

NAND KISHORE, Ph.D.

🏠 Assistant Professor

Electronics Engineering Department, HBTU Kanpur
Kanpur-208002, U.P.

✉ nkishore@hbtu.ac.in, kishore.nand2@gmail.com

☎ +91-6392693468, 8853038570








Research Interest

- 📌 Advance Communication Systems.
- 📌 RF Circuits and Systems
 - Microstrip Antennas and Arrays- MIMO/Diversity Antenna, Digital Beamforming Antenna, Shared Aperture Antenna, Conformal Antenna, Graphene antenna, Metamaterial Based Antenna, Filtenna.
 - Microwave and millimeter wave circuits and systems- Filters, couplers, power divider, phase shifter, Low noise amplifier, Mixer, oscillator.
- 📌 Non-invasive RF Sensor Systems, Near-Field Imaging for medical applications.
- 📌 Intelligent Transportation Systems, and Neural Networks.







Employment Details

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| 30/12/2021 – Till date | 📌 Assistant Professor , Electronics Engineering Department, HBTU Kanpur . |
| 12/08/2021 – 29/12/2021 | 📌 Temporary Faculty , Electronics & Communication Engineering Department, MNNIT Allahabad . |
| 21/09/2020 – 31/07/2021 | 📌 Temporary Faculty , Electronics & Communication Engineering Department, MNNIT Allahabad . |
| 26/07/2019 – 31/08/2020 | 📌 Temporary Faculty , Electronics & Communication Engineering Department, MNNIT Allahabad . |
| 12/07/2018 – 31/05/2019 | 📌 Visiting Faculty , Electronics & Communication Engineering Department, MNNIT Allahabad . |
| 25/01/2018 – 31/05/2018 | 📌 Temporary Faculty , Electronics & Telecommunication Engineering Department, NIT Raipur. |
| 12/07/2012 – 31/12/2012 | 📌 Visiting Faculty , Electronics & Communication Engineering Department, MNNIT Allahabad . |





Education

- 2014 – 2018  **Ph.D., MNNIT Allahabad:** Electronics & Communication Engineering Department.
- Thesis Title: Defected Ground Structure Based Patch Antenna Design for Intelligent Transportation Systems.
 - Major Research Area: RF- Microwave, Microstrip patch Antenna, Communication.
 - Date of Award of degree: June 2018.
- 2010 – 2012  **M.Tech., MNNIT Allahabad:** Electronics Engineering Department.
- Specialization: Digital System.
 - Thesis Title: Performance Analysis of Slotted Right Angled Isosceles Triangular Patch Antenna.
 - Research Area: RF- Microwave, Microstrip patch Antenna.
- 2005 – 2009  **B.Tech., UPTU Lucknow:** Electronics & Communication Engineering Department.
- Institute: Noida Institute of Engineering and Technology, Gr. Noida.
- 2003 – 2004  **Class 12, CBSE Board:**
- Institute: D. A. V. Public School Amlori
- 2001 – 2002  **Class 10, CBSE Board:**
- Institute: D. A. V. Public School Amlori

Subject Taught

-  Communication Foundation.
-  Communication System and Networking.
-  Principle of Communication Engineering.
-  Radar Engineering.
-  Antenna.
-  Electromagnetic.

Software Known

-  MATLAB
-  High Frequency Structure Simulator-HFSS
-  QualNet
-  Network Simulator-2

Research Publications

Journal

- Kushwaha, R. K., Karuppanan, P., & Kishore, N., “High-Gain Patch Antenna Design using PRS and Ground plane Reflector for THz band Applications”, *Optik, Elsevier Publication*, 2021, (ISSN: 0030-4026), (Impact factor: 2.187) (SCI) (DOI: 10.1016/j.ijleo.2021.166559).
- Gaurav Upadhyay, Nand Kishore, Prashant Ranjan, V. S. Tripathi, Shivesh Tripathi, “Frequency Reconfigurable Multiband Patch Antenna Using PIN-Diode for ITS Applications”, *International Journal of Electronic and Communication Engineering, WASET*, vol. 10, no. 12, pp. 735-739, 2018 (ISSN:1307-6892).
- Gaurav Upadhyay, Nand Kishore, Prashant Ranjan, Shivesh Tripathi, V. S. Tripathi, “PIN-Diode Based Slotted Reconfigurable Multiband Antenna Array for Vehicular Communication”, *International Journal of Electronic and Communication Engineering, WASET*, vol. 12, no. 1, pp. 16-19, 2018 (ISSN:1307-6892).
- Nand Kishore, Gaurav Upadhyay, Vijay Shanker Tripathi, and Arun Prakash, “Dual band rectangular patch antenna array with defected ground structure for ITS application”, *AEU-International Journal of Electronics and Communications, Elsevier Publication*, 96, pp. 228-237, October 2018 (ISSN: 1434-8411). (Impact factor: 2.853) (SCI) (DOI: 10.1016/j.aeue.2018.09.039).
- Nand Kishore, Gaurav Upadhyay, Vijay Shanker Tripathi, and Arun Prakash, “Millimeter-Wave Antenna for Intelligent Transportation System”, *Journal of Microwaves, Optoelectronics and Electromagnetic Applications, Brazilian Microwave and Optoelectronics Society (SBMO) and Brazilian Society of Electromagnetism (SBMag)*, vol.17, no.1, pp. 171-178, March 2018 (ISSN: 2179-1074) (SCOPUS) (DOI: 10.1590/2179-10742018v17i1n146).
- Gaurav Upadhyay, Nand Kishore, Saurabh Raj, Shivesh Tripathi, Vijay Shanker Tripathi, “Dual-feed CSRR-loaded switchable multiband microstrip patch antenna for ITS applications”, *IET Microwaves, Antennas and Propagation*, vol. 12, pp. 2135 – 2140, October 2018 (ISSN: 1751-8733). (Impact factor: 1.972) (SCI) (DOI: 10.1049/iet-map.2018.5269)
- Nand Kishore, Arun Prakash, and Vijay Shanker Tripathi. “A reconfigurable ultra wide band antenna with defected ground structure for ITS application”, *AEU-International Journal of Electronics and Communications, Elsevier Publication*, vol.72, pp 210-215, 2017 (ISSN: 1434-8411). (Impact factor: 2.924) (SCI) (DOI: 10.1016/j.aeue.2016.12.009)
- Nand Kishore, Arun Prakash, and V. S. Tripathi, “A Multiband Microstrip Patch Antenna with Defected Ground Structure for ITS Applications”, *Microwave and Optical Technology Letters, Wiley Publication*, Vol. 58, No. 12, pp. 2814 – 2818, December 2016 (ISSN: 1098-2760). (Citation: 02) (Impact factor: 0.957) (SCI) (DOI: 10.1002/mop.30151)

Conference

- Ritesh Kumar Kushwaha , P. Karuppanan, Prateek Ashthana and Nand Kishore, “Design of Tapered Vivaldi Antenna for Milli-meter wave Applications”, *4th International Conference on VLSI, Communication And Signal Processing in MNNIT Allahabad*, 2021, pp.-1-06 (Accepted and Presented).

Research Publications (continued)

- Shashwat Pathak, Nand Kishore, Gaurav Upadhyay, Ratneshwar Kumar Ratnesh, and Rajan Mishra, "A Compact Size Planar Microstrip-Fed Patch Antenna with Hexagonal DGS Slot for WLAN Application", *3rd International Conference on VLSI, Communication And Signal Processing in MNNIT Allahabad*, 2020, pp.-1-09.
- Ritesh Kumar Kushwaha, P. Karuppanan and Nand Kishore, "Investigation of GNR based Metamaterial Antenna for single and dual band THz Applications", *3rd International Conference on VLSI, Communication And Signal Processing in MNNIT Allahabad*, 2020, pp.-1-11.
- S. Raj, P. Tripathi, N. Kishore, S. S. Tripathi and V. S. Tripathi, "A novel Antenna design for Non-Invasive Blood Glucose Measurement and its Sensitivity Optimization using ANN", *2020 International Conference on Electrical and Electronics Engineering (ICE3), Gorakhpur, India*, 2020, pp. 355-358, doi: 10.1109/ICE348803.2020.9122876.
- Saurabh Raj, Nand Kishore, Gaurav Upadhyay, Shivesh Tripathi, Vijay Shanker Tripathi, "A Compact Design of Circularly Polarized Fractal Patch Antenna for 5G Application", *International Microwave and RF Conference (IMaRC 2018), Kolkata,WB*, 28-30 Nov. 2018, pp.-1-4. (ISSN: 2377-9152) doi: 10.1109/IMaRC.2018.8877167.
- Saurabh Raj, Nand Kishore, Gaurav Upadhyay, Shivesh Tripathi, Vijay Shanker Tripathi, "A Novel Design of CSRR Loaded Truncated Patch Antenna for Non-Invasive Blood Glucose Monitoring System", *International Microwave and RF Conference (IMaRC 2018), Kolkata,WB*, 28-30 Nov. 2018, pp. 1-4. (ISSN: 2377-9152), Doi: 10.1109/IMaRC.2018.8877249.
- Saurabh Raj, Gaurav Upadhyay, Nand Kishore, Shivesh Tripathi, Vijay Shanker Tripathi, "A Stacked Patch MIMO Antenna With Circular Polarization for non-invasive Blood Glucose Sensing Application", *5th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON-2018), MMMUT Gorakhpur,UP*, pp. 1-4, 2-4 Nov. 2018 (ISBN: 978-1-5386-5002-8), DOI: 10.1109/UPCON.2018.8597109.
- Prashant Ranjan, Gaurav Upadhyay, Nand Kishore, V.S. Tripathi, and Shivesh Tripathi, "Triple Band Microwave Filter Using Stepped Impedance Line (SIL) and Stub Loaded Resonator with Five Transmission Zeroes", *International Microwave and RF Conference (IMaRC 2017), Ahmadabad*, pp. 287-289, 11-13 Dec 2017 (ISBN: 978-1-5386-1320-7), DOI: 10.1109/IMaRC.2017.8611245.
- Prashant Ranjan, Gaurav Upadhyay, Nand Kishore, V.S. Tripathi, and V. K. Dwivedi, "UWB Filter with Controllable Notch Band and Higher Stop Band Transmission Zero Using Open Stub in Inverted T-Shaped Resonator", *Asia Pacific Microwave Conference (APMC-2017), Kuala Lumpur, Malaysia*, pp. 817-820, 13-16 Nov 2017 (ISBN: 978-1-5386-0640-7) DOI: 10.1109/APMC.2017.8251574.
- Prashant Ranjan, Nand Kishore, Indrasen Singh and V.S. Tripathi, "Inverted Z and Circular Slot Patch Antenna For WLAN and WiMax", *International Conferences in Power Control and Embedded Systems (ICPCES -2012), MNNIT Allahabad*, pp. 281 – 285, 17-19 Dec. 2012 (ISBN 978-1-4673-1049-9) doi: 10.1109/ICPCES.2012.6508079.

Research Publications (continued)

- Nand Kishore, Prashant Ranjan, Indrasen Singh, and V S Tripathi, "Comparison Between Triangular and Rectangular Stepped Dielectric Resonator Antenna", *Advances in Computer Communication and Embedded Systems (ACCES-2012)*, MMMEC Gorakhpur, pp. 155 – 158, 12-13 April 2012 (ISBN: 978-93-82062-19-6).
- Nand Kishore, Prashant Ranjan, Indrasen Singh, and V S Tripathi, "Right Angled Isosceles Triangular Ring Patch Antenna With Different Feeding Techniques", *International Conference on Innovations and Advancements in Information and Communication Technology (ICIAICT 2012)*, GBU Greater Noida, pp. 281 – 286, 30-31 March 2012 (ISBN 978-93-81583-34-0).

Paper Presented in Conference

- Shashwat Pathak, Nand Kishore, Gaurav Upadhyay, Ratneshwar Kumar Ratnesh, and Rajan Mishra, "A Compact Size Planar Microstrip-Fed Patch Antenna with Hexagonal DGS Slot for WLAN Application", *3rd International Conference on VLSI, Communication And Signal Processing in MNNIT Allahabad*, 2020, pp.-1-09.
- Ritesh Kumar Kushwaha , P. Karuppanan and Nand Kishore, "Investigation of GNR based Metamaterial Antenna for single and dual band THz Applications", *3rd International Conference on VLSI, Communication And Signal Processing in MNNIT Allahabad* , 2020, pp.-1-11.
- Nand Kishore, Prashant Ranjan, Indrasen Singh, and V S Tripathi, "Comparison Between Triangular and Rectangular Stepped Dielectric Resonator Antenna", *Advances in Computer Communication and Embedded Systems (ACCES-2012)*, MMMEC Gorakhpur, pp. 155 – 158, 12-13 April 2012 (ISBN: 978-93-82062-19-6).
- Nand Kishore, Prashant Ranjan, Indrasen Singh, and V S Tripathi, "Right Angled Isosceles Triangular Ring Patch Antenna With Different Feeding Techniques", *International Conference on Innovations and Advancements in Information and Communication Technology (ICIAICT 2012)*, GBU Greater Noida, pp. 281 – 286, 30-31 March 2012 (ISBN 978-93-81583-34-0).

Workshop/STC Attend or Volunteer

- Participated in short-term course on, "3G Wireless Networks, MIMO System and Antenna Design (WINMAD - 2013)", held at Motilal Nehru National Institute of Technology Allahabad during 8-13, July 2013.
- Participated in two week work shop organized by MHRD on "Signals and Systems", held at Motilal Nehru National Institute of Technology Allahabad, during 2 -12 January, 2014.
- Worked as volunteer in "IEEE Student Conference in Engineering and Systems (SCES - 2014)", held at Motilal Nehru National Institute of Technology Allahabad, during 28 -30, May, 2014.
- Participated in one week national workshop on "Advances in Wireless and Optical Networks (AWON2014)" held at Motilal Nehru National Institute of Technology Allahabad, during 02 - 07, June 2014.

Workshop/STC Attend or Volunteer (continued)

- Participated in short-term course on “MATLAB and LATEX: Simulation with Documentation (SIM-DOC - 2014)” held at Motilal Nehru National Institute of Technology Allahabad, during 30 June -5 July, 2014.

- Participated and volunteered in one week workshop on “Antenna Design and Signal Processing for 5G Network and IoT (ADSPNIT - 2017)” held at Motilal Nehru National Institute of Technology Allahabad, during 27 February - 4 March, 2017.

- Participated and volunteered in one week workshop on “ Communication and Antenna Design for IoT (CADIT - 2017)” held at Motilal Nehru National Institute of Technology Allahabad, during 22 – 27 September 2017.

- Participated in one GIAN Course on “GPS Data Processing and analysis with GAMIT/GLOBK” held at Motilal Nehru National Institute of Technology Allahabad, during 22 – 26 January 2018.

- Participated in one week workshop on “Soft Skill (SS - 2018)” held at Motilal Nehru National Institute of Technology Allahabad, during 21 – 25 May 2018.

Membership in Professional Bodies

- IEEE Member

Date:

Place: Kanpur

Nand Kishore