




Faculty Details proforma for DU Web-site

Title	Dr.	First Name	Vikram	Last Name	Kumar	Photograph
Designation	Assistant Professor					
Address	Department of Electronic Science University of Delhi, South Campus New Delhi – 110 021					
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Educational Qualifications						
Degree	Institution				Year	
Ph.D. (Electronics - Microwave)	Department of Electronic Engineering, Indian Institute of Technology BHU Varanasi				2019	
M.E.(EC -Microwave)	Department of Electronic & Communication, Birla Institute of Technology Mesra				2011	
B.SC. Engg. (Electronics & Communication)	RP Sharma Institute of Technology Patna, under Magadh University				2008	
Organization		Designation		Duration		Role
Deptt. of Electronic Science, UDSC, INDIA		Assistant Professor		10.03.2022 - Till Date		Teaching & Research
National Institute of Technology Patna		Contractual Faculty		01.12.2020 - 08.03.2022		Teaching & Research
Dronacharya Group of Institution Greater Noida		Assistant Professor		02.07.2020 - 01.11.2020		Teaching
JSS Academy of Technical Education, Noida		Assistant Professor		30.07.2012 - 31.07.2014		Teaching & Research
Dev Bhoomi Institute of Technology, Dehradun		Assistant Professor		11.07.2011 - 23.07.2012		Teaching
Administrative Assignments						
<ul style="list-style-type: none"> • Member, Departmental Research Committee • Member, Committee of Courses 						
Areas of Interest / Specialization						
Specialized in RF & Microwave Devices, Modern Antennas, Plasma Antenna, Numerical Techniques in Microwave Engineering. Having Research Interest in High Power Microwave Application, RF and Microwave circuits, Biomedical Application of Microwave						

Subjects Taught

Theory:

B.Tech (Electronics)

- Bio Medical Signal Processing
- Elements of Electronic
- Microwave Engineering
- Electromagnetic Theory and Wave Propagation

Practical:

B.Tech (Electronics)

- Antenna and Wave Propagation
- Digital Electronics
- Microwave Engineering
- Computational Electromagnetics Lab

Research Guidance

List against each head (If applicable)

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| 1. Supervision of awarded Doctoral Thesis | - | Nil |
| 2. Supervision of Doctoral Thesis, under progress | - | Nil |
| 3. Supervision of awarded M.Phil dissertations | - | Nil |
| 4. Supervision of M.Phil dissertations, under progress | - | Nil |

Publications Profile

List against each head (If applicable) (as Illustrated with examples)

1. Books Chapter

- Vikram Kumar, and Dileep Kumar Gupta, Chapter entitled "Radar components and their types (Transmission lines, Antennas, Filters, Absorbers, generator and receiver)" in the book "Radar Remote Sensing: Application and Challenges", Elsevier Inc., ISBN: 9780128234570.

2. Research papers published in Refereed/Peer Reviewed Journals

- V. Kumar, S. Dwivedi, P. K. Jain, "Circular Sectoral Waveguide TM01 to TE11 Mode Converter", Microwave and Optical Technology Letters, Vol. 61, Page 1697–1701, 2019. Top 10% downloaded paper of Wiley Publication in the duration of January 2018 and December 2019 as recognised and certified by the publication house.
- V. Kumar, S. Dwivedi, P. K. Jain, "Experimental Investigation and Design of Sectoral Waveguide TM01 to TE11 Mode Converter", Journal of Microwave Power and Electromagnetic Energy, Vol. 53, Page 276-295, 2019.
- V. Kumar, S. Dwivedi, P. K. Jain, "Mode Matching Analysis for Characterisation of the SWG Mode Converters", Microwave and Optical Technology Letters, Vol. 61, Page 2619-2627, 2019.
- V. Kumar, M. Mishra, N. K. Joshi, "Study of a fluorescent tube as Plasma antenna", Progress in Electromagnetics Research Letters, Vol. 24, Page 17-26, 2011.

3. Patents Filed

- Inventors: V. Kumar, P. K. Jain, "Coaxial Beam Rotating Mode Converter", Indian Patent, Published on 11 March 2022, Application No. 202231004086, Applicant – NIT Patna.
- Inventors: V. Kumar, S. Rao, P. K. Jain, "An Improved Electromagnetic Radiator Based on Integration of Sectoral Plates in Coaxial Horn Antenna", Indian Patent, Published on 19 November 2021, Application No. 202131036858, Applicant – NIT Patna
- Inventors: V. Kumar, S. Dwivedi, P. K. Jain, "High power microwave sectoral waveguide mode converter", Indian Patent, Published on 01 January 2021, Application No. 201911025593, Applicant – IIT BHU Varanasi.

4. Conference papers

- V Kumar, P K Jain, "Design analysis of a Tunable Tapered Metallic Baffle TM01 to TE11 HPM Mode Converter", IVEC 2020, Monterey, CA. October 2020
- V Kumar, P K Jain, "Sectoral Waveguide TEM to TE11 Mode Converter and its Limitations", National Conference on Emerging Trends in Vacuum Electronic Devices and Application, Roorkee, India, 17-19 November 2017
- V Kumar, P K Jain, "Effects of Dielectrics in Coaxial Beam Rotating Antenna", National Conference on Emerging Trends in Vacuum Electronic Devices and Application, 16-18 March 2017
- V Kumar, P K Jain, "Design and Simulation of a Coaxial to Cylindrical Waveguide Mode Converter", National Conference on Emerging Trends in Vacuum Electron Devices and Application, 3-5 December 2015
- Vikram Kumar, "A Review of Plasma Antennas", National Conference on Higher Education - Ways Ahead, Delhi, India, November 2014.

Awards and Distinctions
I. Qualified GATE 2009 EC
II. UG Project was Department of Science and Technology Bihar in 2007
Research Projects (Major Grants/Research Collaboration)
Nil
Association With Professional Bodies
Other Activities

www.du.ac.in



Signature of Faculty Member