

CURRICULUM VITAE

Name: Santanu Dwari.

Broad Subject: Electronics and Communication Engineering.

Date of Birth: 1st June, 1977

Gender/ Nationality: Male/ Indian

Address for Communication: Department of Electronics Engineering,
Indian Institute of Technology (Indian School of Mines),
Dhanbad – 826004, Jharkhand, India.

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Present Status: Professor, Department of Electronics Engineering, IIT(ISM) Dhanbad.

Educational Qualifications:

Examination	Board/Univ.	Displine	Year	Class/Division
Madhyamik	W.B.B.S.E		1992	1 st
Higher Secondary	W.B.C.H.S.E	Science	1994	1 st
B.Sc.	University of Calcutta	Physics	1997	1 st
B.Tech	University of Calcutta	Radio Physics and Electronics	2000	1 st
M. Tech	University of Calcutta	Radio Physics and Electronics	2002	1 st
Ph.D	IIT Kharagpur	Electronics and Electrical Communication Engineering	2009	

Specialization : RF & Microwave Engineering.

Ph.D Thesis: Design and Characterization of Compact, High Performance, Planar Couplers and Filters for RF and Wireless Applications.

Teaching Experience:

Employer	Post	Period of Employment	
		From	To
Haldia Institute of Technology. (Under West Bengal University of Technology)	Lecturer	23 rd July, 2002	23 rd July, 2004
Haldia Institute of Technology. (Under West Bengal University of Technology)	Lecturer	1 st September, 2008	24 th December, 2008
Indian Institute of Technology Indian School of Mines), Dhanbad	Assistant Professor	29 th December, 2008	5 th June, 2019
Indian Institute of Technology Indian School of Mines), Dhanbad	Associate Professor	6 th June, 2019	23 rd February, 2025
Indian Institute of Technology Indian School of Mines), Dhanbad	Professor	24 th February, 2025	Present

Ph.D Supervision:

- Completed-25

h-index: 35**List of Externally Sponsored Projects:**

Title	Sanctioning authority	Duration	Amount	Status	Role
Modeling, characterization and design of substrate integrated waveguide based dielectric resonator antenna	DST	3 years	Rs. 2.82 Lakhs	Completed	PI

Design and characterization of compact, high performance patch antennas loaded with metamaterials	UGC	3 years	Rs. 8.555 Lakhs	Completed	PI
Passive, package and interconnect modeling in design the mm-wave Si-CMOS/BiCMOS product	Lemon Flip Solutions Pvt Ltd	2 years	Rs. 2 Lakhs	Completed	Consultant
Design and development of substrate integrated waveguide(siw) based circular polarized high gain slot array antenna for satellite communication	ISRO	2 years	Rs.18.2 Lakhs	Completed	PI
Design and Development of Substrate Integrated Waveguide based Self-multiplexing Antennas for 5G communication systems	DST	3 Years	Rs. 56,75,810	Ongoing	PI
FIST (Level – 1)	DST	5 years	Rs. 190 Lakhs	Ongoing	Co-PI

List of EDP Courses:

Title	Amount	Date of the Course	Role
Microwave instrumentation and simulation tools	Rs. 3,82,500	30 th June TO 4 th July, 2014	PI
Modern antenna technology (MAT) : from theory to practice	Rs. 2.04 Lakhs	29 th June to 3 rd July, 2015	PI

Patent Published:

Si. No.	Patent /Publication No.	Title	Assignee/Applicant	Inventor	Year	Status
1	201911009425	Beam Steerable Dielectric Resonator Antenna	Mu Waves Components Research Development (MWCRD), Ghaziabad	Pramod Kumar, Santanu Dwari , Utkarsh, Jitendra Kumar, Shailendra Singh, Amitesh Kumar	2019	Granted Patent No.(Grant No.): 410296
2	201811038176	A dielectric Resonator Antenna with Radiation Beam Reconfigurability	MWCRD, Ghaziabad	Pramod Kumar, Santanu Dwari , Utkarsh, Jitendra Kumar, Shailendra Singh, Amitesh Kumar	2018	Granted Patent No.(Grant No.): 543911

Selected Publications

- [1] Rohit Kumar Saini, and **Santanu Dwari**, “A Broadband Dual Circularly Polarized Square Slot Antenna” *IEEE Transactions on Antennas and Propagation*, Vol. 64, No. 1, pp. 290-294, January 2016.
- [2] Shruti Priya, **Santanu Dwari**, Kundan Kumar, and Mrinal Kanti Mandal, “Compact Self-Quadruplexing SIW Cavity-Backed Slot Antenna” *IEEE Transactions on Antennas and Propagation*, Vol. 67, No. 10, pp. 6656-6660, October 2019.
- [3] Shruti Priya, Kundan Kumar, **Santanu Dwari**, and Mrinal Kanti Mandal, “Circularly Polarized Self-diplexing SIW Cavity-backed Slot Antennas,” *IEEE Transactions on Antennas and Propagation*, Vol. 68, No. 3, pp. 2387-2392, March 2020.
- [4] Kundan Kumar, Shruti Priya, **Santanu Dwari**, and Mrinal Kanti Mandal, “Self-Quadruplexing Circularly Polarized SIW Cavity-Backed Slot Antennas,” *IEEE Transactions on Antennas and Propagation*, Vol. 68, No. 8, pp. 6419-6423, August 2020.
- [5] Pramod Kumar, **Santanu Dwari**, Mrinal Kanti Mandal, Shailendra Singh, Jitendra Kumar, Amitesh Kumar and Utkarsh, “Electronically Controlled Beam Steerable Dual

- Band Star-Shape DRA for UAS and Wi-Fi Data Link Applications” *IEEE Transactions on Antennas and Propagation*, Vol. 68, No. 10, pp. 7214–7218, October 2020.
- [6] Pritam Singh Bakariya, **Santanu Dwari**, Manas Sarkar, and Mrinal Kanti Mandal, “Proximity Coupled Multiband Microstrip Antenna for Wireless Applications,” *IEEE Antennas and Wireless Propagation Letters*, Vol. 14, pp. 646–649, 2015.
- [7] Pritam Singh Bakariya, **Santanu Dwari**, Manas Sarkar, and Mrinal Kanti Mandal, “Proximity Coupled Microstrip Antenna for Bluetooth, WiMAX and WLAN Applications,” *IEEE Antennas and Wireless Propagation Letters*, Vol. 14, pp. 755–758, 2015.
- [8] Rohit Kumar Saini, **Santanu Dwari**, Mrinal Kanti Mandal, “CPW-Fed Dual-Band Dual-Sense Circularly Polarized Monopole Antenna,” *IEEE Antennas and Wireless Propagation Letters*, Vol. 16, pp. 2497–2500, 2017.
- [9] Kundan Kumar, **Santanu Dwari**, Mrinal Kanti Mandal, “Broadband Dual Circularly Polarized Substrate Integrated Waveguide Antenna,” *IEEE Antennas and Wireless Propagation Letters*, Vol. 16, pp. 2971–2974, 2017.
- [10] Shobhit Saxena, Binod K. Kanaujia, **Santanu Dwari**, Sachin Kumar, Rahul Tiwari, “A Compact Dual Polarized MIMO Antenna with Distinct Diversity Performance for UWB Applications,” *IEEE Antennas and Wireless Propagation Letters*, Vol. 16, pp. 3096–3099, 2017.
- [11] Kundan Kumar, **Santanu Dwari**, “Substrate Integrated Waveguide Cavity Backed Self-Triplexing Slot Antenna,” *IEEE Antennas and Wireless Propagation Letters*, Vol. 16, pp. 3249–3252, 2017.
- [12] Kundan Kumar, **Santanu Dwari**, Mrinal Kanti Mandal, “Dual-Band Dual-Sense Circularly Polarized Substrate Integrated Waveguide Antenna,” *IEEE Antennas and Wireless Propagation Letters*, Vol. 17, No. 3, pp. 521–524, March 2018.
- [13] Pawan Kumar, **Santanu Dwari**, Rohit Kumar Saini, Mrinal Kanti Mandal, “Dual-Band Dual-Sense Polarization Reconfigurable Circularly Polarized Antenna” *IEEE Antennas and Wireless Propagation Letters*, Vol. 18, No. 1, pp. 64–68, January 2019.
- [14] Biswajit Pal, Mrinal Kanti Mandal, **Santanu Dwari**, “Varactor Tuned Dual-Band Bandpass Filter With Independently Tunable Band Positions” *IEEE Microwave and Wireless Components Letters*, Vol. 29, Issue. 4, pp. 255–257, April 2019.
- [15] Ankit Bhattacharjee, **Santanu Dwari**, Mrinal Kanti Mandal, “Polarization Reconfigurable Compact Monopole Antenna With Wide Effective Bandwidth” *IEEE Antennas and Wireless Propagation Letters*, Vol. 18, No. 5, pp. 1041–1045, May 2019.
- [16] Shruti Priya, **Santanu Dwari**, “A compact self-triplexing antenna using hmsiw cavity,” *IEEE Antennas and Wireless Propagation Letters*, Vol. 19, No. 5, pp. 861–865, May 2020.
- [17] Ankit Bhattacharjee, and **Santanu Dwari**, “A Monopole Antenna With Reconfigurable Circular Polarization and Pattern Tilting Ability in Two Switchable Wide Frequency Bands” *IEEE Antennas and Wireless Propagation Letters*, Vol. 20, No. 9, pp. 1661–1665, September 2021.
- [18] Ankit Bhattacharjee, and **Santanu Dwari**, “Design of an anisotropic reconfigurable reflective polarization converter for realizing circular polarization reconfigurable antenna” *IEEE Antennas and Wireless Propagation Letters*, (Vol. 21, No. 12, pp. 2392–2396, December 2022.

- [19] Shobhit Saxena, Binod K. Kanaujia, **Santanu Dwari**, Sachin Kumar, Rahul Tiwari,
“MIMO antenna with built-in circular shaped isolator for sub-6 GHz 5G applications”
IET Electronics Letters, Vol.54, Issue. 8, pp. 478-480, April 2018.