

## Resume

**Dr. Akhilesh Mohan**

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### **Research Interest:**

- Substrate Integrated Waveguide (SIW) Antennas and Filters
- Ultrawide band (UWB) Antenna and Filters
- Metamaterial Absorbers, Antenna
- Multiple input and multiple output (MIMO) antennas
- Antenna systems for Full-duplex communications

**Education:**      **Ph. D.** (Microwave Engineering) (**CPI 9.50/10**)  
Indian Institute of Technology, Kanpur, Nov. 2009.  
(Thesis Submitted: May 2009; Thesis Awarded: Nov. 2009)

**M.Tech.** (Microwave and Photonics) (**CPI 9.75/10**)  
Indian Institute of Technology, Kanpur, July 2004.

**B.Tech.** (Electronics Engineering) (**82.80%**)  
Kamla Nehru Institute of Technology, Sultanpur U.P., June 2002.

**M.Tech. Thesis:** Analysis and Design of On-chip Spiral inductors and transformers for GaAs RFICs

**Ph.D Thesis :** Studies on Advanced Filters in Planar Environment using Generalized Multiband Filter Theory in conjunction with Genetic Algorithm and further using EBG/DGS structures

### **Work Experience:**

**Designation:** Professor (Since Nov. 2023 to Present)  
**Organization:** Indian Institute of Technology Roorkee

**Designation:** Associate Professor (Since Feb. 2021 to Nov. 2023)  
**Organization:** Indian Institute of Technology Roorkee

**Designation:** Associate Professor (Since June 2017 to Feb. 2021)  
**Organization:** Indian Institute of Technology Kharagpur

**Designation:** Assistant Professor (Since May 2013 to June 2017)  
**Organization:** Indian Institute of Technology Kharagpur

**Designation:** Assistant Professor (July 2010 to May 2013)  
**Organization:** Indian Institute of Technology Jodhpur

**Designation:** Scientist/Engineer ‘SC’ and ‘SD’ (Feb. 2008 to July 2010)

**Organization:** Space Applications Center, ISRO, Ahmedabad

### **Subjects/Courses Taught:**

#### **UG Level**

- Basic Electronics
- Introduction to Electronics
- Microwave Engineering
- Electromagnetic Theory
- Microwave Lab.
- Basic Electronics

#### **PG Level**

- Antenna Theory and Practice
- RF and Microwave Circuit Design
- Computational EMT
- Advanced RF and Microwave Filter Design: **New Course developed by me**
- Microwave Design Laboratory

### **Sponsored/Consultancy Projects**

<b>S.No.</b>	<b>Sponsoring Agency</b>	<b>Date of Starting</b>	<b>Title of Project</b>	<b>Amount of Grant in Lakhs (Rs.)</b>	<b>Authority</b>	<b>Status of work</b>
<b>1.</b>	<b>DST, India</b>	<b>Feb. 2024</b>	In-Band Full-Duplex (IBFD) Antennas for V2X Communications	<b>46</b>	<b>Principal Investigator</b>	<b>Ongoing</b>
<b>2.</b>	<b>IIT Roorkee</b>	<b>May 2022</b>	Design and Development of Reconfigurable Antenna Array with Frequency Radiation Pattern and Polarization Agility for Wireless Communication Systems	<b>20</b>	<b>Principal Investigator</b>	<b>Completed</b>
<b>3.</b>	<b>DST, India</b>	<b>Jan. 2020</b>	Low Frequency Flexible and Conformal Capacitive Surface-Based Broadband Absorbers with Minimum Thickness and Maximum Bandwidth Targeting Surveillance RADAR Signal Avoidance	<b>40</b>	<b>Principal Investigator</b>	<b>Completed</b>
<b>4.</b>	<b>ISRO</b>	<b>May 2019</b>	Design and Development. Of SIW based band pass filters	<b>16.80</b>	<b>Co-Principal Investigator</b>	<b>Ongoing</b>
<b>5.</b>	<b>DST, India</b>	<b>Sept. 2015</b>	Design and Development of Compact Multilayered UWB MIMO antenna with WLAN band notch function	<b>25</b>	<b>Principal Investigator</b>	<b>Completed</b>
<b>6.</b>	<b>ISRO</b>	<b>June 2015</b>	Feasibility of design and development of L & S band dual polarized shared/common aperture microstrip antenna	<b>6</b>	<b>Principal Investigator</b>	<b>Completed</b>

7.	ISRO	Aug. 2014	Development of substrate integrated waveguide (SIW) based passive devices for satellite transponder	15	Co-Investigator	Completed
8.	IIT Kharagpur	May 2014	Design of miniaturized antenna for UWB (ultrawide band) technology	28	Principal Investigator	Completed
9.	DRDO, DL Jodhpur	Jan. 2013	Design of Circular Waveguide to Coaxial Transition and Dipole Probe for E-field Measurement	6.88	Principal Investigator	Completed
10.	DRDO, DL Jodhpur	Aug. 2011	Conceptualization and Design Study for Free Space Material Characterization Facility	5.68	Principal Investigator	Completed

## Student Supervision:

### Ph. D. Supervision

S.No.	Name of Student	Year	Thesis Title
<b>Graduated</b>			
1.	Shrivishal Tripathi	2015	Analysis and Design of Wideband Fractal Antennas for Portable UWB Applications [Co-Supervisor: Dr. Sandeep Yadav]
2.	Dharmendra Kumar Jhariya	2017	Analysis and Design of Ultra-Wideband Bandpass Filters [Co-Supervisor: Dr. Manoranjan Sinha]
3.	Debidas Kundu	2018	Design and Analysis of Efficient Electromagnetic Absorbers with Polarization Insensitivity and Angle Stability [Co-Supervisor: Dr. A. Chakraborty]
4.	Sourav Nandi	2018	Design and Development of Planar Multiband Multi-Element Antennas for Enhanced Data Rate Wireless Communications
5.	Suvadeep Choudhury	2019	Substrate Integrated Waveguide-Inspired Planar and 3-D Antennas for Microwave and Millimeter Wave Applications [Co-Supervisor: Dr. D. Guha]
6.	Amit Ranjan Azad	2019	Advanced Microwave Bandpass Filters Using Substrate Integrated Waveguide Cavities
7.	Soumen Pandit	2020	Metamaterial-Inspired Compact Planar Antennas for Modern Communication Systems [Co-Supervisor: Dr. Priyadip Ray]
8.	Joysmita Chatterjee	2022	Design and Analysis of Electromagnetic Metasurfaces and their Applications in Modern Wireless Communication Systems [Co-Supervisor: Dr. V. Dixit]
9.	Arpit Barnawal	2024	H-guide based components [Co-Supervisor: Prof. N. P. Pathak]
<b>Current Students</b>			
10.	Amrita Medda	Started Dec 2017	SIW Filters [Co-Supervisor: Dr. Manoranjan Sinha ]
11.	Vimal Kumar	Started July 2021	Transmit/Reflect Array Antennas
12.	Amit Kumar	Started July 2022	V2X Antennas
13.	Sandeep Rana	Started July 2022	Reconfigurable Antennas
14.	Rishiraj Singh	Started July 2023	SIW Antennas
15.	Kartik	Started July 2024	Metasurface Antennas
16.	Deepak Bhardwaj	Started Jan. 2025	ISAC Antennas

## M.Tech Supervision

S.No.	Name of Student	Year	Thesis Title
1.	Anop Singh	2013	Design of Direction Finding Wide Band Antenna System [Co-Supervisor: Dr. Bibhas Adhikari]
2.	Satyanarayan Sahu	2013	Design & Analysis of Low Power Ultra Wide band and Low Noise Amplifier
3.	Umesh Tanwar	2013	Antenna in Health for Bio-telemetry Application [Co-Supervisor: Dr. Ambesh Dixit ]
4.	Himanshu Singhvi	2013	Specific Absorption Rate (SAR) Analysis and Reduction Using SWASSRR [Co-Supervisor: Dr. Ambesh Dixit ]
5.	Nagabhushan Eswara	2013	Performance Investigation of Space Time Coded MIMO-OFDM Systems Using Turbo Codes [Co-Supervisor: Dr. Sandeep Yadav ]
6.	Kapil Lahuwa	2013	Ultra-Wide band Antenna for Body Area Network [Co-Supervisor: Dr. Kiran Hiremath]
7.	Shahnawaj Abdullah	2013	Design & Implementation of Wireless Controls of ECM Systems and Design & Simulation of Basic ECM Principles [Co-Supervisor: Dr. Anumpam Gupta]
8	L. Bhanu Pratap	2015	Circular polarized antenna for UWB and MIMO/Diversity applications
9.	Jabir Husian	2016	Lossy Filters
10.	Anil Kumar Nayak	2016	SIW Horn Antenna
11.	R. Gopika	2016	Dual polarized shared/common aperture microstrip antenna
12.	Vikas Chandra	2017	Design of Wideband DR Antennas
13.	Preeti Tirkey	2017	Design and Implementation of Antennas Based on Metamaterials for Various Applications
14.	Kaushik Das	2017	Miniaturized SIW Filters
15.	Rishi Raj Singh	2018	Reconfigurable SIW Antennas
16.	Sharad Singh Baghel	2018	Metamaterial Absorbers
17.	Subhabrata Patra	2018	Time Domain Antenna Measurements
18.	Prabhjot Singh	2019	Multiband Absorbers
19.	Nilesh Kumar	2020	Broadband LNA Design
20.	K Santosh	2020	Power Amplifier Design
21.	Siddarth Sarkar	2021	SIW Filter
22.	Roshni Verma	2021	Polarization Conversion Metasurface
23.	Sharanabasava Patil	2022	Differential signal generator using wide bandwidth rat-race coupler
24.	Ajay Kumar	2023	High Gain Dual Polarized Antenna System for STAR Applications

## List of Publications:

### Journals:

1. Vimal Kumar and Akhilesh Mohan, "3D-Printed Metal-Only Transmit-Reflect-Array Antenna for Bidirectional Communication," accepted in *IEEE Antennas and Wireless Propagation Letters*, <https://doi.org/10.1109/LAWP.2025.3548855>
2. S. Rana, A. Kumar, A. Mohan, "A Shared-Radiator Co-Polarized Antenna for Full-Duplex Communication in 5G n78 band," *IEEE Antennas and Wireless Propagation Letters*, vol. 24, no. 2, pp. 334-338, Feb. 2025
3. Subhajit Paul, Sandeep Rana, Amit Ranjan Azad, Dalia Nandi, Akhilesh Mohan, "Wideband Tapered Rod MIMO Antenna for W-Band Applications," *ETRI Journal*, Microwave and Optical Technology Letters pp. 1-14, 2025. <https://doi.org/10.4218/etrij.2024-0224>
4. A. K. Baranwal, A. Mohan and N. P. Pathak, "Wideband Tapered Rod MIMO Antenna for W-Band Applications," *Wiley Microwave and Optical Technology Letters* accepted for publication, Microwave and Optical Technology Letters vol. 67, no.2, e70145, Feb. 2025.
5. Sandeep Rana, Amit Kumar, Akhilesh Mohan "A wideband dual polarized in-band full duplex antenna with higher order modes suppression," *International Journal of Microwave and Wireless Technologies*, Published online 2025:1-11. <https://doi.org/10.1017/S1759078725000315>
6. Vimal Kumar, Akhilesh Mohan, Gunjan Srivastava, Sachin Kumar, Tanweer Ali, "3D-Printed Reflect-Transmit-Array Antenna with Reconfigurable Transmitarray Mode for RCS Reduction," in *IEEE Access*, vol. 13, pp. 95137-95147, 2025
7. Amit Kumar, Phyto Mg Mg, Amit Sikder, Gunjan Srivastava, Akhilesh Mohan, A Compact Dual-Band Linearly Co-Polarized Antenna Array System for In-Band Full-Duplex (IBFD) Applications, in *Defence Science Journal*, vol. 75 (3), pp. 339-344, 2025.
8. Vimal Kumar, Amit Sikder, Gunjan Srivastava, Akhilesh Mohan, A 2-bit Quad Band Reconfigurable Intelligent Surface for Modern Wireless Communications, in *Defence Science Journal*, vol. 75 (3), pp. 312-317, 2025.
9. Gunjan Srivastava, Vimal Kumar, Amit Sikder, Akhilesh Mohan, A Miniaturized Self-Multiplexing Antenna for Eight Distinct sub-6 GHz 5G-NR Services for IoT Applications, in *Defence Science Journal*, vol. 75 (3), pp. 304-311, 2025
10. Gunjan Srivastava, Amit Kumar, Akhilesh Mohan, Sachin Kumar, Tanweer Ali, A Self-Octaplexing Millimeter-Wave Antenna Array for 5G FR2 Spectrum, *Scientific Reports*, vol. 15, pp. 10386, 2025,
11. A. Kumar, S. Rana, A. Mohan, G. Srivastava, S. Kumar and K. W. Kim, "A Self-Decoupled MIMO Patch Antenna System for V2X Communications," in *IEEE Access*, vol. 13, pp. 56021-56033, 2025,
12. G. Srivastava, A. Mohan, S. Kumar, H. C. Choi and K. W. Kim, "Compact 16-Port MIMO Antenna for Sub-6 GHz Communications," in *IEEE Access*, vol. 13, pp. 34051-34059, 2025,
13. Gunjan Srivastava, Vimal Kumar, Akhilesh Mohan "Compact 8-port EMSIW MIMO Antenna with High Isolation for Sub-6GHz Communication Systems," *International Journal of Microwave and Wireless Technologies*, vol. 16, no.10, pp. 1749-1755, Feb. 2025.
14. Vimal Kumar, Gunjan Srivastava, Akhilesh Mohan, 3D-Printed High-gain Beam-Switching Dielectric Transmitarray fed by an Integrated Lens Antenna, *Microwave and Optical Technology Letters* vol. 66, no.6, e34204, June 2024.
15. Amrita Medda, Amit Ranjan Azad, Gunjan Srivastava, Akhilesh Mohan, Manoranjan Sinha, "Compact Wide-Stopband QMSIW Based BPF for X-band Applications," *Wiley Microwave and Optical Technology Letters* accepted for publication, Microwave and Optical Technology Letters vol. 66, no.11, e70018, Nov. 2024.
16. A. K. Baranwal, A. Mohan and N. P. Pathak, "Wideband High Gain Dielectric Lens Integrated With Tapered Rod Antenna for W-Band Applications," *IEEE Antennas and Wireless Propagation Letters*, vol. 24, no. 1, pp. 63-67, Jan. 2025,
17. S. Rana, A. Kumar, A. Mohan, B. K. Kanaujia and L. Matekovits, "A Planar Wideband Antenna for Full Duplex Communication With Significant Peak Gain," *IEEE Access*, vol. 12, pp. 153181-153187, 2024.
18. G. Srivastava, A. Mohan, B. K. Kanaujia and L. Matekovits, "Compact Self-Octaplexing Circular EMSIW Antenna for Sub-6 GHz Communication Systems," *IEEE Access*, vol. 12, pp. 154173-154181, 2024,
19. G. Srivastava and A. Mohan, "Compact Eight-Port QMSIW Cavity Backed MIMO Antenna," *IEEE Antennas and Wireless Propagation Letters*, vol. 23, no. 12, pp. 4044-4048, Dec. 2024.
20. Vimal Kumar, Gunjan Srivastava, Akhilesh Mohan, 3D-Printed High-gain Beam-Switching Dielectric Transmitarray fed by an Integrated Lens Antenna, *Wiley Microwave and Optical Technology Letters* vol. 66, no.6, e34204, June 2024.
21. Amrita Medda, Amit Ranjan Azad, Akhilesh Mohan, Manoranjan Sinha, Multilayer circular SIW cavity differential bandpass filter with wide-stopband characteristics, *Wiley Microwave and Optical Technology Letters* vol. 66, no.5, e34147, May 2024.
22. Amrita Medda, Amit Ranjan Azad, Akhilesh Mohan, Manoranjan Sinha, Multilayer circular substrate-integrated

- waveguide cavity band-pass filters with ultrawide stopband characteristics, *International Journal of Microwave and Wireless Technologies*, vol. 16, no.2, pp. 63-68, Feb. 2024.
23. Suvadeep Choudhury, Akhilesh Mohan, An E-plane horn antenna fed with E-plane Tee junction conceptualized by SIW technology, *Wiley Microwave and Optical Technology Letters* vol. 65, no.11, pp. 2933-2940, Nov. 2023.
  24. Suvadeep Choudhury, Akhilesh Mohan and M. Bozzi, "A Coaxial to Air-Filled Substrate Integrated Waveguide Transition With Near-Octave Bandwidth," *IEEE Microwave and Wireless Components Letters*, vol. 32, no. 11, pp. 1275-1278, Nov. 2022,
  25. Joysmita Chatterjee, Akhilesh Mohan and Vivek Dixit, " Ultrawideband RCS Reduction of Planar and Conformal Surfaces Using Ultrathin Polarization Conversion Metasurface", *IEEE Access*, vol. 10, pp. 36563-36575, 2022.
  26. Gunjan Srivastava, Akhilesh Mohan, Amitabha Bhattacharya, "Triple-Band Dual-Polarized SIW Cavity Backed Differential Slot Antenna," *IEEE Antennas and Wireless Propagation Letters*, vol. 21, no. 5, pp. 858-862, May 2022.
  27. Harsh Verdhana Singh, D Venkata Siva Prasad, Shrivishal Tripathi, Akhilesh Mohan, "Closely-coupled wideband MIMO antenna with isolation improvement using decoupling circuit and hexagonal split-ring resonators," *Microwave and Optical Technology Letters*, vol. 63, no. 10 pp. 2614-2620, Oct. 2021.
  28. Sourav Nandi and Akhilesh Mohan, "A Compact Eighth Mode Circular SIW Cavity-Based MIMO Antenna," *IEEE Antennas and Wireless Propagation Letters*, vol. 20, no. 9, pp. 1834-1838, Sept. 2021.
  29. Harsh Verdhana Singh, Shrivishal Tripathi and Akhilesh Mohan, "Closely-coupled MIMO antenna with high wideband isolation using decoupling circuit," *AEU-International Journal of Electronics and Communications* vol. 138, 153833, Aug. 2021.
  30. Joysmita Chatterjee, Akhilesh Mohan and Vivek Dixit, " RCS Reduction and Gain Enhancement of Slot Antenna Using Polarization Conversion Metasurface for X-band Applications ", *International Journal of RF and Microwave Computer-Aided Engineering (RFMiCAE)*, Wiley Journals, vol. 30 (2), pp. 1-13, e22792, April 2021.
  31. Soumen Pandit, Akhilesh Mohan and Priyadip Ray, "Low-RCS Low-Profile Four-Element MIMO Antenna Using Polarization Conversion Metasurface," *IEEE Antennas and Wireless Propagation Letters*, vol. 19, no. 12, pp. 2102-2106, Dec. 2020.
  32. Suvadeep Choudhury, Akhilesh Mohan, Puneet Mishra and Debatosh Guha, "Reconfigurable Dual-Fed Horn with Pattern Switchability Realized by SIW Technology," *IEEE Transactions on Antenna and Propagation*, vol. 68, no. 5, pp. 4072-4076, May 2020.
  33. Joysmita Chatterjee, Akhilesh Mohan and Vivek Dixit, "Frequency reconfigurable slot antenna using metasurface for cognitive radio applications," *IET Microwaves, Antennas & Propagation*, vol. 14, no. 3 pp. 194-202, Feb. 2020.
  34. Soumen Pandit, Akhilesh Mohan and Priyadip Ray, "Square-ring metamaterial for radiation characteristics enhancement of an SIW cavity-backed slot antenna", *International Journal of RF and Microwave Computer-Aided Engineering (RFMiCAE)*, Wiley Journals, vol. 30 (2), pp. 1-8, e21981, Feb. 2020
  35. Amit Ranjan Azad and Akhilesh Mohan, "Compact bandpass filter with wide-stopband using substrate integrated waveguide cavities and short-circuited coplanar line," *International Journal of Microwave and Wireless Technologies*, vol. 12, no. 5, pp. 345-351, Nov. 2019.
  36. Dharmendra Jhariya, Akhilesh Mohan, R Kaushik, V.N. Saxena "Circular-shaped differential wideband band pass filter," *International Journal of Microwave and Wireless Technologies*, vol. 12, no. 3, pp. 193-197, Sept. 2019.
  37. Soumen Pandit, Akhilesh Mohan and Priyadip Ray, "Metamaterial-inspired low-profile high-gain slot antenna," *Microwave and Optical Technology Letters*, vol. 61, no. 9 pp. 2068-2073, Sept. 2019.
  38. Suvadeep Choudhury, Akhilesh Mohan, Puneet Mishra and Debatosh Guha, "Wideband Pyramidal Ridged Horn Design by SIW Technology," *IEEE Antennas and Wireless Propagation Letters*, vol. 18, no. 7, pp. 1517-1521, July 2019.
  39. Debidas Kundu, Sharad Singh Baghel, Akhilesh Mohan and Ajay Chakrabarty, "Design and Analysis of Printed Lossy Capacitive Surface Based Ultra-Wideband Low-Profile Absorber", *IEEE Transactions on Antenna and Propagation*, vol. 67, no. 5, pp. 3533-3538, May 2019.
  40. Gunjan Srivastava and Akhilesh Mohan, "A Differential Dual-Polarized SIW Cavity-Backed Slot Antenna", *IEEE Transactions on Antenna and Propagation*, vol. 67, no. 5, pp. 3450-3454, May 2019.
  41. Soumen Pandit, Akhilesh Mohan and Priyadip Ray, "Dual-band negative-permittivity metamaterial using crossed loop resonator," *Applied Physics A: Materials Science and Processing*, vol. 125, no. 6, 414, pp. 1- 6, 2019.
  42. Amit Ranjan Azad and Akhilesh Mohan, "Single-and Dual-Band Bandpass Filters Using a Single Perturbed

- SIW Circular Cavity,” *IEEE Microwave and Wireless Components Letters*, vol. 29, no. 3, pp. 201-203, March 2019.
43. Sourav Nandi and Akhilesh Mohan, “A self-diplexing MIMO antenna for WLAN applications,” *Microwave and Optical Technology Letters*, vol. 61, no. 1 pp. 239-244, Jan. 2019.
  44. Gunjan Srivastava and Akhilesh Mohan, “High gain SIW cavity backed differential slot antenna for X-band applications,” *IET Electronics Letters*, vol. 54, no. 24 pp. 1361-1362, November, 2018.
  45. Amit Ranjan Azad and Akhilesh Mohan, “Substrate Integrated Waveguide Dual-Band and Wide-Stopband Bandpass Filters,” *IEEE Microwave and Wireless Components Letters*, vol. 28, no. 8, pp. 660-662, Aug. 2018.
  46. Amit Ranjan Azad, Dharmendra Jhariya and Akhilesh Mohan, “Substrate Integrated Waveguide Cross- Coupled Filters with Mixed Electric and Magnetic Coupling Structure,” *International Journal of Microwave and Wireless Technologies*, vol. 10, no. 8, pp. 896-903, 2018.
  47. Suvadeep Choudhury, Akhilesh Mohan and Debatosh Guha, “Wideband Quasi Omnidirectional Planar Inverted F-Antenna for Compact Wireless Systems,” *IEEE Antennas and Wireless Propagation Letters*, vol. 17, no. 7, pp. 1305-1308, July 2018.
  48. Amit Ranjan Azad and Akhilesh Mohan, " Sixteenth-mode substrate integrated waveguide cavity filters", *International Journal of RF and Microwave Computer-Aided Engineering (RFMiCAE)*, Wiley Journals, vol. 28 (9), pp. 1-8, e21603, 2018
  49. Soumen Pandit, Akhilesh Mohan and Priyadip Ray, “Compact Frequency-Reconfigurable MIMO Antenna for Microwave Sensing Applications in WLAN and WiMAX Frequency Bands,” *IEEE Sensor Letters*, vol. 2, no. 2, pp. 1-4, June 2018.
  50. Joysmita Chatterjee, Akhilesh Mohan and Vivek Dixit, "Broadband Circularly Polarized H-Shaped Patch Antenna Using Reactive Impedance Surface," *IEEE Antennas and Wireless Propagation Letters*, vol. 17, no. 4, pp. 625-628, April 2018.
  51. Sourav Nandi and Akhilesh Mohan, “An SIW Based Cavity-Backed Self-Diplexing Antenna with Plus- Shaped Slot” *Microwave and Optical Technology Letters*, vol. 60, no.4 pp. 827-834, 2018.
  52. Soumen Pandit, Akhilesh Mohan and Priyadip Ray, “A Compact 4-Element MIMO Antenna for WLAN Applications,” *Microwave and Optical Technology Letters*, vol. 60, no.2 pp. 289-295, 2018.
  53. Suvadeep Choudhury, Akhilesh Mohan and Debatosh Guha, “SIW-induced dualmode dualband loop antenna: A new design insight and guideline”, *Microwave and Optical Technology Letters*. vol. 60, no.1 pp. 50-56, 2018.
  54. Debidas Kundu, Rintu Kumar Gayen, Akhilesh Mohan and Ajay Chakrabarty, “Moment method analysis of periodic array of thin conducting strips using waveguide simulator”, *Journal of Electromagnetic Waves and Applications*, vol. 32, no. 3, pp. 363-370, 2017.
  55. Dharmendra Jhariya, Akhilesh Mohan, and Manoranjan Sinha, "Design of two-stage fish spear-shaped UWB bandpass filter with sharp selectivity and good out-of-band performances," *International Journal of Microwave and Wireless Technologies*, vol. 9, no. 9, pp. 1821-1826, 2017
  56. Sourav Nandi and Akhilesh Mohan, “An SIW Cavity-Backed Self-Diplexing Antenna,” *IEEE Antennas and Wireless Propagation Letters*, vol. 16, pp. 2708-2711, 2017.
  57. Sourav Nandi and Akhilesh Mohan, “A Compact Dual-Band MIMO Slot Antenna for WLAN Applications,” *IEEE Antennas and Wireless Propagation Letters*, vol. 16, pp. 2457-2460, 2017.
  58. Shrivishal Tripathi, Akhilesh Mohan and Sandeep Yadav “A Compact MIMO/Diversity Antenna with WLAN Band-Notch Characteristics for Portable UWB Applications”, *Progress in Electromagnetic Research (PIER) C*, vol. 77, pp. 29-38, 2017.
  59. Shrivishal Tripathi, Akhilesh Mohan and Sandeep Yadav “A Performance Study of a Fractal UWB Antenna for On-Body WBAN Applications”, *Microwave and Optical Technology Letters*. vol. 59, pp. 2201-2207, 2017.
  60. L. Bhanu Pratap and Akhilesh Mohan, “Microstrip-Fed Broadband Circularly Polarized Antenna for Lower UWB,” *Wireless Personal Communications*, vol. 96 (3), pp. 4167-4175, 2017.
  61. Debidas Kundu, Akhilesh Mohan and Ajay Chakrabarty, “Design of ultrathin dual-resonant reflective polarization converter with customized bandwidths,” *Applied Physics A: Materials Science and Processing*, vol. 123, no. 10, 621, pp. 1-8, 2017.
  62. Sourav Nandi and Akhilesh Mohan, “CRLH Unit Cell Loaded Tri-Band Compact MIMO Antenna for WLAN/WiMAX Applications,” *IEEE Antennas and Wireless Propagation Letters*, vol. 16, pp. 1816- 1819, 2017.
  63. Soumen Pandit, Akhilesh Mohan and Priyadip Ray, “A Low-Profile High-Gain Substrate Integrated Waveguide Slot Antenna with Suppressed Cross-Polarization using Metamaterial,” *IEEE Antennas and Wireless*

- Propagation Letters*, vol. 16, pp. 1614-1617, 2017.
64. Shrivishal Tripathi, Akhilesh Mohan, and Sandeep Yadav, "A Compact Frequency-Reconfigurable Fractal UWB Antenna using Reconfigurable Ground Plane," *Microwave and Optical Technology Letters*, vol. 59, no. 8 pp. 1800–1808, Aug. 2017.
  65. Amit Ranjan Azad and Akhilesh Mohan, "A Compact Sixteenth-Mode Substrate Integrated Waveguide Bandpass Filter With Improved Out-of-Band Performance," *Microwave and Optical Technology Letters*, vol. 59, no. 7 pp. 1728–1733, July 2017.
  66. Suvadeep Chaudhary and Akhilesh Mohan, "Miniaturized Sierpinski Fractal Loaded QMSIW Antenna with CSRR in Ground Plane for WLAN Applications," *Microwave and Optical Technology Letters*, vol. 59, no. 6 pp. 1291-1295, June 2017.
  67. Amit Ranjan Azad and Akhilesh Mohan, "Sixteenth-mode substrate integrated waveguide bandpass filter loaded with complementary split-ring resonator," *IET Electronics Letters*, vol. 53, no. 8 pp. 546-547, April 2017.
  68. Gunjan Sriavastava, Akhilesh Mohan and Ajay Chakrabarty, "Compact Reconfigurable UWB Slot Antenna for Cognitive Radio Applications," *IEEE Antennas and Wireless Propagation Letters*, vol. 16, pp. 1139- 1142, 2017.
  69. Debidas Kundu, Akhilesh Mohan and Ajay Chakrabarty, "A Compact Ultrathin Broadband Absorber by Reducing Cross-Polarized Reflection from Metal-Backed Anisotropic Array," *Microwave and Optical Technology Letters*, vol. 59, no. 4 pp. 970-976, April 2017.
  70. Sourav Nandi and Akhilesh Mohan, "CRLH Unit Cell Loaded Triple Band Compact Monopole Antenna for WLAN/WiMAX Applications," *Microwave and Optical Technology Letters*, vol. 59, no. 3 pp. 686-691, Mar. 2017.
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## **Patents-Indian**

S. No.	Patent Title	Name of Applicants	Patent No.	Award Date	Agency/Country	Status
1.	<b>Substrate Integrated Waveguide Monopole Antenna</b>	S. Choudhury, and A. Mohan	KOL/201631001532	2016	India	Granted
2.	<b>A Millimeter Wave Horn Antenna</b>	S. Choudhury, A. Mohan, and D. Guha	KOL/201831003527	2018	India	Filed
3.	<b>A Substrate Integrated Waveguide Inspired Multi-Horn Antenna</b>	S. Choudhury, A. Mohan, and D. Guha	KOL/201831037619	2018	India	Filed
4.	<b>Triple-band dual-polarized SIW cavity backed differential slot antenna</b>	G. Srivastava, and A. Mohan	KOL/201931041757	2019	India	Filed
5.	<b>Dual port antenna system for cognitive radio (CR) applications</b>	J. Chatterjee, A. Mohan, V. Racherla, V. Dixit	KOL/201931043582	2019	India	Filed
6.	<b>A Wide Band Dual Polarized Planar Antenna</b>	G. Srivastava, A. Mohan and A. Bhattacharya	202033055841	2020	India	Filed
7.	<b>Low-RCS Four-Element MIMO Slot Antenna using Polarization</b>	S. Pandit and A. Mohan	202131006158	2021	India	Filed

	<b>Conversion Metasurface</b>					
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### **Workshop/Short term courses organized:**

1. A TEQIP-III sponsored short term course on “Modern Antennas for Wireless Systems,” 06-10 Oct, 2018 at IIT Kharagpur.
2. An ISRO sponsored short term course on “Special Topics on Antenna Theory and Practice,” 07-19 May, 2018 at IIT Kharagpur.
3. A TEQIP-III Sponsored short term course on “Design of Microwave Antennas for Wireless Communication Applications,” 21-26 Aug, 2017 at IIT Kharagpur.

### **References:**

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### **Declaration:**

I hereby declare that the information given above is correct to the best of my knowledge.



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