# Fahad Bin Sultan University Faculty of Engineering Electrical Engineering Department

#### Ali H. Ramadan

Degree	Discipline	Institution	Year
Ph.D.	Electrical and Computer Engineering	AUB, Lebanon	2014
M.E.	Electrical and Computer Engineering	AUB, Lebanon	2008
B.E.	Computer and Communication Engineering	IUL, Lebanon	2005

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Institution	Rank	Title	Dates	Full Time or Part Time
Fahad Bin Sultan University	Assistant professor	Chairman	2014-Now	Full time

## **Non-Academic Experience**

Company or Entity	Title	<b>Brief Description of Position</b>	<b>Dates</b>	<b>Full Time or</b>
				Part Time

Subjects taught over the past two academic years				
Course code	Course Name	Institution	Credits	
ELEE 230	Programming for Engineers	Fahad Bin Sultan university	3 c.h	
ELEE 340	Electronic Circuits	Fahad Bin Sultan university	3 c.h	
ELEE 380	Control Systems	Fahad Bin Sultan university	3 c.h	
ELEE 390	Electromagnetic	Fahad Bin Sultan university	3 c.h	
ELEE 440L	Electronic Circuits Lab	Fahad Bin Sultan university	1 c.h	
ELEE 451	Digital Signal Processing	Fahad Bin Sultan university	3 c.h	
ELEE 480L	Control Lab	Fahad Bin Sultan university	1 c.h	
ELEE 500	Probability and Stochastic Processes	Fahad Bin Sultan university	3 c.h	

### **Certifications or professional registrations**

- Lebanese Order of Engineers and Architects

#### **Current membership in professional organizations**

- IEEE Member
- IEEE Young professionals Membership
- IEEE Antennas and Propagation Society Membership
- IEEE Microwave Theory and Techniques Society Membership
- IEEE Engineering in Medicine and Biology Society Membership
- IEEE Circuits and Systems Society Membership
- IEEE Electromagnetic Compatibility Society Membership
- IEEE Magnetics Society Membership

#### **Honors and Awards**

- The paper entitled "A V-Band Highly Directive Circularly Polarized Antenna Array for Wireless and Contactless Continuous Glucose Monitoring" won 1<sup>st</sup> place at the student paper competition of the 2023 IEEE International Symposium on Antennas and Propagation in Portland, Oregon, USA.

- The paper entitled "Wearable Flexible Body Matched Electromagnetic Sensors for Personalized Non-Invasive Glucose Monitoring" is among the top 100 most downloaded papers for the year 2022 from Nature Scientific Reports.
- Featured Paper on the Cover Page of the IEEE Journal of Electromagnetic, RF and Microwaves in Medicine and Biology, Number 2, Volume 5, June 2021.
- Best Paper Award (3<sup>rd</sup> place) in the IEEE International Symposium on Antennas and Propagation in Singapore, 4-10 December 2021.
- Best Paper Award, The Second International Conference on Advances in Computational Tools for Engineering Applications (ACTEA'2012), Zouk Mosbeh, Lebanon, 12-15 December 2012.
- Rathmann Family Foundation Ph.D. Fellowship, 2010.
- The Abdul Hadi Debs Endowment Award for Academic Excellence, 2008.

#### **Service Activities**

- IEEE TAP (Transactions on Antennas and Propagation) Reviewer.
- IEEE AP (Antennas and Propagation) Magazine Reviewer.
- IEEE TMTT (Transactions on Microwave Theory and Techniques) Reviewer.
- IEEE AWPL (Antennas and Wireless Propagation Letters) Reviewer.
- MOTL (Microwave and Optical Technology Letters) Reviewer.
- PIER (Progress in Electromagnetics Research) Reviewer.
- Academic Committee; Graduate and Research Committee; Program Advisory Committee; Accreditation and Quality Committee; Field Training Committee; Laboratory and Safety Committee; FYP Committee; University Standing Committees, Electrical Engineering Department, College of Engineering, Fahad Bin Sultan University, 2014-Present.
- EE College Council Representative, College of Engineering, Fahad Bin Sultan University, 2017-2018.
- QA (Quality Assurance) representative, College of Engineering, Fahad Bin Sultan University, 2017-2019.
- Chair of the Annual Report Committee, College of Engineering, Fahad Bin Sultan University, 2018-2019.
- Electrical Engineering Department Chairperson, College of Engineering, Fahad Bin Sultan University, 2020-Present.

# Principal Publications and Presentations of the Last Five Years

- 1- Nader Shafi, Joseph Costantine, Rouwaida Kanj, Youssef Tawk, Ali H. Ramadan, Mazen Kurban, Jihane Abou Rahal, and Assaad A. Eid, "A Portable Non-Invasive Electromagnetic Lesion-Optimized Sensing Device for the Diagnosis of Skin Cancer (SkanMD)," *IEEE Transactions on Biomedical Circuits and Systems*, Vol. 17, No. 3, pp. 558-573, June 2023, doi: 10.1109/TBCAS.2023.3260581.
- 2- Jessica Hanna, Youssef Tawk, Sami Azar, **Ali H. Ramadan**, Batoul Dia, Elias Shamieh, Sumaya Zoghbi, Rouwaida Kanj, Joseph Costantine, and Assaad A. Eid, "Wearable flexible body matched electromagnetic sensors for personalized non-invasive glucose monitoring," *Scientific Reports (Nature Publishing Group)*, Vol. 1, Issue 2, pp. 1-12, September 2022, doi: https://doi.org/10.1038/s41598-022-19251-z.
- 3- Moussa Bteich, Jessica Hanna, Joseph Costantine, Rouwaida Kanj, Youssef Tawk, **Ali H. Ramadan**, and Assaad A. Eid, "A Non-Invasive Flexible Glucose Monitoring Sensor using a Broadband Reject Filter," *IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology*, Vol. 5, No. 2, pp. 139-147, June 2021, doi: 10.1109/JERM.2020.3023053.
- 4- Jessica Hanna, Moussa Bteich, Youssef Tawk, **Ali H. Ramadan**, Batoul Dia, Fatima A. Asadallah, Aline Eid, Rouwaida Kanj, Joseph Costantine, and Assaad A. Eid, "Noninvasive, wearable, and tunable electromagnetic multisensing system for continuous glucose monitoring, mimicking vasculature anatomy," *Science Advances*, Vol. 6, No. 24, June 2020, doi: 10.1126/sciadv.aba5320.
- 5- Aline Eid, Jimmy G. Hester, Joseph Costantine, Youssef Tawk, **Ali H. Ramadan**, and Manos M. Tentzeris, "A Compact Source–Load Agnostic Flexible Rectenna Topology for IoT

- Devices," *IEEE Transactions on Antennas and Propagation*, Vol. 68, No. 4, pp. 2621-2629, April 2020, doi: 10.1109/TAP.2019.2955211.
- 6- Hoda M. Farhat, Joseph Costantine, Rouwaida Kanj, Youssef Tawk, **Ali H. Ramadan**, and Assaad A. Eid, "A V-Band Highly Directive Circularly Polarized Antenna Array for Wireless and Contactless Continuous Glucose Monitoring," *The 2023 IEEE International Symposium on Antennas and Propagation and USNC/URSI National Radio Science Meeting (USNC-URSI)*, pp. 1271-1272, Portland, OR, USA, 23-28 July 2023.
- 7- Moussa Bteich, Joseph Costantine, Rouwaida Kanj, Youssef Tawk, **Ali H. Ramadan**, and Assaad A. Eid, "A Tunable Wearable Band Reject Sensor for Enhanced Glucose Monitoring Sensitivity," *The 2021 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting (APS/URSI)*, pp. 805-806, Singapore, Singapore, 4-10 December 2021.
- 8- Jessica Hanna, Joseph Costantine, Rouwaida Kanj, Youssef Tawk, **Ali H. Ramadan**, and Assaad A. Eid, "A Vasculature Anatomy Inspired Flexible Slot Antenna for Continuous Non-invasive Glucose Monitoring," *The 2021 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting (APS/URSI)*, pp. 803-804, Singapore, Singapore, 4-10 December 2021.

#### **Most Recent Professional Development Activities**

- 2023 IEEE International Symposium on Antennas and Propagation and USNC/URSI National Radio Science Meeting (USNC-URSI), Portland, OR, USA, 23-28 July 2023.