

Ravi P. Joshi

Education

Indian Institute of Technology	Electrical Engineering	B. Tech.	1983
Institute of Technology	Electrical Engineering	M. Tech.	1985
Arizona State University	Electrical Engineering	Ph.D.	1988
Arizona State University	Electrical Engineering	Post. Doc.	5/88-8/89

Academic experience

Professor, Electrical & Computer Engineering, Texas Tech University, Lubbock, TX (01/15–Present)
Professor, Electrical & Computer Engineering, Old Dominion University, Norfolk, VA (05/01–12/14)
Assoc. Prof., Electrical & Computer Engineering, Old Dominion Univ., Norfolk, VA (05/95–05/01)
Assistant Prof., Electrical & Comp. Engr. Old Dominion Univ., Norfolk, VA (08/89-05/95)

Non-academic experience

Visiting Scientist, Motorola Incorporated, Tempe, AZ (05/99 - 07/99)
ASEE Summer Faculty Fellow, NASA Goddard Space Center, MD (05/97 - 07/97)
Visiting Faculty on Sabbatical Leave, Oak Ridge National Laboratory, Oak Ridge, TN (08/96 - 12/96)
Air Force Summer Faculty Fellow, Philips Laboratory, Albuquerque, NM (06/95 - 07/95)

Certifications or professional registrations:

Licensed Professional Engineer State of Texas # 119803
Licensed Professional Engineer Commonwealth of Virginia #0402048456

Current membership in professional organizations

Member of IEEE Plasma Science Society

Honors and awards

Fellow of IEEE, Fellow of IOP, Fellow of IET, Fellow of IETE, IEEE Distinguished Lecturer, NPSS Merit Award, DEIS Dunbar Award, Fulbright Scholar (2019)

Service activities

College: Institutional Effectiveness (IE) committee

Department: ABET Committee, Undergraduate Curriculum Committee, Undergraduate Curriculum Sub-Committee on Electromagnetics and Power.

Professional:

Panelist: NSF programs

Individual proposal reviewed for: AFOSR, NSF

Journal reviewed for: Applied Physics Letters, Journal of Applied Physics, Physical Review Letters, Physical Review B, IEEE Trans, Plasma Science, IEEE Trans. Elect. Dev etc.

Selected publications

419 Total: 206 refereed journal articles and book chapters; over 170 conference proceedings

H-index: 50 // Google Scholar i10-index: 144; Citations: 9601 (as of September 2022)

Some Recent Publications:

- J. Stephens, A. Fierro, S. Beeson, G. Laity, D. Trienekens, **R. P. Joshi**, J. C. Dickens, and A. A. Neuber, "Photoionization Capable, Extreme and Vacuum Ultraviolet Emission in Developing Low Temperature Plasmas in Air," *Plasma Sources Science and Technology* 25, 025024 (2016).
- W. Milestone, Q. Hu, A. Loveless, A. Garner, and **R. P. Joshi**, "Modeling Coupled Single Cell Electroporation and Thermal Effects From Nanosecond Electric Pulse Trains," *Journ. Appl. Physics* **132**, 094701 (2022).
- M. Brown, M. Sanati, and **R. P. Joshi**, "Combined First Principles-Monte Carlo Analyses to Evaluate the Effect of Surface Hydrogen on the Secondary Electron Yield of Nickel," *Journ. Appl. Physics* **131**, 103301 (2022).
- S. N. Sami, R. Islam, S. Portillo, E. Schamiloglu, and **R. P. Joshi**, "Evaluations of Hydrogen Outgassing from Cesium Coated Carbon Fiber Electrodes," *Vacuum* **198**, 110869 (2022).
- A.T. Hewitt, B. Esser, **R. P. Joshi**, J. Mankowski, J. Dickens, A. Neuber, R. Lee, J. Stephens, "Optically Activated, In-waveguide, Semiconductor Attenuators for the Controllable Isolation of Ka-band Microwaves," *IEEE Trans. Microwave Theory and Techniques* **70**, 2217 (2022).
- L. Silvestre, J. Stephens, J. J. Mankowski, J. Dickens, A. A. Neuber, and **R. P. Joshi**, "A Continuum Approach for Multipactor Using the Vlasov-Poisson Analysis," *J. Phys D: Applied Physics* **55**, 045202 (2022).
- S. N. Sami, R. Islam, and **R. P. Joshi**, "Atomistic Calculations of Thermal Conductivity in Films Made From Graphene Sheets for Electron Emitter Applications," *AIP Advances* **11**, 105310 (2021).
- D. Guo, S. N. Sami, L. Diaz, S. Sanati, and **R. P. Joshi**, "Evaluation of Electron Currents from Cesium Coated Tungsten Emitter Arrays with Inclusion of Space Charge Effects, Workfunction Changes and Screening," *Journ. Of Vacuum Science and Technology B* **39**, 054201 (2021).
- S. N. Sami, R. Islam, R. Khare, and **R. P. Joshi**, "Simulations of Hydrogen Outgassing from Carbon Fibers," *Journ. Applied Phys.* **129**, 213303 (2021).
- S. J. Beebe, **R. P. Joshi**, K. H. Schoenbach, and S. Xiao, in *Ultrashort Electric Pulse Effects in Biology and Medicine* (Springer, New York, 2021), ISBN: 978-981-10-5113-5.

Professional development activities

- ABET Faculty Workshop for Assessment, Orlando, FL, March, 2016
- Guest Editor of 5 IEEE Transaction of Plasma Science Special issues
- Senior Editor, IEEE Transaction of Plasma Science

Invited presentations Delivered over 35 invited talks and guest lectures in international conferences and academic institutions; Also attended 10 conferences in the past 5 years.

Patents

A. Pakhomov, K. Schoenbach, J. Kolb and **R. P. Joshi**, "Modulation of Neuromuscular Functions with Ultrashort Electrical Pulses," US Patent 8139339.

Conferences organization

- Organizing Committee -- 2010 IEEE International Conference on Plasma Science
- Chair, Publications and Publicity Committee for IEEE Conference on Electrical Insulation and Dielectric Phenomena (Virginia Beach, 2009 and Quebec City, Canada, 2008).