# **Faculty Profile**

Name : Dr Parul Chaudhary

Designation : Assistant Professor

Qualifications : Ph.D., M.Tech., B.E (ECE)

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Area of Interest/Specialization: Energy Harvesting, Triboelectric material,

Piezoelectricity, IOT, Applications

Experience : 10 years

## **Key Publications**

- 1. Parul Chaudhary and Puneet Azad ,"Energy Harvesting from Human Biomechanical Energy for Health-monitoring Devices", *IETE Journal of Research*, 67(1), 74-81,2021
- 2. Parul Chaudhary and Puneet Azad," Energy harvesting using shoe embedded with piezoelectric material", *Journal of Electronic Materials*, 49(11), 6455-6464, 2020
- 3. Parul chaudhary, Rohit Sharma, Meena Rao, and Mohit Tiwari, "Role of Machine Learning Applications in Enhancing Cyber Security Effectiveness: An Empirical Study" *Rivista Italiana di Filosofia Analitica Junior*, 14 (1), 405-411,2023
- 4. Parul Chaudhary," Analysis of Power dissipation in drift region of 6H-silicon Carbide Dimosfet", IOSR journal,5,59-64,2014
- 5. Parul Chaudhary," Smart Assistive Technology for Differently-Abled Persons", International Journal of All Research Education and Scientific Methods (IJARESM),10(9),234-239,2022

#### Papers presented in Conferences

1. Parul Chaudhary and Puneet Azad, "Demonstration of double electrode vertical-sliding triboelectric generator." In 2017 International Conference on Computing, Communication and Automation (ICCCA), 1483-1487. IEEE, 2017



2. P. Chaudhary and P. Azad, "Power optimization in Triboelectric Energy Harvester," presented at *ELSEVIER-SSRN Int. Electrical & Electronics Engineering Conf., IEEEC 2021*, DTU Delhi, October 23-24, 2021.

# Awards and Recognitions

1. UGC-NET Qualified

### Book Chapter/Books published

**1.** Parul Chaudhary and Puneet Azad ," Efficiency Enhancement in a Piezoelectric Energy Harvester for a Low-Frequency System Using Synchronous Charge Inversion", In *Innovations in Cyber Physical Systems*, 497-503, Springer, Singapore 2021

Memberships of Professional bodies: Lifetime Member of ISTE society

#### Patent

1. Patent publication -Bowl to identify the content in a mixture

Patent application no. 362144-001 A, Date of application: 07/04/2022 Publication Date: 30/12/2022.1)DR Sumanth Kumar Matha 2) DR Sheerin Masroor 3) DR S. Balaji 4)DR Korla Swapnavahini 5) Prof Dr Jayesh Rasiklal Gujarathi 6) Dr Arti Gupta 7) Dr G Prakash Yoganandam 8)Mr Anand Raj Dhanapal 9) Dr Prakash Tanaji Wankhedkar 10) M sakthi Ganapathi 11) Dr Anand Shanker Singh 12)Dr C. Ananda Vayaravel 13) Parul Chaudhary

2. Patent accepted -Device to harvest energy from roots 2

Patent application no. 367577-001 A, Date of application: 12/07/2022 Accepted 1) Dr Manisha 2)Dr Dhirendra Kumar 3) Ratan Chowdhury 4) Dr Harish chander Anandaram 5)Parul Chaudhary6) Dr. Aruna Kumari Nakkella