



ZAKIR HUSAIN DELHI COLLEGE
(University of Delhi)

Faculty Details

(Please Fill the form and Email it to website@zh.du.ac.in)

Title	Dr.	First Name	RITU	Last Name	BANSAL	Photograph
Designation		Assistant Professor				
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Educational Qualifications						
Degree		Institution			Year	
B.Sc.(H) Electronics		ARSD College, University of Delhi, Delhi			2008	
M.Sc. (Electronics)		Department of Electronics, UDSC, DU, Delhi			2010	
Ph.D. in Physics		School of Basic and Applied Sciences, Sanskriti University, Chhata, Mathura, UP- (India)			2022	
Career Profile						
<p>Assistant Professor from Jan 2013 to March 2023 on ad hoc basis in Electronics department, ARSD College, DU. Assistant Professor since June 2023 on permanent basis till date in Electronics department, Zakir Husain Delhi College, University of Delhi, Delhi.</p>						
Administrative Assignments						
<ul style="list-style-type: none">• Member of course drafting committees for various courses in NEP framework 2020.• Member of various question paper settings for different subjects of Electronics for theory examinations in University of Delhi.• Recently member of sub-committees in NIRF and IQAC in Zakir Husain Delhi College, DU.• Member of Organizing committee for “G20 Programme on Indo-Canadian Relationship”.• Member of Organizing committee Alumni Reunion Function.• Recently member of Organizing committee National conference on “Conflict Resolution: Exploring Gandhian relevance for India and the world I the 21st century”.• Recently member of arrangement committee for “Taarunya-24” organized by NSS.						

Areas of Interest / Specialization
Microwave Electronics, Attenuation in THIN FILM MICROSTRIP LINE, Microwave devices, MMIC Lines suitable for Terahertz range.
Subjects Taught
Communication Electronics, Optics and Optoelectronics, Photonics, Engineering Mathematics, Digital System Design, Basic Circuit theory and Network Analysis, Semiconductor Devices, Analog Electronics-I, Digital Signal Processing, Analog Communication, Programming with LabVIEW, Design and Fabrication of PCBs, Artificial Intelligence, Programming with Python, Signal and Systems and Computational Mathematics etc.
Publications Profile
<ol style="list-style-type: none"> 1. 2023, Feb, Ritu Bansal, Sanjay Kumar Mishra, Yogesh Kumar, “Accurate Closed form expressions for Conductor loss and dielectric loss in Thin Film Microstrip Line”, Macromolecular Symposia, Wiley Periodicals, Vol 407. 2. 2022, Jan, Ritu Bansal, Sanjay Kumar Mishra, Yogesh Kumar, Santosh J. Uke, Satish P. Mardikar, Vikram U. Pandit “Investigation for Conductor Loss calculation Including Effect of Adhesive layer of Titanium in Microwave, Millimetre and Terahertz Frequency Range”, Materials Today, Elsevier. 3. 2021, April, Ritu Bansal, Sanjay Kumar Mishra, “Estimation of influence of Adhesion Layer on Attenuation in Thin Film Microstrip Line at Bluetooth Frequency”, International Journal of Research and Analytical Reviews (IJRAR), Volume 8 Issue 2, Pages 153-156. 4. 2021, Feb, Ritu Bansal, Sanjay Kumar Mishra, “Investigation of a simple Model for Conductor loss calculations in Microwave Range for TFML on Polyimide substrate”, International Journal of Creative Research Thoughts (IJCRT), Volume 9, Issue 2, Pages 502-506. 5. 2020, July, Ritu Bansal, K.P Singh Teotia, “Improved Models suggested for Dispersive conductivity and loss tangent of TFMS for Terahertz Applications”, International Journal of Research and Analytical Reviews (IJRAR), Volume 7, Issue 3, Pages 502-506. 6. 2013, March, Anand K. Verma, Paramjeet Singh, and Ritu Bansal*, “Modelling for Dispersion and Losses of Multilayer Asymmetric CPW on Iso/Anisotropic Substrate”, Progress In Electromagnetic Research B (PIER), Vol. 48, 395-419. 7. 2013, March, Paramjeet Singh, A.K Verma, Ritu Bansal*, “Analysis of Multilayer Coplanar Waveguide with Finite Conductor Thickness”, International Journal of Microwave and Optical Technology (IJMOT), vol. 8, No. 2. 8. 2013, Jan, A.K. Verma, Paramjeet Singh and Ritu Bansal* “Computation of static and frequency-dependent line parameters of multilayer CPW using static SDA and single layer reduction method” Article first published online, Copyright © 2013 Wiley Periodicals, Inc.
Conference Presentations
<p style="text-align: center;"><u>International Conferences</u></p> <ol style="list-style-type: none"> 1. 2023, Dr. Sanjay Kumar Mishra, Dr. Ritu Bansal, Ms. Pooja kumara, “A brief review on cadmium sulphide quantum dots”, 2nd International Conference on Advancement in Core and Frontier of Physics (ACFP-2023), organized by Department of Physics, GLA University Mathura, UP, 17th - 19th Feb. 2. 2022, Ritu Bansal, Sanjay Kumar Mishra, “Calculations for Attenuation in Thin Film Microstrip Line at Bluetooth Frequency with Adhesive Layer”, International Conference on Recent

Advances in Functional Materials (RAFM-2022), organized by department of physics, IQAC, ARSD College (DU), 14th-16th March.

3. 2021, Ritu Bansal, Sanjay Kumar Mishra, “**Calculation of Dielectric Loss in Thin Film Microstrip Line on DuPont Polyimide Substrate**”, World Nano Congress on Advanced Science and Technology, International Conference organized by VIT, Vellore (WNCT-2021)”, 8th-13th March.
4. 2013, Ritu Bansal, Paramjeet Singh and A.K.Verma, “**Loss Computation for Thin Film Microstrip Line (TFMS)**” , National Conference on Recent Developments in Electronics (NCRDE), UDSC New Delhi, 18th-20th January.
5. 2013, Ritu Bansal, Paramjeet Singh and A.K Verma, “**Experimental verification of conductor loss for Thin Film Microstrip Line**”, International Conference on Advanced Computing & Communication Technologies (ACCT), Page(s):208 – 210, ISSN: 2327-0632, Print ISBN: 978-1-4673-5965-8, INSPEC Accession Number: 13564499, Rohtak, Feb.
6. 2012, Ritu Bansal, Y.K. Awasthi, Paramjeet Singh and A.K. Verma, “**Accuarate Dispersion Model for Microstrip Line up to Terahertz Frequency Range**” , International Conference on Communication and Electronics System Design, (ICCESD) , *Proc. SPIE* Vol. 8760, Jaipur, 28th-30th December.
7. 2012, Paramjeet Singh, Ritu Bansal, A.K Verma, “**Dispersion analysis of Coplanar Waveguide for low frequency**”, International Conference on Communication and Electronics System Design (ICCESD), *Proc. SPIE* Vol. 8760, Jaipur, 28th-30th December, 2012.
8. 2010, Nainu Priya Chaudhari, Ritu Bansal and A.K Verma, “**A new accurate CAD to study characteristics of Microstrip line**”, International Conference on Microwaves Antenna Propagation & Remote Sensing (ICMARS), Jodhpur, 14th-17th December.

National Conferences and Symposium

9. 2021, Ritu Bansal, Sanjay Kumar Mishra, “**Green IoT in drainage system using Artificial Intelligence**”, National Conference on Green IoT and Industry 5.0 (NCGII), 22nd Oct.
10. 2021, Ritu Bansal, Sanjay Kumar Mishra, “**Accurate Closed form expressions for Conductor loss and dielectric loss in Thin Film Microstrip Line**”, National Conference on Materials and devices (NCMD-2021), 16th-17th Sept.
11. 2020, Ritu Bansal, K.P Singh Teotia, “**Accurate calculation of conductor loss of Thin Film Microstrip**”, “New Trends in Nanotechnology (2nd National Conference organized by Department of Physics ARSD College, DU, NTNA-2020)”, February 6th-7th.
12. 2011, Ritu Bansal and A.K Verma, “**A new accurate CAD to study characteristics of CPW (Coplanar waveguide) line**”, National Conference and Workshop on Recent Advances in Modern Communication Systems and Nanotechnology (NCMCN), Jaipur, 6th-8th January.

Awards and Distinctions

Qualified National Eligibility Test held in June 2012.

Other Activities

- Participated in Online four-week Orientation/Induction Programme for “Faculty in Universities/Colleges/Institutes of Higher Education”, Organized by TLC, Ramanujan College, DU under the aegis of Ministry of Education, PMMMNMTT.
- Participated in Online two-week interdisciplinary Refresher Course on “Advanced Research Methodology”, Organized by TLC, Ramanujan College, DU under the aegis of Ministry of Education, PMMMNMTT.

- Attended Online Workshop on “Electrical and thermal characterization of Advanced CMOS, SOI, FinFET”, Jointly Organized by IEEE EDS Delhi Chapter and DBT star college status program, DDU, DU, The National Academy of sciences, India-Delhi Chapter.
- Attended Online Workshop on “Modern Transistor Designs”, Jointly Organized by IEEE EDS Delhi Chapter and DBT star college status program, DDU, DU, The National Academy of sciences, India-Delhi Chapter.

Signature of Faculty Member