

Curriculum vita

Name : *Ashraf Shouki Seliem Said Ahmed Mohra*

Tel : *Mob (010-2828-1975)*

Institution. : *Electrical Engineering Dept.
Benha Faculty of Engineering,
Benha University*

Qualification : *Full professor in Electronics and
Communications*

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Educational History

1. B.Sc. degree in Electrical Engineering (Electronics & Communications) with ***Excellent with honor degree (Ranking: First)***, 1986, Faculty of Engineering (Benha Branch), Zagazig University, Egypt.
2. M. Sc degree in Electrical Engineering (microwave Engineering), October 1994, thesis title “Six-Port Reflectometer”, Faculty of Engineering, Ain Shams University, Egypt.
3. Ph. D degree in Electrical Engineering (Microwave Engineering), June 2000, thesis title “Active Six-Port Reflectometer”, Faculty of Engineering, Ain Shams University, Egypt
4. Promoted to Associate Prof. from April 2006 at Electronic Research Institute, Ministry of Scientific research and technology, Egypt.
5. Promoted to Full Prof. from May 2011 at Electronics Research institute, Ministry of Scientific Research and Technology, Egypt.
6. Head of Microstrip Department, Electronics Research Institute from July3, 2012 up June 2015.
7. From July 2015 to Aug.2, 2016 , professor at Electronics Research institute, Ministry of Scientific Research and Technology, Egypt.

8. From Aug.1, 2016 professor at Benha Faculty of engineering, Benha university
9. From Aug.3, 2016 to Sept.10, 2018, head of Electrical engineering Dept.
10. From Sept.11, 2018 , Vice Dean for educations and Students affairs, Benha Faculty of engineering, Benha university

Research areas

- Analysis, Design, Fabrication and Measurement of the Passive Microstrip components such as hybrids junctions (directional coupler, branch line coupler, Lange couple, ring coupler, etc.) for the MICs and MMICs applications.
- Analysis, Design, Fabrication, calibration and Measurement of the Six-port Reflectometer that constructed from direction couplers or quadrature hybrids or three line coupler or five-port plus coupler, etc.)
- Analysis, Design, Fabrication and Measurement of the Microstrip antenna (Patch antenna, array antennas, H shape antenna, shorted T-shape antenna, compact antenna, WLAN antenna, Ultra wide band antenna(UWA), etc.)
- Analysis, design, fabrication and measurement of Microstrip Filters with and without defected ground structures (DGS).
- Nondestructive Evaluation (NDE) using Magneto resistive Sensors
- Design, Fabrication and Measurement of Metamaterials circuits

Experiences

- Working on different ready made software package such as PUFF, APPCAD, IE3D, etc
- Analysis, Design and Fabrication of Microstrip passive Circuits such as couplers, filters, antennas, active filter, active antenna, etc.
- Measurement of microwave circuits and components using Scalar and vector network analyzer
- Inspection of material properties using Nondestructive Evaluation (NDE) by using Magnetoresistive Sensors

Projects

1- With Egyptian Armed Forces

- Analysis, Design and Fabrications of some elements of TPS-63 radar and mixer circuits (1991-1997).
- 2-D radar circuits, from Jan. 2015-up to now.

2- With Arab organization for industrialization (AOI)

- Analysis design and fabrication of LNB (low noise blocking Amplifier) with Electronics Factory (Arab authority for Fabrications), (98-2000).

3- With Academic of Scientific Research and Technology

- Analysis, design and fabrication of some circuits of Nile-Sat Receiver with Academic of Scientific Research and Technology (99-2002).
- Analysis, design, fabrication and measurement of some Microstrip antennas (Aperture coupled Microstrip antenna, annular slot Microstrip antenna, linearly polarized rectangular patch antenna) (2001-2003).

4. Project with Military Technical College, Egypt (1999-2004).

- Implementation of the Microstrip Lab. And training of the staff.

5- Project with King Saud University, Saudi Arabia Kingdom

- **A. S. Mohra** and M. Alkanhal, "Wide Band Array Antenna for ISM Applications (around 2.45GHz)", *college of Engineering, King Saud University, project 37/426-2005-2006.*
- I. Elshafiey and **A. S. Mohra**, "Development of Magnetic Field Maps Imaging System for Metal Inspection", *college of Engineering, King Saud University, (SABIC Funded), project 27/426, 2005-2006.*
- **A. S. Mohra** and M. Alkanhal, "A Dual Band Microwave Power Divider using Microstrip Technology", *college of Engineering, King Saud University, Project # (45/427), period (2006-2007).*
- **A. S. Mohra** and M. Alkanhal, "A Dual Band Rat-Race Coupler Using Microstrip Technology", *college of Engineering", King Saud University, Project # (58/428), period (2007-2008).*

- **A. S. Mohra** and M. Alkanhal, "A Novel Compact Microwave Filter ", *King Saud University, Project # (38/429), period (2008-2009)*.
- Omer Siddiqui and **A. S. Mohra** "A Triple Band Power Divider using Metamaterial Lines", *King Saud University, Project # (7/430), (2008-2009)*.
- Majeed Alkanhal, **A. S. Mohra** "A Compact size hybrid junctions using defected ground structures", *King Saud University, Project # (150176), (2010-2011)*.

6- Project with Saudi Telecommunications Commission (STC)

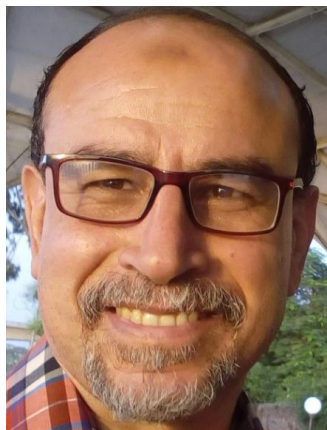
- Project for measuring the electromagnetic radiations from the base station of mobile communications

Training courses

- Has a *project management professional* training (PMP) from National Management Institute, Egypt and PMI MENA chapter, Egypt from 8th October to 13th December 2012.



BIOGRAPHY



Ashraf Shawky Seliem Mohra was born in Egypt in 1963. He received the B.Sc. degree in Electronics and communications from faculty of engineering, Zagazig University in 1986. He received the M.Sc. and Ph. D degree in Electronics and communications from Ain Shams University, Cairo, Egypt, in 1994 and 2000, respectively. He was a member of Electronics Research institute from 1989 up 2016. He is currently vice dean for education and students affair at Benha Faculty of Engineering, Benha university. His current research interests include microstrip antennas, filters, couplers, computer aided design of planar and uniplanar of MIC's and MMIC's, Metamaterials., image processing, cryptography

List of Publications

Journal Articles

1. M. Marzouk, A.F. Abdullah, H. Elhenawy, **A. S. Mohra**, "Microstrip Six-port Reflectometer", *PIERES, University of Washington, Seattle, USA, PP.739, 1995.*
2. E. A. Abdullah, N. A. El-Deeb, H. Elhenawy and **A.S.Mohra**, "Wide band three sections directional coupler", *URSI, University of Colorado, USA PP.136, Jan.2000.*
3. E. A. Abdullah, N. A. El-Deeb, H. Elhenawy and **A. S. Mohra**, "Six-Port Reflectometer using Microstrip Three Sections Directional Coupler", *URSI, University of Colorado, USA PP.137, Jan.2000.*
4. A.F.Sheta, **A. S. Mohra** and S.F. Mahmoud, "A New Class of Miniature Quadrature Couplers for MICs and MMICs Applications", *Microwave and Optical Technology Letters, Vol.43, No.3, PP.215-219 August 2002*

5. A.F. Sheta, **A. S. Mohra** and S.F. Mahmoud, "Multi-Band Operation of Compact H-shaped Microstrip Antenna", *Microwave and Optical Technology Letters*, Vol.35, No.5, PP.363-367 **Dec. 2002**
6. **A. S. Mohra**, A. F. Sheta and S. F. Mahmoud, "A small size 3-dB 180° Microstrip Ring couplers", *Journal of Electromagnetic Wave and Applications*, Vol.17, No.5, PP.707-718, **May 2003**.
7. **A. S. Mohra** "Six-Port Reflectometer based on four 0/180 Microstrip Ring Couplers", *Microwave and Optical Technology Letters*, Vol.40, No.2, PP.167-170, **Jan. 2004**.
8. **A. S. Mohra**, " Six-Port Reflectometer Structure using Two Microstrip Three-Section Couplers, " *Scientific Bulletin, Ain shames University, Faculty of engineering*, Vol.19, No.1, PP.503-515, **March 2004**.
9. E. El-Kenawy, **A. S. Mohra** " Three-Section Microstrip Directional Coupler" *Journal if Engineering Science, Faculty of Assuit*, Vol.33-No-2, PP.639-653, **April 2004**.
10. **A. S. Mohra**, A. F. Sheta and S. F. Mahmoud, "A New small size 3-dB 180° Microstrip Ring couplers", *Applied Computational Electromagnetic society journal*, Vol.19, No.2, **July 2004**.
11. A.F.Sheta, N.Dib and **A. S. Mohra**, "Investigation of New Non-Degenerate Dual-band Microstrip Patch Filter", *IEE Proceedings Microwave Antennas and Proportions*, Vol.153, Issue 1, PP.89-95, **Feb 2006**.
12. A.F.Sheta, H.Boghdady, **A. S. Mohra** and S.F.Mahmoud, "A novel Dual-band Small Size Microstrip antenna" *Applied Computational Electromagnetic Society Journal*, PP.135-142, USA, **July 2006**.
13. **A. S. Mohra** and Majeed al-Kanhal, "small size stepped impedance low pass filters", *Microwave and Optical Technology Letters*, Vol.49, PP.2398-2403, **Oct.2007**.
14. I. Elshafiey and **A. S. Mohra**, " GMR and GMI based systems for Nondestructive evaluation of Printed Circuit Board" *Journal of Circuits, System and Computers*, Vol.16, No.6, PP.847-857, **Dec.2007**.
15. **A. S. Mohra**, "Compact Dual band Wilkinson Power Divider" *Microwave and Optical Technology Letters*, Vol.50, No.6, PP.1678-1682, **June 2008**.
16. Majeed Alkanhal and **A. S. Mohra** "Dual band Ring Couplers Using T and Π sections", *International Journal of Microwave and Optical Technology*, Vol.3, No.4, PP.460-466, **Sept.2008**.
17. **A. S. Mohra** and Majeed Alkanhal, "Dual Band Wilkinson Power Divider Using T-Section", *Journal of Microwave, Optoelectronics*

- and Electromagnetic Applications, Vol.7, No.2, PP.83-90, Dec.2008.*
18. **A. S. Mohra** and Omer Siddiqui, "A Tunable Band Pass Filter Based on Capacitor-Loaded Metamaterial Lines " *Electronics letter, Vol.45, No.9, PP.471-472, April 2009.*
 19. **A. S. Mohra**, " Compact lowpass Filter with Sharp Transition Band based on Defected ground Structures", *Progress In Electromagnetic Research Letters, Vol. 8, PP. 83–92, May 2009.*
 20. Majeed Alkanhal and **A. S. Mohra**, " Harmonic Suppressed and Size-Reduced Bandstop and Bandpass Filters" *Microwave and Optical Technology Letters, Vol. 51, No.9, PP.2109-2114, Sept. 2009*
 21. Omar Siddiqui, **A. S. Mohra**, Majeed Alkanhal, " Design, Analysis and related Applications of shunt varactor loaded reconfigurable metamaterial transmission lines", *International Journal of Microwave and Optical Technology , Vol.4, No.5, PP.283-292, Sept.2009.*
 22. **A. S. Mohra**, "Coupled Microstrip Line Bandpass Filter with Harmonic Suppression Using Right-Angle Triangle Grooves" *Microwave and Optical Technology Letters, Vol.51, No.9, PP.2313-2318, Oct. 2009.*
 23. **A. S. Mohra**, Majeed Alkanhal and Esmat A. Abdullah "Size Reduced Defected Ground Microstrip Directional Coupler" *Microwave and Optical Technology Letters, Vol.52, No.9, PP.1933-1937, Sept.2010.*
 24. O.F. Siddiqui, **A. S. Mohra** and G.V. Eleftheriades, "Quad-Band power divider based on left-handed transmission lines", *Electronics Letters, Vol. 46 No. 21, PP.1441-1442, Oct. 2010.*
 25. Ayman S. Al-Zayed, Z. Hejazi and **A. S. Mohra**, " A Microstrip Directional Coupler with Tight Coupling and Relatively Wideband Using Defected Ground Structure" *Advanced computational Electromagnetic Society Journal, vol.25, No.10, PP.877-887, Oct.2010.*
 26. **A. S. Mohra**, "Microstrip Lowpass Filter with Wideband Rejection using Opened Circuit Stubs and Z-slots Defected Ground Structures" *Microwave and Optical Technology Letters, Vol.53, No.4, PP.811-815, April 2011.*
 27. **A. S. Mohra** and Majeed AlKanhal, "Applications of Defected Ground Structure for size reduction of hybrid junctions" *Journal of Active and Passive Electronics Devices, Vol.7, No.3, PP.251-260, July 2012.*
 28. O. F. Siddiqui and **A. S. Mohra**, "A harmonic-suppressed microstrip antenna using a Metamaterial-inspired compact shunt

- capacitor loaded feedline", *Progress In Electromagnetics Research C*, Vol. 45, 151-162, **2013**
- 29.D. A. Salem, **A. S. Mohra** and A. Sebak, "A Compact Ultra Wideband Bandpass Filter Using Arrow Coupled Lines with Defected Ground Structure", *Journal of Electrical Systems and Information Technology* , PP.36-44, **May 2014**.
 - 30.H.A. Mohammed and **A. S. Mohra**" controllable Band-Notched Printed Monopole Antenna", *International Journal of Engineering Research*, Volume No.5, Issue No.2, pp : 110- 114, Feb. 2016.
 - 31.Osama M. Dardeer, Tamer G. Abouelnaga, **Ashraf S. Mohra** and Hadia M. El -Hennawy," A Novel UWB Vivaldi Antenna Array for Radar Applications", *International Journal of Scientific & Engineering Research*, Volume 7 , Issue 5, PP.1169-1174, **May 2016**.
 - 32.H.A. Mohammed and **A. S. Mohra** "Electronically switchable lowpass/bandpass Filter with Controlled Bandwidth using Pin Diode- Loaded stubs ", *International Journal of Scientific & Engineering Research*, Volume 7, Issue 6, PP.675-678, **June-2016**
 - 33.Osama Dardeer, Tamer Abouelnaga, **A. S. Mohra**, Hadia Elhennawy, "Compact UWB Power Divider, Analysis and Design", *Journal of Electromagnetic Analysis and Applications*, Vol. 9, PP.9-21, **Feb. 2017**.
 - 34.T.G. Abouelnaga and **A.S.Mohra**,"Reconfigurable 3/6 dB Novel Branch line coupler ", *Open journal of antennas and propagations*, Vol.2, PP.8-22, **Feb.2017**.
 - 35.T.G. M.A. Abouelnaga and **A.S.Mohra**," Novel compact harmonic –rejected ring resonator based bandpass filter", *Progress In Electromagnetics Research C*, Vol. 74,PP. 191–201, **2017**
 - 36.Eman G. Ouf, **Ashraf S. Mohra**, Esmat A. Abdallah, and Hadia Elhennawy," Ultra-Wideband Bandpass Filter with Sharp Tuned Notched Band Rejection Based on CRLH Transmission-Line Unit Cell", *Progress In Electromagnetics Research Letters*, Vol. 69, 9–14, **2017**.
 37. O.F.Siddique, **A.S.Mohra**," Microwave Dielectric Sensing in Hyperbolically Dispersive Media", *IEEE Sensors Letters*, Vol.1, issue 6, **Dec.2017**.
 38. Moatasem M. Elsayed, Abeer. T Khalil, Tamer O. Diab, **Ashraf S. Mohra** , " Hybrid Method for brain extraction and MRI scan classification", *International Journal of Engineering and technology*, Vol.7, No.4 PP.4769-4779,**2018**.
 - 39.Fatma sheriff, Wael A. Mohamed, **Ashraf S. Mohra**, "Skin Lesion Analysis towards melanoma Detection using Deep Learning

Techniques", *International Journal of electronics and telecommunications*, Vol. 65, No. 4, PP. 597-602, 2019

Conference Papers

40. **A. S. Mohra**, "Six-port Reflectometer Realization Using Two Microstrip Three-Section Couplers", *NRSC'2001, Faculty of Engineering, Mansoura University, PP.55-61, March 2001*
41. **A. S. Mohra**, A. F. Sheta and S. F. Mahmoud, "Analysis and Design of Small Size-Short Circuited Microstrip T-Shaped Antenna", *Twentieth National Radio Science Conference (NRSC, 2003).*), Atomic Energy Authority, **March 18-20-2003.**
42. **A. S. Mohra**, A. F. Sheta and S. F. Mahmoud, "A small size 3dB 0/180° microstrip ring coupler", *NRSC,2001, Faculty of Engineering, Mansoura University, PP.55-61, March 2001.*
43. **A. S. Mohra**, A. F. sheta and S. F. Mahmoud, "A New small size 3-dB 180° Microstrip Ring couplers", *Applied Computational Electromagnetic society conference, 24-28 March, 2003, Monterey, USA.*
44. R. Ghoname, **A. S. Mohra**, E. Abdallah and H. Elhenawy, " Design and performance of Novel shorted small microstrip antenna", *Mediterranean Microwave Symposium, Ain shams University, Faculty of Engineering, 6-8 May 2003*
45. **A. S. Mohra**, " Six-Port Reflectometer based on four 0/180 Microstrip Ring Couplers", *Mediterranean Microwave Symposium, Ain shams University, Faculty of Engineering, 6-8 May 2003*
46. W. Abdel Wahab, D. Salem, **A. S. Mohra** E. Hashish, " Field Theory of five Port Annular Microstrip Junction" *The 46th IEEE International Midwest Symposium on Circuit and Systems, 27-30 Dec., 2003, Cairo-Egypt.*
47. I. M. Elshafiey and **A. S. Mohra**, " Development of Metal Inspection System Exploiting Magnetoresistive Sensors", *The 6th International Workshop on system on Chip for Real Time Applications, Ain Shams University, Cairo, Egypt, PP.152-155, 27-29 Dec. 2006.*
48. Majeed Alkanhal, Saleh Elshebaley, **A. S. Mohra** and Wahid Elmasry, " Attenuation of Electromagnetic Radiation by polymeric Thermal Insulation Materials", *Proceeding of the Seventh Saudi Engineering Conference", 2-5 Dec. 2007, Riyadh, Saudi Arabia*
49. Abdel Fattah Sheta, **A. S. Mohra**, and Samir F. Mahmoud, "Modified Compact H-Shaped Microstrip Antenna for Tuning

- Multi-Band", 25th national radio science conference, Tanta University, Cairo, Egypt, 18-20 **March 2008**.
50. **A. S. Mohra**, "Compact Dual Band Wilkinson Power Divider", 25th national radio science conference, Tanta Univ., Cairo, Egypt, 18-20 **March 2008**.
51. I. Elshafiey, A. F. Sheta, M. Alkanhal, **A. S. Mohra**, and A. AlOrainy, "Near-Field Characterization of Reconfigurable Narrowband Antenna in the Proximity of the Human Body," *Proceedings of the 35th Annual Review of Progress in Quantitative Nondestructive Evaluation, University of Illinois – Chicago, Chicago, Illinois, July, 2008*.
52. A.F. Sheta, I. Elshafiey, **A.S. Mohra**, Z. Siddiqui, and A. Sebak, "A Compact Antenna for Microwave Imaging and Hyperthermia Treatment of Brain Tumor", published in ANTEM Symposium, Toulouse space show, 25-28 **June 2012**.
53. **A.S. Mohra**, Abdel-Fattah Sheta, Zeeshan Siddiqui, and Ibrahim Elshafiey", Development of Microwave System for Tumor Ablation and Imaging "published in *European Microwave Conference (EUMC2012)*, **Oct, 2012**.
54. D. A. Salem, **A. S. Mohra** and A. Sebak, "A Compact Ultra Wideband Bandpass Filter Using Arrow Coupled Lines with Defected Ground Structure", 2nd international conference on New paradigm in electronics and Information Technology (PIET;013), Luxor, Egypt. 30 Nov.3-**Dec. 2013**.
55. H. A. El Hamshary, **A. S. Mohra**, and M.A. Alkanhl," Ultra Wideband Antenna with Controllable Rejection Band", 2nd international conference on New paradigm in electronics and Information Technology (PIET;013), Luxor, Egypt. 30 Nov.3-**Dec. 2013**.
56. I.M. Barseem, D.A. Salem, **A.S. Mohra**," Lowpass Filter with Sharp Rolloff Factor Using Open Circuit Stubs and Modified π -Defected Ground Structure", " 2nd international conference on New paradigm in electronics and Information Technology (PIET;013), Luxor, Egypt. 30 Nov.3-**Dec. 2013**.
57. **A. S. Mohra**" Dual Band Branch Line Coupler using T and Π Sections", 4th international conference on New paradigm in electronics and Information Technology (PIET;015), Luxor, Egypt. **Nov. 2015**.
58. **Mohamed I. Ahmed, Ashraf S. Mohra**," Controllable WLAN Band Rejection of Ultra Wideband Monopole Antenna Using PIN Diodes and Two C-Shaped Conductor", 34rd National Radio Science Conference (NRSC 2017), March 13-16, **2017**, Alexandria, Egypt.

59. Hesham. A. Mohamed and **Ashraf S. Mohra**," Compact cascaded branch line coupler using T-sections conversion ", 34rd National Radio Science Conference (NRSC 2017), March 13-16, **2017**, Alexandria, Egypt.
60. Mahmoud Abd ElAziz, Anwer S. Abd El-Hameed, **Ashraf S. Mohra**, Amr A. Awamry," Compact Triple -Band Microstrip BPF Utilizing Interdigital-Coupled Lines Feeding Structure", PIER , 17-20 **June, 2019**, Rome, Italy.
61. Eman Zakaria, Wael A. Mohamed, Abeer. T. Khalil and **Ashraf S. Mohra**," Face Recognition using Deep Neural Network Technique", International Conference on Automation Science and Engineering (ICASE-2019), 26-27 June 2019, Giza, Egypt, PP.28-33, 2019.
62. Samar S. Mohamed, Wael A. Mohamed, Abeer. T. Khalil and **Ashraf . S. Mohra**, " Deep Learning Face Detection and Recognition", International Conference on Automation Science and Engineering (ICASE-2019), 26-27 June 2019, Giza, Egypt, PP.34-38, 2019.