

Profile Page



Name : Dr Sukwinder Singh

Designation : Assistant Professor Grade-i

Department : Electronics and Comm. Engg.

Qualification : PhD RF and Microwave Engineering (IIT Roorkee)
M.Tech Microwave Engineering (IIT (BHU))
B.Tech Electronics & Communication (KIET (UPTU))

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Research Interests :

RF and microwave, millimeter-wave sources and components, guided wave structures, electromagnetics.

Other Profile Links :

Google Scholar Link :

Sukwinder Singh [Click Here](#)

Journal Publications :

Year	Journal	Publication
2021	International Journal of Circuit Theory and Applications 2021; 49: pp. 762– 777	Sukwinder Singh, Jagannath Malik "Review of efficiency enhancement techniques and linearization techniques for power amplifier."
2019	Journal of Infrared Milli Terahz Waves	Sukwinder Singh, and M. V. Kartikeyan, "Full-wave Analysis of Plasma-Loaded Coaxial Cavity with Wedge-Shaped Corrugations on the Insert"
2019	IEEE Transactions on Electron Devices, vol. 66, no. 9, pp. 4029-4035, Sept. 2019	S. Yuvaraj, Delphine Alphonsa Jose, Sukwinder Singh, M. V. Kartikeyan, "Effect of Insert Misalignment on a Triangular Corrugated Coaxial Cavity Gyrotron,"
2018	IEEE Transactions on Electron Devices	Sukwinder Singh and M. V. Kartikeyan, "Analysis of Plasma Loaded Conventional and Coaxial Cavity With Wedge-Shaped Corrugations on the Insert", vol. 65, no. 6, pp. 2614-2619.
2017	IEEE Trans. Electron Devices, vol. 64, no. 5, pp. 2369-2375	Sukwinder Singh and M. V. Kartikeyan, "Full Wave Analysis of Plasma Loaded Coaxial Gyrotron Cavity With Triangular Corrugations on the Insert,"
2017	IEEE Trans. Electron Devices, vol. 64, no. 4, pp. 1756-1762	Sukwinder Singh and M. V. Kartikeyan, "Full Wave Analysis of Coaxial Gyrotron Cavity With Triangular Corrugations on the Insert,"

2016	IEEE Trans. Electron Devices, vol. 63, no. 10, pp. 4060-4066	Sukwinder Singh and M. V. Kartikeyan, "Analysis of Plasma-Loaded Noncorrugated and Triangular Corrugated Coaxial Cavity,"
2016	IEEE Trans. Electron Devices, vol. 63, no. 5, pp. 2118-2124	M. Thottappan, Sukwinder Singh and P. K. Jain, "Gyro-TWT Using a Metal PBG Waveguide as Its RF Circuit - Part I: Analysis and Design,"
2015	IEEE Trans. Electron Devices, vol. 62, no. 7, pp. 2333-2338,	Sukwinder Singh and M. V. Kartikeyan, "Analysis of a Triangular Corrugated Coaxial Cavity for Megawatt-Class Gyrotron,"

Conference Publications :

Year	Conference	Publication
2022	2022 10th International Conference on Emerging Trends in Engineering and Technology - Signal and Information Processing (ICETET-SIP-22), 2022, pp. 1-4, doi: 10.1109/ICETET-SIP-2254415.2022.9791701.	R. Kumar and S. Singh, "A Three Stage Ku-Band GaN HEMT Power Amplifier,"
2022	2022 10th International Conference on Emerging Trends in Engineering and Technology - Signal and Information Processing (ICETET-SIP-22), 2022, pp. 1-4, doi: 10.1109/ICETET-SIP-2254415.2022.9791733.	K. Saurabh and S. Singh, "A 3.5GHz Power Amplifier Design,"
2022	2022 10th International Conference on Emerging Trends in Engineering and Technology - Signal and Information Processing (ICETET-SIP-22), 2022, pp. 1-4, doi: 10.1109/ICETET-SIP-2254415.2022.9791713.	P. Rattanpal and S. Singh, "Design of a Multistage X Band Power Amplifier,"
2021	12th International Conference on Computing Communication and Networking Technologies (ICCCNT)	A. Vancha, H. Tolani, S. C. Bera and S. Singh. "Design of a 5W X-Band GaN HEMT Power Amplifier,"
2021	6th International Conference on MICRO-ELECTRONICS, ELECTROMAGNETICS AND TELECOMMUNICATIONS	Tejendra Kumar Singh, Deepti Kakkar, Sukwinder Singh, "Design of Class AB and Class C Amplifiers"
2020	3rd International Conference on VLSI, Communication and Signal Processing (VCAS)	Akash Gaikwad, Sukwinder Singh "X band class F power amplifier for satellite communication"
2020	3rd International Conference on VLSI, Communication and Signal Processing (VCAS)	Manoj Kumar, Deepti kakkar, Sukwinder Singh ""Design of Ku band HEMT based Class AB Amplifier""
2018	2018 IEEE International Vacuum Electronics Conference (IVEC), Monterey, CA, USA.	S. Singh, S. Yuvaraj, G. S. Baghel and M. V. Kartikeyan, "Design studies of a RF interaction cavity for a 4 MW, 170 GHz triangular corrugated coaxial cavity gyrotron"
2018	2018 11th German Microwave Conference (GeMiC), Freiburg	S. Yuvaraj, D. A. Jose, S. Singh, M. S. Chauhan and M. V. Kartikeyan, "Eigenvalue analysis of a triangular corrugated coaxial cavity with misaligned inner rod,"
2015	2015 International Conference on Microwave, Optical and Communication Engineering (ICMOCE), Bhubaneswar,	S. Yuvaraj, S. Singh, G. S. Baghel and M. V. Kartikeyan, "Mode selection and interaction structure design of a megawatt class, sub-THz wave coaxial cavity gyrotron,"
2014	2014 IEEE International Microwave and RF Conference (IMaRC), Bangalore,	S. Singh and M. V. Kartikeyan, "Field analysis of a novel interaction structure for high power sub-THz wave coaxial cavity gyrotrons,"

Research Projects :

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
Principal Investigator	Research	To Design a Robotic Arm to Identify Different Objects	TEQIP-III			3 Lakhs	Ongoing	
Principal Investigator	ISRO STIC	Design and Development of RF and Microwave Components	ISRO	01-03-2020	01-12-2022	14.5 lakhs	Ongoing	Dr Balwinder Raj

Events Organized :

Category	Type	Title	Venue	From	To	Designation
STC	National	Latest Developments in Communication and Microwave Technologies	NIT Jalandhar	02-09-2020	06-09-2020	Coordinator
STC	National	Emerging Trends and Challenges in Communication Systems	NIT Jalandhar	11-01-2021	15-01-2021	Coordinator

Professional Affiliations :

Designation	Organization
Member	IEEE

PG Dissertation Guided :

Student Name	Dissertation Title	Status	Year	Co-Supervisor
Anish Vancha	Design of X-band Single-stage and Broadband Multi-stage Power Amplifier	Completed	2019-21	-
Allupilli Jhansi Lakshmi	Ku Band Class AB RF Power Amplifier Design For Satellite Applications	Completed	2019-21	-
Tejendra Kumar Singh	Design of Doherty Power Amplifier	Completed	2019-21	Dr Deepti Kakkar
Manoj Kumar	Design of GaN HEMT based Ku band class AB RF power amplifier for satellite uplink	Completed	2018-20	Dr Deepti Kakkar
Akash Gaikwad	Design of X band class F power amplifier for satellite communication	Completed	2018-20	-

Admin. Responsibilities :

Position Held	Organization	From	To
Member	Space Incubation Center, NIT Jalandhar	01-03-19	
Member	Hindi Cell	01-03-2020	-