

# Curriculum-Vitae of Ravi Panwar

## Current Affiliation

Assistant Professor, Discipline of Electronics & Communication Engineering  
**Indian Institute of Information Technology, Design & Manufacturing, Jabalpur (IIIT Jabalpur)**  
(An Institute of National Importance, established by the MHRD, Government of India)  
Dumna Airport Road, Jabalpur-482005, Madhya Pradesh, India

## Contact Information

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Mailing address	Dumna Airport Road, Jabalpur-482005, Madhya Pradesh, India

## Academic and Research Qualifications

1. **Postdoctorate** (*Microwave Measurement Techniques for Radome and Stealth Structures*), **Korea Advanced Institute of Science and Technology (KAIST), South Korea** (2015-16).
2. **Ph.D.** (*Broadband Radar Absorbing Materials Using Fractal Frequency Selective Surface (FSS) for Stealth Application*), **Indian Institute of Technology Roorkee (IIT Roorkee)**, Uttarakhand, India (2012-15).
3. **M. Tech** (*Microelectronics & VLSI Design*), **Kurukshetra University Main Campus**, Haryana, India with **72.76 %** (2008-2010).
4. **B. Tech** (*Electronics & Communication Engineering*), **Chaudhary Charan Singh (C.C.S.) University Main Campus (Government University)**, Meerut, Uttar Pradesh, India with **72.37 %** (2004-08).

## Research Interests

RF nanotechnology, microwave absorbing nanomaterials & structures, radomes, frequency selective surfaces (FSSs), metamaterial structures (absorbers and antennas), RCS reduction, destructive and non-destructive evaluation of nanomaterials using electromagnetic techniques, and structural health monitoring of radome & stealth structures.

## Employment History

- Assistant Professor, **IIIT Jabalpur** (July 2017 onwards).
- Assistant Professor, **Thapar University, Patiala**, Punjab (2016-17).
- Visiting Professor, **KAIST, South Korea** (Dec. 2016-Jan. 2017)
- Postdoctoral Fellow, **KAIST, South Korea** (2015-16).
- MHRD Teaching Assistant, **IIT Roorkee** (2012-15).
- Assistant Professor, **NIT Kurukshetra**, Harynana (2011-12).

## Administrative Experience

- **Faculty Incharge**, ECE Department Website Committee, **IIIT Jabalpur**, June 2018 to till date.
- **Faculty Incharge**, Electronics Club under Institute Gymkhana, **IIIT Jabalpur**, Jan. 2018 to till date.
- **Institute Coordinator**, Stanford-MHRD survey, **IIIT Jabalpur**, 2017, 2019.
- **Member**, Committee to promote the Digital Initiatives of Government of India at **IIIT Jabalpur**, August 2017 to till date.

## Awards, Honors and Recognitions

- **MPCOST Travel Grant** by Govt. of Madhya Pradesh to visit NTU, Singapore, 2018.
- **Top Poster Award** for an effective research contribution under the Swachh Bharat Mission of Govt. of India at India International Science Festival (IISF) 2017, IIT Madras, 2017.
- **Early Career Research Award 2017**, Science and Engineering Research Board (SERB), Department of Science & Technology (DST), Government of India, 2017.
- **KAIST Institute Postdoctoral Fellowship**, Republic of Korea, 2016.
- **Brain Korea Research Fellowship**, Ministry of Education, National Research Foundation (NRF), Republic of Korea, 2015.
- **IEEE Magnetic Society-Student Award 2015**, IEEE International Conference on Magnetism (Intermag 2015), Beijing, China.
- **International Travel Grant (Young Scientist)**, Department of Science and Technology (DST), Ministry of Science & Technology, Government of India, to visit Beijing, China, 2015.
- **Student's Career Development Fund (SCDF)**, IIT Roorkee, 2015.
- **Best Research Paper Award (Gold Medal)**, International Conference on Light "Optics 14", A.I.P Conference, N.I.T Calicut, Kerala, India, 2014.
- **Ministry of Human Resource and Development (MHRD) Teaching Assistantship**, Government of India, 2012.

## Technical Reviewer Experience

1. Reviewer, *SERB-DST (ECRA, EMR, and IMPRINT) Funded Research Projects*
2. Reviewer, *IEEE Transactions on Microwave Theory and Techniques*
3. Reviewer, *IEEE Transactions on Antennas and Wave Propagation*
4. Reviewer, *IEEE Transactions on Electromagnetic Compatibility*
5. Reviewer, *IEEE Transactions on Magnetism*
6. Reviewer, *IEEE Microwave and Wireless Components Letters*
7. Reviewer, *IEEE Antennas and Wireless Propagation Letters*
8. Reviewer, *IEEE Antennas and Propagation Magazine*
9. Reviewer, *IEEE Sensors Journal*
10. Reviewer, *IEEE Communications Magazine*
11. Reviewer, *IEEE Access*
12. Reviewer, *IET Microwaves, Antennas and Propagation*
13. Reviewer, *IET Electronics Letters*
14. Reviewer, *IEEE MTT Society's Microwaves 101*
15. Reviewer, *Defence Science Journal*
16. Reviewer, *Journal of Microwave Power & Electromagnetic Energy (Taylor & Francis)*
17. Reviewer, *International Journal of RF and Microwave Computer-Aided Engineering*
18. Reviewer, *Measurement (Elsevier)*
19. Reviewer, *Materials Research Express (IoP Science)*
20. Reviewer, *Materials and Design (Elsevier)*
21. Reviewer, *Composite Structures (Elsevier)*
22. Reviewer, *Composites Science and Technology (Elsevier)*
23. Reviewer, *Advanced Composite Materials (Taylor & Francis)*
24. Reviewer, *SN Applied Physics (Springer)*
25. Reviewer, *International Journal of Alloys and Compounds (Elsevier)*
26. Reviewer, *Waste and Biomass Valorization (WAVE) (Springer)*
27. Reviewer, *IETE Journal of Research (Taylor and Francis)*
28. Reviewer, *Journal of Intelligent Material Systems and Structures (Sage)*
29. Reviewer, *International Journal of Computer Applications in Technology (Inderscience)*
30. Reviewer, *Journal of Optical Engineering (SPIE)*

31. Reviewer, *IEEE International Conference on Industrial & Informatics Systems-2016 Organized by IIT Rookee.*
32. Reviewer, *IEEE International Conference on Information and Communication Technology 2018, Jointly Organized by all four Central Govt. Funded IIIT's.*

### Country Visited

- *China*, for IEEE Magnetic Society Award, 2015.
- *South Korea*, for Postdoctoral research, 2015.
- *South Korea*, as a Visiting Professor, KAIST, 2016.
- *Malaysia*, for presenting a research paper, 2017.
- *Singapore*, for presenting a research paper, 2018.

### Sponsored Research Projects

S.No.	Project Title	Role	Funding Agency	Amount	Period	Status
1.	An efficient use of discarded heterogeneous electronic waste for development of cost effective microwave absorber	PI	SERB	Rs. 43,94,770	2017-2020 (Three years)	Ongoing
2.	Optimal design of multilayered microwave absorbing structures for stealth applications	PI	FIG, IIIT Jabalpur	Rs. 1,50,000	2017-2019 (Two years)	Ongoing
3.	RCS analysis of heritage sites in and around Jabalpur city using customized RADAR	Co-PI	DST	Rs. 35,67,840	2019-2022 (Three Years)	Under second stage of review

### Research Publications

#### International Journals

1. **Ravi Panwar**, Smitha Puthucheri, Vijaya Agarwala, and Dharmendra Singh, Fractal frequency selective surface embedded thin broadband microwave absorber coatings using heterogeneous composites, *IEEE Transactions on Microwave Theory and Techniques*, vol. 63, pp. 2438-2448.
2. Rishi Mishra, Arpit Sahu, and **Ravi Panwar**, Cascaded graphene frequency selective surface integrated tunable broadband terahertz metamaterial absorber, *IEEE Photonics Journal*, 2019, Accepted.
3. Jaswinder Kaur, Nitika, and **Ravi Panwar**, Design and Optimization of a Dual-Band Slotted Microstrip patch antenna using Differential Evolution Algorithm with improved Cross Polarization characteristics for Wireless Applications, *Journal of Electromagnetic Waves and Applications (Taylors & Francis)*, 2019, Accepted.
4. Varsha Mishra, **Ravi Panwar**, Arunima Singh, Smitha Puthucheri, and Dharmendra Singh, Critical analysis of periodic fractal frequency selective surfaces coupled with synthesized ferrite based dielectric substrates for optimal radar wave absorption, *IET Science, Measurement and Technology*, 2019, Accepted.
5. Atipriya Sharma, **Ravi Panwar**, and Rajesh Khanna, Experimental validation of frequency selective surface loaded hybrid metamaterial absorber with wide bandwidth, *IEEE Magnetics Letters*, vol. 10, pp. 1-5, 2019.

6. Yagyesh Kumar, Ekta Panwar, and **Ravi Panwar**, Design and critical analysis of hybrid multilayered surface plasmon resonance biosensor configuration with improved sensitivity, *Defense Science Journal (DRDO Journal)*, 2019, Accepted.
7. Rishi Mishra, **Ravi Panwar**, and Dharmendra Singh, Equivalent circuit model for design of frequency selective, Terahertz-band, graphene based metamaterial absorber, *IEEE Magnetics Letters*, pp. 1-5, vol. 9, 2018.  
**Honor: (Popular articles of the Journal).**
8. **Ravi Panwar**, Smitha Puthucheri, and Dharmendra Singh, Experimental demonstration of novel hybrid microwave absorbing coatings using particle size controlled hard-soft ferrite, *IEEE Transactions on Magnetics*, vol. 54, pp. 1-5, 2018.
9. Ravi Yadav, **Ravi Panwar**, and Dharmendra Singh, Extended Jaya's algorithm for optimal design of broadband layered microwave absorbing structures, *IEEE Magnetics Letters*, vol. 9, pp. 1-5, 2018.  
**Honor: (Popular articles of the Journal).**
10. **Ravi Panwar**, Smitha Puthucheri, Dharmendra Singh, and Vijaya Agarwala, Design of a ferrite-graphene based thin broadband radar wave absorber for stealth applications, *IEEE Transactions on Magnetics*, vol. 51, pp. 1-4.
11. **Ravi Panwar**, and Jung Ryul Lee, Performance and non-destructive evaluation methods of airborne radome and stealth structures, *Measurement Science and Technology, IOP Science*, vol. 29, 062001, 2018.
12. **Ravi Panwar**, Dharmendra Singh, Jung Ryul Lee, Periodic frequency selective surface coupled, highly efficient, broadband, single layer microwave absorber, *Journal of Optoelectronics and Advanced Materials-Rapid Communications*, vol. 12, issue 7-8, 2018.
13. **Ravi Panwar**, Daesung Son, and Jung Ryul Lee, Novel optimization method of single square FSS impinged and cascaded radar absorbing composites, *Advanced Composite Materials (Taylor & Francis)*, vol. 27, pp. 1-11, 2018.
14. **Ravi Panwar**, and Jung Ryul Lee, Progress in frequency selective surface-based smart electromagnetic structures: A critical review, *Aerospace Science & Technology (Elsevier)*, vol. 66, pp. 216-234, 2017.  
**Honor: (Most downloaded articles of the Journal).**
15. **Ravi Panwar**, Smitha Puthucheri, Dharmendra Singh, Vijaya Agarwala, and Jung Ryul Lee, Microwave absorption properties of FSS impacted composites as a broadband microwave absorber, *Advanced Composite Materials (Taylor & Francis)*, vol. 26, pp. 99-113, 2017.
16. Smitha Puthucheri, Isha Singh, Mohd Najim, **Ravi Panwar**, Dharmendra Singh, Vijaya Agarwala, and Ghanshyam Das Varma, Development of thin broadband radar absorbing materials using nanostructured spinel ferrites, *Journal of Material Science: Materials in Electronics (Springer)*, vol. 27, pp. 7731-7737, 2016.
17. **Ravi Panwar**, Smitha Puthucheri, Vijaya Agarwala, and Dharmendra Singh, An efficient use of waste material for development of cost effective broadband radar wave absorber, *Journal of Electromagnetic Waves and Applications (Taylor & Francis)*, vol. 29, pp. 1238-1255, 2015.
18. **Ravi Panwar**, Vijaya Agarwala, and Dharmendra Singh, A cost effective solution for development of broadband radar absorbing material using electronic waste, *Ceramic International (Elsevier)*, vol. 41, pp. 2923-2930, 2015.
19. **Ravi Panwar**, A critical review on reliable, low power and high yield electronic system design, *Technology Letters*, vol. 2, pp. 5-18, 2015.
20. **Ravi Panwar**, Smitha Puthucheri, Vijaya Agarwala, and Dharmendra Singh, Investigation of a novel natural waste composite as a radar wave absorber at X-band, *Advanced Science Letters (American Scientific Publishers)*, vol. 20, pp. 1425-1429, 2014.

21. **Ravi Panwar**, Vijaya Agarwala, and Dharmendra Singh, Design and experimental verification of a thin broadband nano-composite multilayer microwave absorber using genetic algorithm based approach, *AIP Proc. (American Institute of Physics)*, vol. 1620, pp. 406-415, 2014.
22. **Ravi Panwar**, Recent developments, issues and challenges for lithography in ULSI fabrication, *International Journal of Electronics and Computer Technology*, vol. 1, pp. 702-711, 2012.
23. A. Kumar, **R. Panwar**, D. Kumar, M. Kumar, and D. Kumar, Reactively sputtered amorphous MoN films as a diffusion barrier for copper metallization, *Journal of Optoelectronics and Advanced Materials-Rapid Communications*, vol. 5, pp. 54-57, 2011.
24. **Ravi Panwar**, Asha Dhingra, and Dinesh Kumar, Study of thermal stability behaviour of Mon & WN thin films in ULSI, *International Journal of Advances in Engineering and Technology*, vol. 1, pp. 55-64, 2011.

### **Book Chapters**

25. Arpit Sahu, Ravi Yadav, Trivesh Kumar, **Ravi Panwar**, Design and analysis of triple split ring resonator based polarization-insensitive, multiband metamaterial absorber, *Springer Nature Series, Algorithms for Intelligent Systems (AIS)*, 2019.
26. Tanveer Kaur, Arpit Sahu, **Ravi Panwar**, and Rajesh Khanna, Chip resistor loaded fractal frequency selective surface based miniaturized broadband microwave absorber from 2 to 18 GHz, *Springer Nature Series, Algorithms for Intelligent Systems (AIS)*, 2019.
27. Arpit Sahu, **Ravi Panwar**, An optimal design of split ring resonator and electronic waste composite based cost effective microwave absorber for low observable applications, *Springer Nature Series, Algorithms for Intelligent Systems (AIS)*, 2019.

### **International Conference Publications**

28. **Ravi Panwar**, and Dharmendra Singh, Design, fabrication and performance evaluation of magneto-dielectric based electromagnetic wave absorbers optimized using biologically inspired optimization strategies, *IEEE International Magnetics Conference (Intermag 2018), Nanyang Technological University, Singapore*, 2018.
29. **Ravi Panwar**, and Dharmendra Singh, Microwave heat treated ferrite based X-band microwave absorber with wide bandwidth for low observable applications, *IEEE Asia-Pacific Microwave Conference (APMC), Kuala Lumpur, Malaysia*, pp. 387-390, 2017. ([Available online at IEEE Xplore](#)).
30. Tanveer Kaur, **Ravi Panwar**, and Rajesh Khanna, Design of resistive circuit elements based broadband metamaterial structures from 2 to 18 GHz, *Metamaterials 2017, 8<sup>th</sup> International Conference on Metamaterials, Photonic Crystals and Plasmonics, South Korea*, 2017.
31. **Ravi Panwar**, Varsha Mishra, Smitha Puthucheri, Dharmendra Singh, and Vijaya Agarwala, Application of sandwiched sierpinski carpet fractal FSS for performance enhancement of microwave absorbing composite, *IEEE International Conference on Industrial and Information Systems, IIT Roorkee, India*, 2017. ([Available online at IEEE Xplore](#)).
32. **Ravi Panwar**, Jong Min Hyun, and Jung Ryul Lee, Effective utilization of advanced electromagnetic approaches for microwave absorbing composites, *IEEE-ACCM 10, Busan, South Korea*, 2016.
33. **Ravi Panwar**, Jong Min Hyun, and Jung Ryul Lee, Microwave absorption response of FSS impinged bilayered microwave absorber for anti-radar applications, *ASHMECS 2016, South Korea*, 2016.
34. **Ravi Panwar**, and Jung Ryul Lee, Design of X-band microwave absorber using square shaped frequency selective surface, *Korean Society for Aeronautical and Space Sciences (KSAS) Spring Conference, Republic of Korea*, 2016.

35. **Ravi Panwar**, and Dharmendra Singh, Investigation of significantly enhanced electromagnetic wave absorption of hard-soft ferrite-graphene nanocomposite, *IEEE International Conference on Magnetism*, pp. 1, Beijing, China, 2015 (Available online at IEEE Xplore).  
**Honor: Awarded with IEEE Magnetic Society-Student Award and DST Travel Grant (Young Scientist)**.
36. **Ravi Panwar**, Smitha Puthucheri, Vijaya Agarwala, and Dharmendra Singh, Development of broadband radar wave absorber using bio-degradable waste composite, *International Conferences on Materials Sciences and Technology, University of Delhi, India*, 2016. (Available online at VBRI Press).
37. **Ravi Panwar**, Smitha Puthucheri, Arunima Singh, Vijaya Agarwala, and Dharmendra Singh, Critical analysis of fractal FSS with heterogeneous composite to enhance microwave absorption for stealth application, *IEEE International RF & Microwave Conference (IMaRC 2015)*, pp. 416-418, 2015, Hyderabad, India (Available online at IEEE Xplore).
38. **Ravi Panwar**, Smitha Puthucheri, Vijaya Agarwala, and Dharmendra Singh, Effect of particle size on radar wave absorption of fractal frequency selective surface loaded multilayered structures, *IEEE International RF & Microwave Conference (IMaRC 2014)*, pp. 186-188, 2014, Indian Institute of Science, Bangalore (IISc, Bangalore), Bangalore (Available online at IEEE Xplore).  
**Honor: One of the five finalists shortlisted for KU Limaye Memorial Best Paper Award**.
39. **Ravi Panwar**, Smitha Puthucheri, Vijaya Agarwala, and Dharmendra Singh, Design of frequency selective surface embedded broadband multilayered microwave absorbing structures, *6<sup>th</sup> IEEE International Conference on Power Electronics, NIT Kurukshetra*, Haryana, 2014.
40. **Ravi Panwar**, Vijaya Agarwala, and Dharmendra Singh, Design and experimental verification of a thin broadband nano-composite multilayer microwave absorber using genetic algorithm based approach, *International Conference on Light "Optics 14", National Institute of Technology (NIT Calicut)*, Kerala, 2014.  
**Honor: Received Best Research Paper Award**
41. **Ravi Panwar**, Vijaya Agarwala, and Dharmendra Singh, Investigation of a novel stone dust based composite waste material coated over cloth for radar wave absorption at X-band, *International Conference on Electron Microscopy, Electron Microscope Society, University of Delhi*, 2014.
42. **Ravi Panwar**, and Asha Dhingra, Single electron transistor: A useful nano-electronic device, *International Conference on Sports Biomechanics, Emerging Technologies & Quality Assurance in Technical Education, Indian Society of Biomechanics, IIT Roorkee*, 2012.

#### **Domestic Conference Publications**

43. Yagyesh Kumar, Ekta Panwar, and Ravi Panwar, Design and critical analysis of hybrid multilayered surface plasmon resonance biosensor configuration with improved sensitivity, *National Symposium on Microwave Absorbing Materials, IIT Roorkee*, August 24-25, 2018.
44. Ravi Yadav, Ravi Panwar, Optimal design of thin and broadband multi-layered electromagnetic wave absorbing structures at low frequency using Jaya's algorithm, *National Symposium on Microwave Absorbing Materials, IIT Roorkee*, August 24-25, 2018.
45. **Ravi Panwar**, Smitha Puthucheri, Vijaya Agarwala, and Dharmendra Singh, Fractal frequency selective surface embedded broadband microwave absorber using disassembled waste printed circuit boards, *IEEE Conference on Recent Advances in Electronics and Computer Engineering, IIT Roorkee*, pp. 116-119, 2015 (Available online at IEEE Xplore).

46. Arunima Singh, **Ravi Panwar**, Smitha Puthucheri, Vijaya Agarwala, and Dharmendra Singh, Parametric analysis of frequency selective surfaces over radar absorbing nanocrystalline structures, *IEEE Conference on Recent Advances in Electronics and Computer Engineering, IIT Roorkee*, pp. 75-79, 2015 ([Available online at IEEE Xplore](#)).
47. **Ravi Panwar**, Smitha Puthucheri, Vijaya Agarwala, and Dharmendra Singh, Study to explore the possible application of sugarcane bagasse for development of broadband microwave absorber: a cost effective solution, *Uttarakhand State Council for Science & Technology (UCOST)*, 2015, Dehradun.
48. **Ravi Panwar**, Dharmendra Singh, and Vijaya Agarwala, A novel waste material coated on cloth for radar absorption at X-band, *Seminar on Radar Imaging and its Applications, IIT Roorkee*, 2014.
49. **Ravi Panwar**, Vijaya Agarwala, and Dharmendra Singh, Investigation of a novel natural waste composite as a radar wave absorber at X-band, *National Conference on Nanotechnology and Renewable Energy, Jamia Millia Islamia University*, New Delhi, 2014.
50. **Ravi Panwar**, Low power VLSI design: a latest approach in VLSI, 3<sup>rd</sup> National Conference on Recent Innovations in Engineering, Galaxy Global Group of Institutions, Ambala, Haryana, 2012.
51. **Ravi Panwar**, Pankaj Kumar, Nitin Kumar, and Abhishek Singhal, Reactively sputtered amorphous MoN Thin film deposition and characterization, National conference on Recent Technologies in Electronics, Meerut, 2011.
52. **Ravi Panwar**, Recent advancement in DBIST, National conference on Recent Technologies in Electronics, Meerut, 2011.
53. Pankaj Kumar, Abhishek Singhal, **Ravi Panwar**, and Nitin Kumar, The built in self test for PCB board testing, National conference on Recent Technologies in Electronics, Meerut, 2011.
54. Abhishek Singhal, Pankaj Kumar, **Ravi Panwar**, and Nitin Kumar, Analysis of low pass, high pass, and band pass filter using Kaiser Window function, National conference on Recent Technologies in Electronics, Meerut, 2011.

#### **Invited Talk Delivered (India and Abroad)**

1. Invited talk on “An efficient use of graphene and frequency selective surface for design of THz metamaterial absorber: Technology of the future”, National Symposium on Microwave Absorbing Materials, *IIT Roorkee, India*, August 24-25, 2018.
2. Invited talk on “FSS impacted microwave absorbing structures and their performance evaluation using distinct microwave measurement techniques”, Workshop on Recent Trends in Microwave Absorbing Materials for Stealth & Communication Applications, *IIT Roorkee, India*, August 24, 2017.
3. Invited talk on “Heterogeneous nanocomposite based advanced microwave absorbing materials for fighter aircrafts”, First International Workshop on Stealth & Radome Structures, *Korea Advanced Institute of Science & Technology, South Korea*, 2017.
4. Invited talk under BK21 Project Group on “Stealth and radome based advanced electromagnetic structures”, *Chonnam National University, South Korea*, 2016.

#### **Faculty Development Programs/Short Term Courses/Workshop Organized**

- *High Frequency and Low Frequency Electromagnetic Analysis Using HFSS*, sponsored by ICT Academy, IIT Jabalpur, March 19-23, 2018.

## Short Term Courses/Training Programs/ Workshops Attended in India and Abroad

1. National Symposium on *Microwave Absorbing Materials*, IIT Roorkee, India, August 24-25, 2018.
2. *First International Workshop on Stealth & Radome Structures*, Korea Advanced Institute of Science & Technology, South Korea, 2017.
3. Workshop on *Recent Trends in Microwave Absorbing Materials for Stealth & Communication Applications*, IIT Roorkee, India, August 24, 2017.
4. *Induction Training Programme for Newly Recruited Teachers* conducted by National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh, MHRD, Government of India, September 19-21, 2016.
5. Seminar on *Radar Imaging and its Applications*, Electronics & Communication Engineering Department, I.I.T Roorkee, India, Jan. 02-03, 2014.
6. Short term course of *Vacuum Electron Devices Association* (VEDA-2013), Electronics & Communication Engineering Department, I.I.T Roorkee, India, Oct. 18-20, 2013.
7. Workshop on *Formulation of Smart Nanodevices*, Centre of Nanotechnology, I.I.T Roorkee organized by Nextsapiens, Feb. 2-3, 2013.
8. Training program on *Vacuum Science & Plasma Technology*, Department of Electronic Science, Kurukshetra University main campus and supported by TEQIP world band project, Oct. 21-22, 2008.

## Courses Taught

Course Name	Course type (Undergraduate/ Postgraduate Level)	Institute
Network Analysis and Synthesis	Undergraduate	IIT Jabalpur
Sensing Methods and Devices	Undergraduate	IIT Jabalpur
RF and Microwave Engineering	Undergraduate	IIT Jabalpur
Fundamentals of Electrical & Electronics Engineering	Undergraduate	IIT Jabalpur
Concepts in Electronic Devices	Postgraduate	IIT Jabalpur
Microwave Engineering	Undergraduate	Thapar University
Antenna & Wave Propagation	Undergraduate	Thapar University
Engineering Design	Undergraduate	Thapar University
Electromagnetic Field & Wave Theory	Undergraduate	NIT Kurukshetra
Low Power VLSI Design	Postgraduate	NIT Kurukshetra

## Thesis and Project Supervision (Doctorate and Master's Only)

Name	Title of Thesis/Project	Degree Level	Status	Current affiliation
Mrs. Atipriya Sharma	Metamaterial inspired absorbers and antennas	Doctoral	In-Progress, 2016	Thapar University, Patiala
Mr. Ravi Yadav	Development of analytical methodologies for layered absorbers	Doctoral	In-Progress, 2019	IIT Jabalpur
Mr. Chandrabhan Patel	Electronic waste management	JRF	In-Progress, 2019	IIT Jabalpur
Mr. Anindya	Design and development of	M.Tech	In-Progress,	IIT



Midya Chowdhury	airborne radomes		2019	Jabalpur
Mr. Sunil	Frequency selective EMI shielding structures	M.Tech	In-Progress, 2019	IIT Jabalpur
Mr. Arpit Sahu	Low frequency metamaterial absorbers	M.Tech	In-Progress, 2018	IIT Jabalpur
Ms. Tanveer Kaur	Design of chip resistor loaded metamaterial structures	M.Tech	Completed, 2017	Pursuing a doctorate from San Jose State University, USA
Ms. Paramveer Kaur	Optimization techniques for multilayered metamaterials	M.Tech	Completed, 2017	PNB

### Membership of Professional Bodies

1. IEEE Member
2. IEEE Microwave Theory and Techniques (MTT) Society
3. IEEE Photonics Society
4. IEEE Young Professionals
5. IEEE Technology and Engineering Management Technical Community
6. Korean Society for Aeronautical and Space Sciences

### Session Chair/Publication Chair/ Technical Expert/Judge

- **Member, Reviewer Committee**, Unmanned Aerial System in Geomatics-2019 (ICUASG-2019), IIT Roorkee, April 06-07, 2019.
- **Member, Advisory Committee**, Abhikalpan 2019, Institute Techno-Design Festival, IIT Jabalpur, March 2-4, 2019.
- **Session Chair**, International Conference on Information and Communication Technology 2018 (CICT-2018), IIT Jabalpur, October 26-28, 2018.
- **Session Chair**, National Symposium on Microwave Absorbing Materials, IIT Roorkee, India, August 24-25, 2018.
- **Publication Chair**, International Conference on Information and Communication Technology 2018 (CICT-2018), IIT Jabalpur, October 26-28, 2018.
- **Judge**, Essay Competition under Hindi Pakhwara, IIT Jabalpur, 2018.
- **Session Chair**, IEEE Asia Pacific Microwave Conference, Kuala Lumpur, Malaysia, Nov. 13-16, 2017.
- **Judge and Technical Expert**, International Space Settlement Design Competition 2017, Gurugram, Nov. 02-05, 2017.

### Member, Technical Program Committee

- International Workshop on Artificial Intelligence and Deep Learning Methods for Human Centric Systems, November 5 - 9, 2018, Moscow, Russia.
- International Conference on Signal Processing and Communication, Jaypee Institute of Information Technology, Noida, India, March 7-9, 2019.
- National Symposium on Microwave Absorbing Materials, IIT Roorkee, India, August 24-25, 2018.
- Coordinator, FDP on High Frequency and Low Frequency Electromagnetic Analysis, IIT Jabalpur, March 19-23, 2018.
- International Conference on Reliability and Safety Engineering, IIT Jabalpur, Feb. 26-28, 2018.

- International Design Workshop 2017 (DeW 2017), IIIT Jabalpur, Dec. 09-11, 2017.

## List of Referees

### 1. **Prof. Dharmendra Singh**

Professor, Department of Electronics & Communication Engineering  
Professor & Head, Department of Computer Science and Engineering  
Coordinator, RailTel - IIT Roorkee Center of Excellence in Telecommunication  
Indian Institute of Technology Roorkee (IIT Roorkee), India  
E-mail: dharmfec@gmail.com; dharm@ec.iitr.ac.in, Contact No: +91-9411160088.

### 2. **Prof. Jung Ryul Lee**

Director, Opto-Electro-Structural Laboratory  
Korea Advanced Institute of Science and Technology (KAIST)  
N7, #3334, KAIST 291 Daehak-ro, Yuseong-gu, Daejeon 34141, South Korea  
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Tel. +82-42-350-3768