



### Elias Nassar

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## Biography

Dr. Nassar graduated with a Ph.D. degree from the Ohio State University, Columbus, OH, USA in 1997. He joined Notre Dame University in 1998 as Assistant Professor of Electrical Engineering, where he was promoted to Associate Professor in 2005 and Professor in 2011. He served as the Electrical, Computer and Communication Engineering Department Chairperson from 2001 to 2006 and Dean of the Faculty of Engineering from 2006 to 2012. He also served as ABET Coordinator from 2012 to 2013 and FE Assessment coordinator from 2017-present. He is a Senior Member of the IEEE. His research is in the areas of electromagnetics and engineering education. He has many publications in conferences and journals and has served as conference chair and member of technical committees in several international conferences. He is an ABET Program Evaluator since 2015 and is active in accreditation activities.

## Peer-reviewed Journals

### Local

- Optimal Power Flow Solution of the Lebanese Electric Power System, Jabr, R. A., Georges, S. W., & Nassar, E. M., Palma Research Journal, 1, Vol. 10, 2008.

### International

- "Complex Dielectric Constant Computation from Three Dimensional Simulations of Random Media Using The Finite Difference Time Domain Method", E. Nassar, J. Johnson, & R. Lee, WSEAS Transactions on Electronics, Issue 8, Vol.3, ISSN 1109-9445, August 2006.
- "Study and Development of a Silicon Infrared Diode Operating Under Forward Bias", M. ElTahchi, E. Nassar & P. Mialhe, Microelectronics Journal, Vol. 36, No. 3, March 2005.
- "A Numerical Model for Electromagnetic Scattering from Sea Ice", E. M. Nassar, J. T. Johnson & R. Lee, IEEE Transactions on GeoScience and Remote Sensing, Vol. 38, No. 3, May 2000.
- "Electromagnetic Probe for the Measurement of the Dielectric Constant of Materials," E. Nassar, R. Lee & J. D. Young, IEEE Transactions on Antennas and Propagation, Vol. 47, No. 6, June 1999.
- "Application of Plane Waves for Accurate Measurement of Microwave Scattering from Geophysical Surfaces," S. Gogineni, K. Jezek, L. Peters, Jr., J. Young & E. Nassar, IEEE Transactions on Geoscience and Remote Sensing, Vol. 33, No. 3, May 1995.

## Peer-reviewed Conference Proceedings

### Local

- "Antenna Design for the GPR Detection and Classification of Landmines", A. Al Takach, M. Haidar, M. Al-Husseini, A. El-Hajj, & E. Nassar, 22nd International LAAS Conference, April 14-15, 2016, Beirut, Lebanon.

- “Linear to Circular Polarization Transformation of Vivaldi Antennas and Its Use in GPR Detection”, A. AlTakach, M. Al-Husseini, A. El-Hajj, & E. Nassar, The Third IEEE Middle East Conference on Antennas and Propagation, Sep. 20-22, 2016, Beirut, Lebanon.
- Compact and Super Broadband Volumetric Folded Dipole Antenna for Mobile Applications, Harmouch, A., Nassar, E., Kais, H., Rishani, N., 2009 International Conference on Advances in Computational Tools for Engineering Applications, Zouk Mosbeh, Lebanon, 2009.
- “The Use of Multimedia Tools in Electrical Engineering Education at Notre Dame University”, Elias M. Nassar, The Use of Information Technology in Higher Education in Arab Universities Conference, Notre Dame University, Lebanon, March 12-13, 2001.
- “Investigation of Radiowave propagation from Cellular Phones and Means of Reducing its effects on the Human Head”, E. M. Nassar & F. Keyrouz, 3rd Conference on Modeling and Simulation in Biology, Medicine and Biomedical Engineering, University of Balamand, Lebanon, May 27-30, 2003.

### Regional

- Analysis and Design of a Disinfection Device for Agricultural Products, S. Keyrouz, E. Nassar, & E. Akiki, 2011 IEEE GCC Conference and Exhibition for Sustainable Ubiquitous Technology, UAE, 2011.

### International

- “Simple Design Method for Dielectric-Filled Low-Sidelobe Slotted Waveguide Antennas”, M. Al-Husseini, H. M. El-Misilmani, K. Y. Kaban, A. El-Hajj, & E. Nassar, The 4th Advanced Electromagnetics Symposium, July 26-28, 2016, Malagua, Spain.
- Building an Assessment and Continuous Improvement System, E. Nassar, 2014 ABET Symposium, April 4, 2014, Pittsburgh, USA
- The Integration of Reconfigurable Filters for the Matching of Wideband Antennas, Y. Tawk, C. Christodoulou, M. Zamudio, E. Nassar & J. Constantine, IEEE APS/URSI Symposium, July 7-13, 2013, Florida, USA.
- Involving Faculty Members: Experience in Establishing an Outcome Assessment Process at an Undergraduate Private Institution, E. Nassar & N. Metni, 2011 ABET Symposium, April 14-16, 2011, USA
- Design of A Compact and Super Broadband Volumetric Folded Dipole Antenna for Mobile Applications, A. Harmouch & E. Nassar, Progress in Electromagnetics Research Symposium. China, 2010.
- “Study and Development of a Silicon Infrared Diode Operating Under Forward Bias”, M. ElTahchi, E. Nassar & P.Mialhe, 5th International Conference on Low Dimensional Structures and Devices, Cancun, Mayan Riviera, Mexico, Dec. 12-17, 2004.
- “Monte-Carlo Simulations of Electromagnetic Scattering from Sea Ice with a Rough Surface”, Progress in Electromagnetic Research Symposium, Nantes, France, July 1998.
- “Electromagnetic Modeling of Sea Ice Using the Finite Difference Time Domain Method,” E. Nassar, J. Johnson & R. Lee, Progress in Electromagnetic Research Symposium, Cambridge, MA, USA, July 1997.
- “Unusual Uses of Compact Range Technology,” L. Peters Jr., W. D. Burnside, E. Nassar & H. T. Chou, Antenna Measurement Techniques Association Meeting and Symposium, Seattle, WA, USA, September 1996.
- “Electromagnetic Probe for In-Situ Measurement of The Complex Dielectric Constant of Materials,” E. Nassar, R. Lee & J. Young, IEEE Antennas and Propagation Symposium and URSI Science Meeting, Baltimore, MD, USA, July 1996.
- “In Situ Measurement of the Complex Dielectric Constant of Sea Ice from 1 to 10 GHz”, E. Nassar, R. Lee, K. Jezek & J. Young, International GeoScience and Remote Sensing Symposium, Lincoln, NE, USA, May 1996.
- “Microwave Scattering From Saline Ice Using Plane Wave Illumination,” K. Jezek, P. Gogineni, L. Peters, Jr., J. Young, S. Beaven, E. Nassar & I. Zabel, International GeoScience and Remote Sensing Symposium, Pasadena, CA, USA, August 1994.

### Chapters in Books

- Introduction to Computer Tools in Electrical Engineering, Elias M. Nassar, NDU Press, ISBN:9953418357, 2002.

### Specialized Reports

- CNRS, three-year \$150,000 Associated Research Unit, (with AUB and LU) 2015-2018.

### Esteemed indicators

- ABET Program Evaluator, 2015-present
- Member of the IEEE GUOS Committee overseeing IEEE Section operations worldwide.
- Chairperson IEEE Lebanon Section 2008-2010
- Chairperson, IEEE Region 8 Student Activities Committee, 2011-2012
- Elected Member of the IEEE Region 8 Nominations and Appointments Committee 2013-2014.

- General Chair of the 2009 and 2012 International Conferences on Advances in Computational Tools for Engineering Applications, Zouk Mosbeh, Lebanon.
- Honorary Co-Chair of the 2013 IEEE REDEC International Conference, Beirut, Lebanon.
- General Co-Chair of the 2014 IEEE MELECON International Conference, Beirut, Lebanon.
- Member, Union of Radio Science International