



### **Publications by Faculty**

- Raut, P., Panda, D. K., Nanda, U., & Hsu, C. C. (May 2024). Simulation and Modeling of high-sensitive JL-TFET based biosensor for label free detection of biomolecules. *Microsystem Technologies*, 1-9. SCI-2.1 [https:// doi.org/ 10.1007/s00542-024-05638-7](https://doi.org/10.1007/s00542-024-05638-7)
- Reddy, N. N., Raut, P., & Panda, D. K. (June 2024). GSE and GWE Techniques to improve ON (ION) current and Ambipolar conduction of Tunnel FET (TFET) device: A Comprehensive review. *Micro and Nanostructures*, 207865, SCI - 3.1 [https://doi.org/ 10.1016/ j.micrna. 2024.207865](https://doi.org/10.1016/j.micrna.2024.207865)
- Raut, P., Nanda, U. and Panda, D. K “(May 2024), Analysis of RF with DC and Linearity Parameter and study of Noise characteristics of Gate- All- Around Junction less FET (GAA-JLFET) and its applications” accepted as book chapter in book” *Nano-Devices for IC Design*. [https:// doi.org/10.1002 /9781394186396.ch6](https://doi.org/10.1002/9781394186396.ch6)
- Suryanarayana, G., Ramtej, K.S., Reddy, D.S. et al. Deep interpolation based hyperspectral-multispectral image fusion via anisotropic dependent principal component analysis. *Multimedia Tools Appl* (2024). <https://doi.org/10.1007/s11042-024-19132-9>
- Vanka, S., Chandrasekhar, C., Varactor Tunable Compact MIMO Antenna with Reconfigurable Multi Band Operating and Notching for Cognitive Radio Applications. 2024 IEEE Wireless Antenna and Microwave Symposium, WAMS 2024.

### **Publications with Students.....**

- Ram, S.V.S., Saritha, V., Nagurvali, S., Prasanth, R., Malleshwari, N.S.N., A Compact Planar Antenna Operating at Lower and Higher 5G Bands , 2024 IEEE Wireless Antenna and Microwave Symposium, WAMS 2024
- Sai Boppudi, B., Lakshmi Ambati, R., Geetha Sravani Beeram, S.Venkata Raghavan, S.T.P., Anumala, V.S. Performance Evaluation of Rake Receiver using Rayleigh Fading Channel in Terms of Bit Error Rate 2023 8th International Conference on Communication and Electronics Systems (ICCES) Coimbatore, India, ISBN:979-8-3503-9663-8, 01-03 June 2023, Scopus, 10.1109/ICCES57224.2023.10192621
- A Vijayasankar, Gnaneswari Kancherla, Srinivasa Panchavedi Gopamsana, Bhaskar Reddy Yadamakanti, Early Heart Disease Detection with Extreme Data Approach using Ensemble Learning Techniques 2023 8th International Conference on Communication and Electronics Systems (ICCES), Coimbatore, 979-8-3503-9664-5, 10.1109/ICCES57224.2023.10192651

# Department of ECE

## Vision

To produce globally competitive and socially sensitized engineering graduates and to bring out quality research in the frontier areas of Electronics & Communication Engineering.

## Mission

To provide quality and contemporary education in the domain of Electronics & Communication Engineering through periodically updated curriculum, best of breed laboratory facilities, collaborative ventures with the industries and effective teaching learning process.

To pursue research and new technologies in Electronics & Communication Engineering and related disciplines in order to serve the needs of the society, industry, government and scientific community.

## PSOs

PSO1 Demonstrate proficiency in design, development and implementation of application oriented engineering systems using VLSI and IOT

PSO2 Implement functional blocks of hardware / software designs for signal processing and communication applications

## POs

- PO1 → Engineering knowledge
- PO2 → Problem analysis
- PO3 → Design/development of solutions
- PO4 → Conduct investigations of complex problems
- PO5 → Modern tool usage
- PO6 → The engineer and society
- PO7 → Environment and sustainability
- PO8 → Ethics
- PO9 → Individual and team work
- PO10 → Communication
- PO11 → Project management and finance
- PO12 → Life-long learning

V R Siddhartha engineering College

Department of ECE

## News Letter Editorial Board

### Chief Editor

Dr. D Venkata Rao  
Head of Dept  
ECE

### Editor

Mrs. Y Sarada Devi  
Asst.Professor  
ECE

### Student Editors

Sk Saijha 208W1A04B3  
G Pallavi 208W1A04 81