

### **Best Paper Award**

Suchitra Venkatesan, Krishnan Manickavasagam, Nikita Tengenkal, Nagendran Vijayalakshmi, "Health monitoring and prognosis of electric vehicle motor using intelligent-digital twin", in IET Electric Power Applications, vol. 13, no. 9, pp. 1328-1335, June 2019. DOI: 10.1049/iet-epa.2018.5732

### **2021 Winners of the IET Premium (Best Paper) Awards**

### **Patent awarded-4**

1. K. Manickavasagam, N. Sivakumar and K. Kanthimath "Design and Analysis of Permanent Magnet Linear Alternator", Indian Patent awarded: Patent No: 513129 Patent Application No: 201641043799, Date of Grant: 21.02.2024
2. Suchitra, V., Manickavasagam, K., Naveen Kumar, T., Vineetha, P. and Indira, M. S. "Method, System and Apparatus to Extend Discharge Time of Battery Using Two-Chopper Circuit", Indian Patent awarded: Patent No: 501482: Indian Patent Application: 201841048761, Date of Grant: 19.01.2024
3. Abhinandan.U, Anusha Vadde, K.Manickavasagam "Permanent Magnet Switched Repulsive Motor for High Torque and Autonomous Mobile Supply Unit", Application: 202041055632, Dec 2020 Patent No: 547529: Indian Patent Application: 201841048761, Date of Grant: 12.08.2024
4. K.T.Prajwal, K.Manickavasagam, "Conical Shaped Electromagnetic Energy Harvester", Application: 202041055630, Dec 2020 Patent awarded: Patent No: 551092: Indian Patent Application: 201841048761, Date of Grant: 25.09.2024

### **Patent filed-3**

1. Prajwal, K. T. and Manickavasagam. K. "Fusion of Horizontal and Vertical Movement Electromagnetic Energy Harvester", Indian Patent Application: 202241003995, January 24, 2022.
2. Prajwal, K. T. and Manickavasagam. K. "Vertical Coil-Magnet Stack Electromagnetic Energy Harvester", Indian Patent Application: 202341004839, January 25, 2023.
3. Prajwal K. T., K. Manickavasagam, S Malathi and T Naveen Kumar, "Fuzzy Based Intelligent Controller for Voltage Enhancement from Energy Harvester", Indian Patent Application: 202441041569; January 25, 2024