Dr. PUNEETH KUMAR T R

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Education

Sl. No.	Degree	Year	Institute	Specialization
1	BE	2009	SIT, Tumku	Telecommunication Engineering
2	M.Tech	2013	RVCE, Bangalore	Digital Communication Engineering
3	Ph.D.	2020	NITK Surathkal	ECE(Antennas and Microwaves)

Professional Experience

Sl. No.	Date (from-to)	Designation	Organization
1	Aug 2016-Presesnt	Assistant Professor	Siddaganga Institute of Technology
2	Aug-2013-May 2016	Assistant Professor(contractual)	Siddaganga Institute of Technology
3	25th June 2010-7th sept. 2011	Software Engineer	Aeronautical Development Agency

Positions held

1. Contineo Coordinator
2. TBI Coordinator
3. Patent Coordinator
4. Project Coordinator
5. Time Table coordinator

Awards and Honors

- Received Best Project Awarded by KSCST in BE.
- Received Best PhD Thesis Award from BITES

Courses Taught

Undergraduate Courses

- Signals and Systems
- Electromagnetic Field Theory
- Transmission lines and waveguides
- RF and Microwave circuit design
- Microwave Engineering
- Antennas
- Radar Systems
- Wireless communication.
- Research Methodology
- Telecom Operations and Business Support Systems

Postgraduate Courses

- Antenna Theory and Design
- RF and Microwave circuit design

Research Guidance

Sl. No	Name of the Scholar	Title	Year of completion
1.	Nandeesh T V	Design and Analysis of MIMO Antennas for 5G Sub-6GHz Band Wireless Applications	Ongoing

Research Areas

- Microwave Engineering
- Antennas and Metamaterials
- RF circuits and optics

Publications

Journals

- V. K. S. Rajanna, T. Venkatesh, **P. K. Tharehalli Rajanna**, and S. Mudukavvanavar, "Independently tunable metamaterial inspired compact triband dual-sense circularly polarized antenna," **International Journal of Microwave and Wireless Technologies**, pp. 1–9, 2024. doi:10.1017/S1759078724001247.
- *Praveen Haandi Lakshman, Yerriswamy Thatti,* ***Puneeth Kumar Tharehalli Rajanna****, Shambulinga Mudukavvanavar "*High-gain circularly polarized metasurface antenna for NR257 band millimeter-wave 5G communication" in **Indonesian Journal of Electrical Engineering and Computer Science**, [S.l.], v. 37, n. 2, p. 867-877, feb. 2025. ISSN 2502-4760.
- Vinaya Kumar Sugganapalya Rajanna, Thimmegowda Venkatesh, Puneeth Kumar Tharehalli Rajanna, and Mudukavvanavar Shambulinga, "A Triband Slot Antenna Loaded with Asymmetric Split Ring Resonator for Wireless Applications," **Progress In Electromagnetics Research Letters,** Vol. 117, 61-67, 2024. doi:10.2528/PIERL23110101
- **Puneeth Kumar Tharehalli Rajanna**, Krishnamoorthy Kandasamy, and Pratik Mevada, "Phase Gradient Metasurface Assisted Wideband Circularly Polarized Monopole Antenna," **Progress In Electromagnetics Research M**, Vol. 117, 13-23, 2023. doi:10.2528/PIERM23020701.
- **Puneeth Kumar T R**, Karthik Rudramuni and **Krishnamoorthy Kandasamy,** "Slot Coupled Dual Band High Gain Circularly Polarized Metasurface Antenna", **International Journal of RF and Microwave Computer-Aided Engineering,** Vol 32, no. 08, August 2022. https://doi.org/10.1002/mmce.23229
- D. S. Arun Kumar, **T. R. Puneeth Kumar**, **K. Krishnamoorthy**, P. Devadas Bhat and M. R. Rahman, "Flexible Electromagnetic Shielding Material Using Multi-Walled Carbon Nanotube Coated Cotton Fabric", **IEEE Transactions on Components, Packaging and Manufacturing Technology,** Vol.12, No. 03, 479 - 488, Feb 2022.
- Karthik Rudramuni, **Puneeth Kumar T R**, Krishnamoorthy Kandasamy, Basudev Majumder and Qingfeng Zhang, "Dual-Band Asymmetric Leaky Wave Antennas for Circular Polarization and Simultaneous Dual Beam Scanning", **IEEE Transactions on Antennas and Propagation**, Vol 69, No. 4, 1843 - 1852, April 2021.
- **Puneeth Kumar T R**, Karthik Rudramuni and **Krishnamoorthy Kandasamy,**"compact Wideband Circularly Polarized SRR Loaded Slot Antenna for Soil Moisture Sensor Application" **Microwave Review,** Vol. 26, No. 2, Dec. 2020.
- Karthik Rudramuni, **Puneeth Kumar T R, Krishnamoorthy Kandasamy**, Basudev Majumder and Qingfeng Zhang, "Goubau Line Based End-Fire Antenna", **International Journal of RF and Microwave Computer-Aided Engineering.** Vol.29, no.12, Dec 2019.

- **Puneeth Kumar T R,** Karthik Rudramuni and **Krishnamoorthy Kandasamy,** "Compact Triband Circularly Polarized Planar Slot Antenna loaded with Split Ring Resonators", **International Journal of RF and Microwave Computer-Aided Engineering.** Vol.29, no.12, Dec 2019. https://doi.org/10.1002/mmce.21953.
- **Puneeth Kumar T R**, Karthik Rudramuni and **Krishnamoorthy Kandasamy,** "Characteristic Mode Based Compact Circularly Polarized Metasurface Antenna for In-Band RCS Reduction", **International Journal of Microwave and Wireless Technologies.** 1-7. doi:10.1017/S1759078719001119, Sep. 2019.
- **Puneeth Kumar T R**, Karthik Rudramuni and **Krishnamoorthy Kandasamy,** "A High Gain Circularly Polarized Antenna Using Zero-Index Metamaterial" ***IEEE antennas and Wireless Propagation Letters.*** Vol. 18, no. 6, PP. 1129-1133, June 2019.
- **Puneeth Kumar T R**, Karthik Rudramuni and **Krishnamoorthy Kandasamy,** "A Wideband Circularly Polarized Slot Antenna Backed by Frequency Selective Surface" ***Journal of Electromagnetic Engineering and Science***. Vol. 19(3), PP. 166-171, July 2019.
- Karthik Rudramuni, **Krishnamoorthy Kandasamy**, Qingfeng Zhang, Xiao-Lan Tang, Abhishek Kandwal, **Puneeth Kumar Tharehalli Rajanna**, Haiwen Liu, "*Goubau-Line Leaky Wave Antenna for Wide-Angle Beam Scanning From Backfire to End-fire*", ***IEEE Antennas and Wireless. Propag. Lett.,*** *vol. 17, issue 8, pp. 1571-1574,* Aug. 2018.

Conference Proceedings

- S. S. S, Y. H. M, B. K. V, D. P. N, P. K. T. Rajanna and K. Kandasamy, "Design and Analysis of Wide-Band Circularly Polarized 2×2 Mimo Antenna for Sub-6 Ghz 5G Communication," *2025 3rd International Conference on Smart Systems for applications in Electrical Sciences (ICSSES)*, Tumakuru, India, 2025, pp. 1-4, doi: 10.1109/ICSSES64899.2025.11009724.
- V. K. S R, V. T and P. K. Tharehalli Rajanna, "Characteristic Mode Analysis of Wideband Patch Antenna Using Dual-Mode Resonance," *2024 5th IEEE Global Conference for Advancement in Technology (GCAT)*, Bangalore, India, 2024, pp. 1-5, doi: 10.1109/GCAT62922.2024.10923838.
- K. Akshatha, S. U. Bhat, T. N. Lohith, R. Sunil and P. K. T. Rajanna, "Design and Analysis of High Gain Linear to Circular Polarization Conversion Metasurface Based Patch Antenna," *2024 International Conference on Smart Systems for applications in Electrical Sciences (ICSSES)*, Tumakuru, India, 2024, pp. 1-5, doi: 10.1109/ICSSES62373.2024.10561450.
- V. Kumar S R, T. Venkatesh and P. K. Tharehalli Rajanna, "Characteristic Mode Analysis of Polarization Reconfigurable Compact Metasurface Antenna for sub-6GHz 5G Application," *2023 3rd International Conference on Mobile Networks and Wireless Communications (ICMNWC)*, Tumkur, India, 2023, pp. 1-6, doi: 10.1109/ICMNWC60182.2023.10435870.

- S. K. T R, **P. K. Tharehalli Rajanna**, D. P. N, S. S. S, Y. H. M and B. K. V, "Design and Simulation of Low Noise Amplifier for Sub-6GHz 5G Application," *2023 International Conference on Smart Systems for applications in Electrical Sciences (ICSSES)*, Tumakuru, India, 2023, pp. 1-5, doi: 10.1109/ICSSES58299.2023.10199901.
- T. Yerriswamy, P. H. L, **T. R. Puneeth Kumar** and R. Hosamani, "N258 Frequency Band Circularly Polarized Corner Perturbed Microstrip Patch Antenna," *2022 2nd Asian Conference on Innovation in Technology (ASIANCON)*, Ravet, India, 2022, pp. 1-4, doi: 10.1109/ASIANCON55314.2022.9909131.
- S. T. Gowthami and **P. T. R. Kumar**, "Independently Tunable Dual Band Antenna loaded with modified Split Ring Resonator with Circular Polarization Characteristics for Wireless Applications," *2022 First International Conference on Electrical, Electronics, Information and Communication Technologies (ICEEICT)*, Trichy, India, 2022, pp. 1-4, doi: 10.1109/ICEEICT53079.2022.9768514.
- **Puneeth Kumar T R**, Karthik Rudramuni and **Krishnamoorthy Kandasamy,**"A Zero-Index Based Metasurface Antenna with Improved Gain and Circular Polarization Characteristics", **2021 IEEE Texas Symposium on Wireless and Microwave Circuits and Systems (WMCS), Texas, USA, May 18-20, 2021.**
- **Puneeth Kumar T R**, Karthik Rudramuni and **Krishnamoorthy Kandasamy, "**Dual Band Circularly Polarized Slot Antenna Loaded with Asymmetric Cross Strips", **2018 IEEE Indian Conference on Antennas and Propagation (InCAP 2018)**, Hyderabad, India, Dec 16-19, 2018. (Conference Travel grant awarded).
- Vikrant Bande, **Puneeth Kumar T R** and **Krishnamoorthy Kandasamy,** "Dual Band-Dual Sense Circularly Polarized Patch Antenna for Wi-Max Application", 2018 **IEEE Indian Conference on Antennas and Propagation (InCAP 201**8), Hyderabad, India, Dec 16-19, 2018.
- Karthik Rudramuni, **Puneeth Kumar T R**, **Krishnamoorthy K,** Basudev Majumder and Qingfeng Zhang Zhang, "Planar Goubau Line Based Endfire Antenna", **2018 IEEE-INAE Workshop on Electromagnetics (IIWE),** December 06 to 08, 2018, Trivandrum, India. (Conference Travel grant awarded).
- **Puneeth Kumar T R**, Karthik Rudramuni **and Krishnamoorthy Kandasamy,** "Compact Dual Band Circularly Polarized Planar Slot Antenna loaded with a Rotated SRR", **2018 IEEE-INAE Workshop on Electromagnetics (IIWE),** December 06 to 08, 2018, Trivandrum, India.
- Vikrant Bande, **Puneeth Kumar T R** and **Krishnamoorthy Kandasamy**, "Compact Dual Band Dual Polarized Patch Antenna for Wireless Applications" **2018 IEEE-INAE Workshop on Electromagnetics (IIWE),**December 06 to 08, 2018, Trivandrum, India.

Reviewer of Journals

- IEEE Antennas and Wireless Propagation letters
- International Journal of communication systems
- Microwave and optical technology letters
- International journal of RF and Microwave computer aided engineering
- International Journal of microwave and wireless technologies
- Progress in Electromagnetic Research(PIER)
- International Journal of electronics and communication
- IEEE Access.

Invited Lectures, talks and workshops

- A talk on simulation aspects of antenna design in CST studio at KLE Hubli.