Sanaa Salama, Dr.-Ing. Curriculum Vitae

PERSONAL DATA

Date of birth 15.02.1984 Gender Female **Family Status** Married with three children Nationality Jordan Address Arab American University Faculty of Engineering and Information Technology **Telecommunication Engineering Department** P.O. Box 240Jenin, Palestine Office 109C Phone 00970597165051 Email sanaa.salama@aaup.edu

EDUCATION

- <u>PhD in Electrical Engineering (October 2011-April 2015):</u> High Frequency Technology Department (HFT), *Duisburg-Essen University*, Germany. Dissertation title: "Electromagnetic Modelling and Optimization of Antennas on small Platforms". Specialization area: Phased Antenna Arrays, Multi-Ports Antenna Systems (MIMO) /Mutual Coupling and Chassis Wavemodes Coupling.
- <u>M.Sc. in Electrical Engineering (August 2009):</u> *Jordan University*, Jordan, excellent evaluation GPA 3.83/4. Master's thesis title: "Enhanced Dual-band Planar Inverted F-L Antenna for WLAN applications".Specialization area: Multiband Antenna Design.
- <u>B.Sc. in Telecommunication Technology (June 2006)</u>: *Arab American University (AAUJ)*, Palestine, first class honors GPA 3.96/4. Bachelor's thesis title: "Simulation of End to End Communication System Using Matlab/Simulink and Multisim". Specialization area: Communication Systems.

EXPERIENCE AND WORKSHOPS

- <u>Lecturer (February 2010-Septemper 2011)</u>, Telecommunication Engineering Department, Arab American University (AAUJ), Palestine.
- <u>Committee Member</u> for Foundation of Antenna and Microwave Lab, Telecommunication Engineering Department, AAUJ, Palestine.
- <u>Exercise Supervision (WS 2013/2014)</u>, Microwave Theory and Techniques, High Frequency Department, Duisburg-Essen University, Germany.
- <u>Reviewer for</u> "Multi Band PIFA Antenna GSM, WLAN and WiMAX for Mobile Phone Applications", Majlesi Journal of Electrical Engineering, Islamic Azad University, Iran.
- <u>Reviewer for</u> "A Novel UWB Wearable Antenna", submitted to Zuhair Hijjawi Award for undergraduate research, Palestine.
- <u>Reviewer for</u> "Capacity & Coverage Enhancement in 3G WCDMA Wataniya Cellular Network", submitted to Zuhair Hijjawi Award for undergraduate research, Palestine.
- <u>Workshop on "LTCC for Highly Integrated Antenna Front Ends"</u>,(13 November 2013), Loughborough, UK.
- <u>Workshop on "Multibeam Antennas and Beamforming Networks/Electronic Scanned</u> <u>Arrays Design", (10October 2014)</u>, Rome, Italy.
- Assistant Professor (September 2015-current), Telecommunication Engineering Department, Arab American University (AAUJ), Palestine.
- Chairperson (September 2016 August 2018), Telecommunication Engineering Department, Arab American University (AAUJ), Palestine.
- Membership as a returning experet in the Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) GmbH, 01.08.2017-31.07.2019.
- As a reviewer for Asia Pacific Microwave Conference APMC2017, Kuala Lumpur, Malaysia, November 2017.
- Workshop on "Sustainable Development, the Centre for International Migration and Development (CIM)", (23-24 February 2018), Amman, Jordan.
- As a reviewer for International Journal of Information and Communication Sciences (IJICS); ISSN: 2575-1700 (Print); ISSN: 2575-1719 (Online); http://www.sciencepublishinggroup.com/j/ijics", June, 2018-June, 2020.

- As a reviewer for 2018 IEEE International RF and Microwave Conference (RFM2018), Penang, Malaysia, December 2018.
- As a reviewer for 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT 2019), Amman, Jordan, April 2019.

Courses taught at AAUJ:

- 1. Electromagnetic Theory I
- 2. Electromagnetic Theory II
- 3. Electrical Circuits I
- 4. Electrical Circuits II
- 5. Microwave Systems
- 6. Analog Communications
- 7. Digital Communications

Labs taught at AAUJ:

- 1. Analog Communications Lab
- 2. Digital Communications Lab
- 3. Electrical Circuits Lab
- 4. Digital Logic Design Lab
- 5. Antennas and Microwave Lab.

PUBLICATIONS (Books and Papers)

- S. Salama, and Mohamed K.Abdelazeez, "Multiband Planar Inverted-F Dual-L Antenna (PIFDLA) for WLAN Applications", *Journal of King Saud University-Engineering Sciences JKSU*, vol. 24, no. 1, pp. 61-69, January **2012**.
- S. Salama, and K. Solbach, "Equivalent Circuit Modeling of Monopoles on a Small Platform," *International Workshop on AntennaTechnologyiWAT2013*, Karlsruhe, Germany, March 2013.
- S. Salama, and K. Solbach, "Design of Decoupling Network for Monopole Four Square Array antenna for Multi-beam Applications," *Loughborough Antennas and Propagation Conference LAPC2013*, Loughborough, UK, November 2013.
- S. Salama, and K. Solbach, "Parasitic Elements Based Decoupling Technique for Monopole Four Square Array Antenna", *European Microwave Conference EuMC2014*, Rome, Italy, October 2014.
- S. Salama, and K. Solbach, "Study of Mutual Coupling and Chassismodes Coupling through the Equivalent Circuit Modeling of Two Monopoles on a Small

Platform,"*Loughborough Antennas and Propagation ConferenceLAPC 2014*, Loughborough, UK, November **2014**.

- S. Salama, and K. Solbach, "Eigenmodal Feed Based Decoupling Network for Two Ports MIMO and Diversity," *Loughborough Antennas and Propagation Conference LAPC 2014*, Loughborough, UK, November 2014.
- S. Salama, "Antenna Design Challenges on Small Platforms", ISBN: 978-3-8381-5141-0, *SuedwestdeutscherVerlag for Hochschulschriften, OmniScriptum GmbH &Co. KG*, Germany, **2015**.
- S. Salama, "Design of a Rectangular Loop-Shape RF Coil for 7-Tesla Magnetic Resonance Imaging," *Asia Pacific Microwave Conference APMC2017*, Kuala Lumpur, Malaysia, November 2017.
- S. Salama, "Reactive-Element Based Decoupling Network for a Two-Element MRI Phased Array", *Journal of King Saud University-Engineering Sciences JKSU*, May **2018**. (accepted)
- S. Salama, "Parasitic Element Based Decoupling Network for a Two-Element MRI Phased Array," 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology JEEIT2019, Amman, Jordan, April 2019. (accepted)
- A. Abuelhaija and S. Salama, "Port Decoupling vs Array Elements Decoupling at 7-Tesla Magnetic Resonance Imaging", *Journal of Magnetic Resonance*, (submitted)

AWARDS

- <u>Ministry of Higher Education Scholarship</u> for B.Sc., Arab American University, Palestine, 2002-2006.
- <u>Deutscher Akademischer Austausch Dienst (DAAD)Scholarship</u> for M.Sc., JordanUniversity, Jordan, 2007-2009.
- <u>Deutscher Akademischer Austausch Dienst (DAAD) Scholarship</u> for PhD,Duisburg-Essen University, Germany, 2011-2015.

AREAS OF RESEARCH INTERESTS

- Characteristic Chassis Wavemodes.
- Coupling Element-Based Antenna Structure.
- MIMO Antenna Design.
- Beam-Forming Antenna Array Design.
- Mutual Coupling and Chassis Wavemodes Coupling

- Design of Decoupling and Matching Networks.
- Magnetic Resonance Imaging MRI (RF coil design)

MEMBERSHIP

• Jordan Engineers Association

LANGUAGES

- Arabic Language (mother tongue).
- English Language (very good).
- German Language (levels A1, A2).

REFEREES

- **Prof. Mohamed K. Abdelazeez**, Electrical Engineering Department, Jordan University, Amman, Jordan, abdelazeez@ieee.org
- **Prof. Dr.-Ing. Klaus Solbach**, High Frequency Technology Department (HFT), Duisburg-Essen University, Duisburg, Germany, <u>klaus.solbach@uni-due.de</u>
- **Dr. Nasser Hamad**, Electrical Engineering Department, American University of Ras Al Khaimah, Ras Al Khaimah, UAE, <u>nasser.hamad@aurak.ae</u>
- **Prof. Dr.-Ing. Thomas Kaiser**, Digital Signal Processing Department (DSP), Duisburg-Essen University, Duisburg, Germany, <u>thomas.kaiser@uni-due.de</u>