# **Department of Electrical & Electronics Engineering**

## Sanctioned R&D Projects

## <u>2022-23</u>

S.No	Title of the Project/FDP	Funding Agency	Grant in Rs.
1	Detecting and addressing the interruption in electrical poles	Gayatrhi Educational and Development Society	8500
2	Four quadrant DC moor controlled by android applications	Gayatrhi Educational and Development Society	7154
3	Dual axis solar tracking with weather monitor	Gayatrhi Educational and Development Society	10000
4	Auxiliary Transformer monitoring system using IoT	Gayatrhi Educational and Development Society	5604
5	Automatic Real Time Railway Fishplate Monitoring System For Early warning using IoT	Gayatrhi Educational and Development Society	5650
6	Smart Energy Meter Using GSM	Gayatrhi Educational and Development Society	6610
7	Real-Time Street Light Monitoring and Control	Gayatrhi Educational and Development Society	5500
8	Protection of Induction Motor from Overvoltage, Over Current And Temperature	Gayatrhi Educational and Development Society	8800
9	A model of Led Matrix Using Arduino	Gayatrhi Educational and Development Society	7650
10	Multi Power Supply Using Four different Sources for No- Break Power Supply	Gayatrhi Educational and Development Society	7198
11	Wireless Battery Charging for EV	Gayatrhi Educational and Development Society	10000
12	IoT based smart tollgate system using RFID Control	Gayatrhi Educational and Development Society	7552
13	Prototype of Advanced Highway Power Generation & EV'S Wireless Charging	Gayatrhi Educational and Development Society	9724
14	Human following Robot using Arduino with GPS Tracker	Gayatrhi Educational and Development Society	11500
15	Automatic Power Factor Correction with Measurement of Real Power, Reactive Power, Apparent Power	Gayatrhi Educational and Development Society	8600
16	A Prototype of Advanced Automotive Safety System with Obstacle Avoiding, Bluetooth & Voice Controls	Gayatrhi Educational and Development Society	7350
17	RPM display for BLDC motor with speed controller	Gayatrhi Educational and Development Society	5992
18	IoT-Based battery monitoring system for electric vehicle	Gayatrhi Educational and Development Society	3704
		Total	1,37,088

<u>2021-22</u>

S.No.	Title of the Project/FDP	Funding Agency	Grant in Rs.
1	"Recent Innovations in Electrical, Electronics, Instrumentation, Automation and Teaching Pedagogy" (FDP)	Srikar Bio-Tech Pvt.Ltd, Hyderabad	2,25,000
2	Automatic Power Factor Detection and Correction System (Passive PF Correction)	Srikar Bio-Tech Pvt.Ltd, Hyderabad	23,000
3	Single Stage Buck-Boost Transformer Less Inverter For Single Phase Grid Connected Solar PV Systems	Srikar Bio-Tech Pvt.Ltd, Hyderabad	27,000
4	DTC Control Strategy for Doubly Fed Induction Machine Under Low Voltage Dips.	Srikar Bio-Tech Pvt.Ltd, Hyderabad	24,000
5	Design and analysis of Hand Movement based Electric Device Control	Srikar Bio-Tech Pvt.Ltd, Hyderabad	28,000
6	Microcontroller based Overheat detector using Temperature sensor with Buzzer indication.	Srikar Bio-Tech Pvt.Ltd, Hyderabad	22,000
7	Applications of Intelligent Techniques to Electrical Engineering(FDP)	Srikar Bio-Tech Pvt.Ltd, Hyderabad	2,50,000
8	Single-Stage Buck-Boost Transformerless Inverter for 1-φ Grid-Connected Solar PV Systems	Srikar Bio-Tech Pvt.Ltd, Hyderabad	36,000
Total			6,35,000

### 2020-21

S.No.	Title of the Project / FDP	PI/ Coordinator	Grant in Rs.
1	Wireless Power Transfer of High-Speed Electric Vehicle.	Srikar Bio-Tech Pvt.Ltd, Hyderabad	27000
2	Full-Bridge Reactive Power Compensator with Minimized- Equipped Capacitor and Its Application to Static VAR Compensator	Srikar Bio-Tech Pvt.Ltd, Hyderabad	24000
3	Supervisory Controlling Plus Data Acquisition For Remote Industry	Srikar Bio-Tech Pvt.Ltd, Hyderabad	26000
4	Real-time Alert System for Auxiliary Transformer Failures.	Srikar Bio-Tech Pvt.Ltd, Hyderabad	28000
5	Automatic Real Time Railway Fishplate Monitoring System For Early warning using IoT	Srikar Bio-Tech Pvt.Ltd, Hyderabad	23000
6	Solar Water Pump Control with Four Different Time Slots for Power Saving Applications.	Srikar Bio-Tech Pvt.Ltd, Hyderabad	22000
7	Establishment of IoT lab.	Srikar Bio-Tech Pvt.Ltd, Hyderabad	690000
8	Protection of induction motor from under Voltage, Over Voltage and Temperature	Srikar Bio-Tech Pvt.Ltd, Hyderabad	21000
9	Multi Power Supply Using Four different Sources for No- Break Power Supply	Srikar Bio-Tech Pvt.Ltd, Hyderabad	24000
10	Power Electronics, Energy Storage and Renewable Technologies (PEESRT) for E Transportation in India(FDP)	Srikar Bio-Tech Pvt.Ltd, Hyderabad	108000

11	. Recent advances in power electronics and power systems Engineering(FDP)	Srikar Bio-Tech Pvt.Ltd, Hyderabad	105000
12	PV and Battery-Operated High-Speed Electric Vehicle with BLDC Motor Control.	Srikar Bio-Tech Pvt.Ltd, Hyderabad	23000
Total			1,12,1000

## <u>2019-20</u>

S.No.	Title of the Project/FDP	Funding Agency	Grant in Rs.
1	Set up of Industrial Automation lab	Siva Sankar Enterprises Hyderabad	750000
2	Design of Electric vehicle	Siva Sankar Enterprises Hyderabad	150000
3	2 Weeks FDP on "Master class on Electric Vehicle Design"	Srikar Bio-Tech Pvt.Ltd, Hyderabad	280000
4	2 Weeks FDP on "Power Electronics Applications in Renewable Power Generation Systems"	Srikar Bio-Tech Pvt.Ltd, Hyderabad	180000
5	"Adaptive Grey Wolf based on Firefly algorithm technique for optimal reactive power dispatch in unbalanced load conditions"	Srikar Bio-Tech Pvt.Ltd, Hyderabad	23000
6	Automatic Optimization and Control of Power Factor, Reactive Power and Reduction of THD for Linear and Nonlinear Load by Using Arduino UNO	Srikar Bio-Tech Pvt.Ltd, Hyderabad	27000
7	Analysis and design of Marx Generator for High Voltage	Srikar Bio-Tech Pvt.Ltd, Hyderabad	24000
8	Analysis and Testing of Dual Axis Solar Tracker for Standalone PV Systems	Srikar Bio-Tech Pvt.Ltd, Hyderabad	26000
9	Power Grid Failure Detection Based on Voltage and Frequency Variance Detection	Srikar Bio-Tech Pvt.Ltd, Hyderabad	28000
10	Analysis and design of solar PV systems	Srikar Bio-Tech Pvt.Ltd, Hyderabad	135000
11	High Voltage DC Up To 2 kV From AC by using Capacitors And Diodes in Ladder Network	Srikar Bio-Tech Pvt.Ltd, Hyderabad	21000
		Total	16,44,000