Department of Electronics & Telecommunication Engineering

Faculty Achievements

Sr. No.	Name of Faculty	Achievement
1	 Dr. Devashree Marotkar	**Awards Received** • I2OR "International Women In Engineering Award" on 8th March 2025 on Women's Day • "Pratibha Samman Award" by Navbharat on 5th September 2022 • "Best Women Faculty Award" by Novel Research Academy on 15 September 2021 • "Excellent paper Award" for the paper Titled "To Study The effect of DGS on Antenna Parameters" **Patent Granted on** • "Drone Navigation Device" • "Sensor for Breast / Lung Cancer Detection" • "Fuel tank with Digital Gauge" • "Multiple Input multiple Output (MIMO) Multiband Antenna for 5G IOT Devices" **Book Published on Title** • "Image Processing Essentials: A Digital Perspective" by SIPH Publication. • "Basic Electronics" by SIPH Publication. • "Wireless Communication" by SIPH Publication. **Copyright Awarded on** • "Experimental Setup Of Iot Based Low-Cost Fertilization And Irrigation Monitoring System For Cotton Crop Field" • "Lab Manual Of Microprocessor And Its Application" • "Portable Air Purifier With Air Quality Monitoring System" • "Underground Cable Fault Detection Of Copper Wire Using Arduino And Gsm" • "Python Complete Tutorial Part-1" • "Electro Hydraulic Goods Elevator" • "Automobile Geoponics Robo" • "Flying Eye" **NPTEL** • Acquired **Elite + Silver Certification** in NPTEL Course on 'Development Research Method' by IIT Guwahati. • Acquired **Elite + Silver Certification** in NPTEL Course on 'Enhancing Soft Skills and Personality' by IIT Kanpur. • Top Performing **Mentor** in NPTEL Microprocessor and Microcontroller **Grants Received** • Received a **grant of 2.5 Lakhs** for One week FDP on "Artificial Intelligence and Machine Learning for Next Generation IoT Network" (20th Jan. to 25th Jan.25) 5 Days FDP in collaboration with EICT IIT Roorkee.

		• Received a **grant of 2,00,000** by AICTE-VAANI to conduct Workshop on **"Semiconductors-Trends in 2024"** in Marathi Language • **General Chair** of Conference Organized ICACEBD-24, ICACEBD-25 • Editorial Board Member of IJSET journal • Reviewer in IEEE-International Conference and Scopus indexed International Conferences.
2	 Dr. Swati Dixit	• Translated AICTE Book "Basics of Electronics" in Marathi Language and the book available on AICTE e-KUMBH portal. • Received appreciation for **Expert talk at Training Program on Examination System** organized by Raisoni Group of Institutions on 8th June 2021. • Received Copyrights on lab manuals of "Electronic Devices and Circuits" and "Analog Integrated Circuits". • Received Appreciation from IIT Kharagpur for translating files of the NPTEL course **Microprocessor and Microcontroller** in Marathi. • **Chair-person** in technical session of "1st World Congress on Optimization and Automation Techniques in Engineering and Management -20" (WCOATEM-20). • **NPTEL Certificate with Silver + Elite Grade** for successful completion of the course **"Introduction to Basic Spoken Sanskrit and Intermediate Level of Spoken Sanskrit"** • **NPTEL Certificate with Silver + Elite Grade** for successful completion of the course **"Enhancing Soft Skills & Personality".** • Received a grant of 2,00,000 by AICTE-VAANI to conduct Workshop on **"Semiconductors-Trends in 2024"** in Marathi Language • **Patents granted on "**Multiple Input Multiple Output (MIMO) Multiband Antenna for 5G IOT Devices", "Smart Wearable Device for Continuous Health Monitoring and Emergency Response" (UK), Innovation Patent by Australian Government with title "An Intelligent System & Method to Track and Navigate Moving Objects in a Smart Environment using IoT Network" • **Books published-"**Wireless Communication", "Image Processing Essentials: A Digital Perspective", "Basic Electronics"," Biomedical Electronics: Approaches and Implementations". • Technical Session Chair in 2nd International Conference on Trends in Material Science and Manufacturing Engineering organized by Innovative Scientific Research Association, India • Reviewer in IEEE-International Conference and Scopus indexed International Conferences.

3.	 Dr. Sanket Kasturiwala	• **Keynote Speaker** at 4th International Conference on Advances in Management and Technology (ICAMT-2024). • **Reviewer** at International Journal of Applied Power Engineering (Scopus) • **Book Published on** 1)Analysis of Leaf Diseases using Image Super Resolution Techniques. 2) Image Processing Essentials: A Digital Perspective. • **Patent Granted on** 1) Drone Navigation. 2) Multiple-Input Multiple-Output (Mimo) Multiband Antenna For 5G Iot Devices. 3) A Solar Powered Air Purifier • **Copyright Published on** 1) Lab Manual of Electronics Product Development. 2) A Poster On "IoT Based Agriculture Monitoring System".
4	 Dr. Shubhangini Ugale	• **Copyright published on** MULTIRATE DSP • **Copyright published on** Power point presentation on Transmission Line • **Reviewer** at 3rd International conference at Advanced Communication, Energy and Big data (ICACEBD-25) • **Patent published on** AI-Based Kids Oral Health Monitoring Device **Book published on** Machine Learning Applications: Case Studies and Best Practices.
5.	 Ms. Swati Hadke	• **Patent Granted on** Hybrid Method for Video Shot Boundary Detection. • **Patent Granted on** Ai Based Quantum Computing Data Processing Device. • **Patent Granted on** Drone Navigation. • **Patent published on** Autonomous Drone Navigation Device Incorporating Machine Learning for Obstacle Avoidance. • **Patent published on** Method And System For Real-Time Adaptive Power Management In Electronic Devices • **Patent published on** Big Data Based Application Of Electronic Technology In Communication Engineering. • **Patent published on** Sensor Based Intelligent Brain Computer Interface System for Assisting Hand Paralyzed Patients to perform Typing by Brain • **Reviewer** at International Conference on Emerging Trends in Engineering and Medical Sciences • **Copyright published on "**Battery Management System with Monitoring and Controlling". • **Received Appreciation Letter** for successful planning and execution of event INTERSTELLA 3.0 organized by NASA Space Apps in collaboration with the Youthopian Force at GHRCEM, Nagpur held on 4th and 5th October 2025.

		• **Book Chapter Published** on Smart Wearable Devices for Remote Patient Monitoring in Healthcare, Digital image processing using Python language
6.	 Ms. Priyanka Chopkar	• **Patent Granted on** Multiple – Input Multiple – Output (MIMO) Multiband Antenna for 5G IOT Devices. • **Patent Granted on** Smart Wearable Device for Continuous Health Monitoring and Emergency Response (UK) • **Patent Published on** Energy Efficient Deep Learning Architecture for Mobile Devices. • **Patent Published on** Big Data Based Application of Electronic Technology in Communication Engineering. • **Patent Published on** Method and System for Real-Time Adaptive Power Management In Electronic Devices. • **Patent Published on** Forecasting of Flood Process in IOT enabled smart cities using convolutional neural network • **Patent Published on** Automatic Prediction the Hazardous Protein Complexes Using Machine • **Patent Published on** Global Maritime Distress and Safety System. • **Copyright published on** Lab Manual for Web Technologies • **Copyright published on** Lab Manual for Microcontroller and Embedded System • **Copyright published on** Automated Medicine Reminder Box • **Copyright published on** Lab Manual of Electronics Product Development. • **Copyright published on** Lab Manual of Computer Communication Network • **Copyright published on** Lab Manual of Advance Digital System Design • **Book Published on Basic Electronics** • **NPTEL Believers Star.** • Acquire Elite certification in NPTEL course on **"Machine Learning and Deep Learning – Fundamentals and Applications**", by IIT Madras • Acquire Elite certification in NPTEL course on **"Introduction to Machine Learning"** by IIT Madras. • Acquire Elite certification in NPTEL course on **"Microprocessors and Microcontrollers"** by IIT Kharagpur • Received Appreciation Letter for successful planning and execution of event INTERSTELLA 3.0 organized by NASA Space Apps in collaboration with the Youthopian Force at GHRCEM, Nagpur held on 4th and 5th October 2025.
7.	 Ms. Prajakta Upadhye	• **Patent Granted on** FUEL TANK WITH DIGITAL GAUGE • **Patent Granted on** MULTIPLE-INPUT MULTIPLE-OUTPUT (MIMO) MULTIBAND ANTENNA FOR 5G IOT DEVICES • **Patent Published on** The Efficacy of Artificial Intelligence and Internet of Things Models for Soil Monitoring and Crop Management • **Patent Published on** Smart Wearable Device for Continuous Health Monitoring and Emergency Response (UK). Design number 6361985

		• **Patent Published on** Big Data Based Application Of Electronic Technology In Communication Engineering • **Patent Published on** Method And System For Real-Time Adaptive Power Management In Electronic Devices • **Copyright published on** "Automated Medicine Reminder Box" Certificate No.: LD-20250169325 • **Copyright published on "**Lab Manual for Microcontroller and Embedded system" Certificate No.: LD-20250174500 • **Copyright published on** 2 In 1 Laser Engraving And CNC Cutting Machine • Acquire Elite Certification in NPTEL Course on '**INTRODUCTION TO INTERNET OF THINGS'** and '**MICROPROCESSOR AND MICROCONTROLLER' by IIT Kkaragpur** • **Book Chapter Published** on AI-Based Fault Detection for Power Transformers: A Comparative Study of Traditional and AutoML Methods, Internet of Things-based cognitive wireless sensor networks: applications, merits, and demerits and Digital image processing using Python language • Delivered Expert Lecture on topic Hands on IOT in AICTE SPONSORED 3 days workshop on "Semiconductor trends in 2024"organized by Department of Electronics &Telecommunication Engineering of GHRCEM Nagpur • Delivered Expert Lecture in FDP on 'Internet of Things (IOT)' organized at G.H. Raisoni Institute of Engineering and Technology, Shraddha Park, Nagpur campus in association with Sadabai Woman's College Nagpur.
8.	 Ms. Sucheta Raut	• **Best Paper Award** for the paper "RoboSoil: An Agrobot for Microbial Detection and Yield Enhancement" presented at the "1st Hybrid International Conference on Women in Agriculture, Science, Technology, Education, Engineering & Management (WASTEEM-2025)", organized by the Centre for Innovation & Incubation Council **National Institute of Technology Jamshedpur**, during 15th - 16th November 2025. • **Patent Granted on** Smart Wearable Device for Continuous Health Monitoring and Emergency Response (UK). • **Patent Published on** Big Data Based Application of Electronic Technology in Communication Engineering. • **Patent Published on** Method and System for Real-Time Adaptive Power Management In Electronic Devices. • **Copyright published on** Lab Manual Of Embedded System Design & RTOS • **Copyright published on** 2 In 1 Laser Engraving And CNC Cutting Machine • Awarded with the **"NPTEL Star – NPTEL Believer"** title, a recognition by **NPTEL** for successfully completing **four NPTEL courses within the same certification cycle.**

		• Acquire **Silver Medal** with **Elite certification** in NPTEL course on "Principles of Modern CDMA/ MIMO/ OFDM Wireless Communications", by **IIT Kanpur.** • Acquire **Silver Medal** with **Elite certification** in NPTEL course on "Research Methodology", by **IIT Madras.** • Acquire **Elite certification** in NPTEL course on "Cloud Computing" by **IIT Kharagpur.** • Acquire **Elite certification** in NPTEL course on "Microprocessors and Microcontrollers" by **IIT Kharagpur.** • Received Appreciation Letter for successful planning and execution of event INTERSTELLA 3.0 organized by NASA Space Apps in collaboration with the Youthopian Force at GHRCEM, Nagpur held on 4th and 5th October 2025.
09.	 Mr. Purushottam Chawke	• **Patent published on** Image Processing Techniques Integrated With Machine Learning Approaches For Analyzing And Estimating Soil Moisture Using Satellite-Captured Images • Acquire Elite Certification in NPTEL Course on '**Digital Circuits'** by IIT Kharagpur. • **Received Appreciation Letter** for successful planning and execution of event INTERSTELLA 3.0 organized by NASA Space Apps in collaboration with the Youthopian Force at GHRCEM, Nagpur held on 4th and 5th October 2025.
10.	 Mr. Vishal Jaiswal	• **Patent published on** Weight Based Object Sorting Automaton System Using Iot Based Application. • **Copyright published on** Battery Management System with Monitoring and Controlling. • **Book published on** Fundamentals of Signals and Systems. • **Received Appreciation Letter** for successful planning and execution of event INTERSTELLA 3.0 organized by NASA Space Apps in collaboration with the Youthopian Force at GHRCEM, Nagpur held on 4th and 5th October 2025.
11.	 Mr. Ashish Katore	• **Copyright on Scrutiny "**FIREFIGHTER ROBOT 1.0 suppression and reconnaissance in hazardous environments**"** • **Appreciation latter on INTERSTELLA 3.0 NASA** Space App Nagpur in collaboration with Youthopian **GHRCEMN.**