March 5-6, 2007.
5. M. Baker, M. Saed, T. Karp, B. Nutter, "The Development of a Project-Oriented Freshman Course in Electrical and Computer Engineering," ASEE-GSW, South Padre Island, Texas, March 2007.

(D) Technical Reports:

1. S. M. Riad, W. A. Davis, A. Elshabini-Riad, M. A. Saed, D. M. Keller, and J. C. Toscano, "Wideband Characterization of Thick Film Materials and PCM Lines," Final report submitted to E. I. DuPont & Company, Electronics Department, Wilmington, DE, September 1987.
2. S. M. Riad, A. Elshabini-Riad, W. A. Davis, M. A. Saed, S. E. Bucca, K. Fidanboyly, N. Muthurkrishnan, and J. C. Toscano, "Wideband Characterization of Polymer Materials Used in the Construction of Multilayer Electronic Circuits," Final report submitted to E. I. DuPont & Company, Electronics Department, Wilmington, DE, September 1988.
3. S. M. Riad, A. Elshabini-Riad, W. A. Davis, M. A. Saed, K. Fidanboyly, S. E. Bucca, Mark A. Busse, N. Muthurkrishnan, M. Y. Andrawis, "Wideband and Microwave Techniques for Characterization of Materials and Planar Geometry Lines," Final report submitted to E. I. DuPont & Company, Electronics Department, Wilmington, DE, September 1989.
4. M. A. Saed, "Phased Array Project - Design of Angle Diversity Antenna," Final report submitted to Cablewave Systems, a Division of Radio Frequency Systems, North Haven, CT, January 2, 1992.

5. NASA JOVE Final Report, Submitted to NASA/JOVE program, November 2000.
6. M. A. Saed and J. Bredeson, "Electrical Engineering Workforce Development at Texas Tech," submitted to Texas Engineering and Technical Consortium (TETC), August 2007.
7. M. A. Saed and J. Bredeson, "Electrical Engineering Recruitment and Retention at Texas Tech," submitted to Texas Engineering and Technical Consortium (TETC). October 2007.
8. M. A. Saed, "Recruiting and Retention Efforts to Increase Electrical and Computer Engineering Graduates," submitted to Texas Engineering and Technical Consortium (TETC). October 2008.

X. PROFESSIONAL SERVICE

Service at Texas Tech

- Member of College of Engineering Tenure and Promotion Committee, 2011-present.
- Member of Departmental Excellence in Teaching Award Selection Committee, 2009-2011.
- Member of College of Engineering ABET Team, 2009-2011.
- Chair of ECE Department ABET Committee, 2009-present.
- Vice-Chair of the IEEE South Plains Section, January 2004-December 2008.
- Reviewed the textbook "Introduction to MATLAB 7", Etter, Kuncicky, and Moore, Prentice Hall, 2008.
- Member of College of Engineering Awards Committee 2007-2009.
- Member of TxDOT RMC4 Technical Assistance Panel on Traffic Operations, January 2004-January 2006.
- Chair of the College of Engineering Awards Selection Committee, 2003/04 and 2004/05.
- Reviewed Proposals for U.S. Civilian Research & Development Foundation (CRDF).
- Served as a Panelist on NSF's REU Program's Review Panel and SBIR/STTR Program.
- Reviewed papers for the following journals: IEEE Transactions on Microwave Theory and Techniques, IEEE Microwave and Wireless Components Letters, IET Microwaves, Antennas & Propagation, Journal of Electromagnetic Waves and Applications, Progress in Electromagnetics Research, IEEE Antennas and Wireless Propagation Letters.
- Chaired sessions at the IEEE International Symposium on Antennas and Propagation and USNC/URSI Radio Science Meeting.
- Taught the Electricity and Magnetism component of the course CE 4101: Application of Engineering Fundamentals, to help prepare COE students for NCEES Fundamentals of Engineering Exam.
- Served as a member of several committees in the ECE department including Electromagnetics and Power, Circuits and Electronics, ABET Committee, Curriculum Committee, and freshman advising.
- Served as a member of Grade Appeals Committee, College of Engineering.
- Served as a judge for the poster session in the National Black Graduate Student Conference (NBGSC), Texas Tech, March 30, 2001.

Service at SUNY New Paltz

- Wrote a major portion of the Self Study Report for the Fall 1999 accreditation review of the Electrical Engineering program at SUNY New Paltz. Also, created, administered, and analyzed survey instruments for program outcomes assessment.
- Served in all departmental committees and the following university-wide committees at SUNY New Paltz:
 - ◊ Search Committee, University Provost / Vice President for Academic Affairs (member).
 - ◊ Search Committee, Dean of School of Physical Sciences and Engineering (member).
 - ◊ Executive Council, College of Engineering and Business Administration (member).

- ◇ Research, Awards, and Leaves Committee (chair).
- ◇ Academic Affairs Committee (member).
- ◇ Curriculum Committee (member).
- ◇ Budget, Goals, and Plans Committee (member).

XI. MEMBERSHIP IN PROFESSIONAL SOCIETIES:

Senior Member of IEEE, IEEE Antennas and Propagation Society, and IEEE Microwave Theory and Techniques Society.