

**Details of Projects at University College of Engineering (Autonomous), Osmania University,Hyderabad-07. As on 22-08-2023**

| SI.No. | Dept. | Name of the faculty                      | Project Title   | Funding Agency            | Starting Date | Duration of the project | Total amount sanctioned (Rs.) | Ongoing/ Completed |
|--------|-------|--|---|---------------------------|---------------|-------------------------|-------------------------------|--------------------|
| 1      | BME   | Mr. M. Venkateswara Rao & Prof. M.Malini | Hyperthermia application of Nano materials for cancer Therapy   | UPE Status of UGC         | 01-01-2013    | 5 years                 | 7350000                       | Completed          |
| 2      | BME   | Dr. D.Suman                              | Mitigation of drowsy driving through ANN based Blink features from the EOG Data Acquisition system                            | Seed Grant Under TEQIP-II | 01-01-2015    | 1 year                  | 100000                        | Completed          |
| 3      | BME   | Dr. D.Suman                              | Design and Development of a Fuzzy Expert system for the mitigation of drowsy driving of the heavy vehicles                    | UGC-MRP                   | 01-01-2016    | 4 years                 | 500000                        | Completed          |
| 4      | BME   | Mr. K.E.Ch.Vidyasagar                    | Design and Development of automatic epilepsy detection and classification system  | UGC-MRP                   | 01-01-2016    | 4 years                 | 380000                        | ongoing            |
| 5      | BME   | Prof.M.Malini                            | Fatal heart rate viability  | DST-PURSE                 | 01-01-2017    | 4 years                 | 400000                        | ongoing            |
| 6      | BME   | Mr. M.Venkateswara Rao & Mr. M.Srinivas  | Gait Analysis in Parkinson's disease  | DST-PURSE                 | 01-01-2017    | 3 years                 | 1500000                       | ongoing            |
| 7      | BME   | Dr. M.Malini                             | Analysis of Fetal Heart rate variability  | DST-PURSE                 | 01-01-2017    | 3 years                 | 400000                        | ongoing            |
| 8      | BME   | Dr. D.Suman                              | A holistic therapeutic approach of Yoga and Meditation for the Hypertension- A clinical study on the Autonomic Control system | DST-PURSE                 | 01-01-2017    | 3 years                 | 400000                        | ongoing            |

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| 9  | BME | Mr. K.E.Ch.Vidya Sagar & Mrs. G.Shravanya | Design and development of A Multi biological parameters based integrated system  | DST-PURSE                       | 01-01-2017 | 3 years | 400000  | ongoing   |
| 10 | BME | Prof.M.Malini                             | Wireless data acquisition system for vital sign monitoring   | UGC-SERO Minor Research Project | 30-06-2017 | 2 years | 264000  | Completed |
| 11 | BME | Dr.D.Suman                                | A fuzzy expert system for the detection of drowsiness from the EOG signal analysis   | UGC-SERO Minor Research Project | 30-06-2017 | 2 years | 500000  | Completed |
| 12 | BME | Dr.D.Suman                                | A study of Sub thalamic Local Field potentials of Parkinson's disease patients under Deep Brain Stimulation therapy for finding the potential biomarkers | TSCOST                          | 01-03-2020 | 1 year  | 400000  | Completed |
| 13 | BME | Dr.D.Suman                                | Teacher's Associateship for Research Excellence ( TARE)  | SERB -DST (TARE)                | 08-05-2023 | 3 years | 1830000 | ongoing   |
| 14 | CED | Prof.M.Gopal Naik                         | Urban watershed modelling using geospatial technique   | UGC-Minor Research Project      | 01-01-2013 | 3 years | 1515000 | Completed |
| 15 | CED | Prof.M.Gopal Naik                         | Surface flow measurement using largescale particle image velocimetry   | UGC-SERO Minor Research Project | 01-01-2013 | 2 years | 500000  | Completed |
| 16 | CED | Prof. V.Bhikshma                          | Flexural and shear behaviour of high strength pond ash concrete.   | UGC Minor Research Project      | 26-03-2017 | 2 years | 235000  | Completed |
| 17 | CED | Dr.K.Sheshikanth                          | Impacts of climate change on Indian summ   | UGC-SERO Minor Research Project | 30-06-2017 | 2 years | 149900  | Completed |

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| 18 | CED | Dr. M. V. S. Sreedhar                | Laboratory investigation on uplift capacity of shallow foundation   | M/S Ramboll india pvt. Ltd. Hyderabad                                   | 27-11-2017 | 2 years | 320000  | ongoing   |
| 19 | CED | Dr.K.Sheshikanth                     | Assessment of climate change impact on precipitation and stream flow in middle krishna (K2) , Ghataprabha (k3), Malaprabha(k4), and lower bhima(k6) sub basins of krishna basin | AC-IWRM- Govt. of Karnataka   | 01-01-2018 | 1 year  | 3000000 | Completed |
| 20 | CED | Prof.M.Gopal Naik & Dr. Harish Gupta | Planning and development of climate resilient water sensitive urban designs. A case study of Hyderabad Metropolitan City.   | MHRD-SPARC (Internatioanl collabratiion with TEXAS A&M University, USA) | 14-05-2019 | 2 years | 7438318 | ongoing   |
| 21 | CED | Prof.M.Gopal Naik                    | Development of sustainable urban drainage system considering the climate change and urbanization Impacts.   | SERB-DST  | 22-05-2019 | 3 years | 4013500 | ongoing   |
| 22 | CED | Prof. M.Kumar                        | A study on curved speed humps ( CHS) and its Evaluation of Environment Impacts for Indian conditions SERB-DST Project(Civil) Transportation.                                    | SERB-DST  | 13-11-2019 | 3 years | 3823360 | Completed |
| 23 | CED | Dr. Harish Gupta                     | SWAYAM MOOCs on Water Resources and Watershed Management  | UGC-MOOCs   | 01-04-2020 | 2 years | 1350000 | ongoing   |
| 24 | CED | Dr.K.Sheshikanth                     | Assessment of Climate Change Impacts on Indian Monsoon Precipitation using new age CMIP6 Dataset: Implications to Water Security in the Godavai and Narmada Basins              | SERB-DST ( CLIMATE)   | 01-03-2023 | 3 years | 1300000 | ongoing   |
| 25 | CED | Dr.K.Sheshikanth                     | Influence of Terrestrial Feedbacks on Rainfall and Assessment of Droughts and Extreme under Climate Change  | SERB-DST (TERRESTRIAL)  | 24-02-2023 | 3 years | 195000  | ongoing   |
| 26 | CSE | Dr. A. Hameed                        | Creating a social network dataset excluding bots contribution   | UCE-TEQIP II  | 01-01-2015 | 1 year  | 100000  | Completed |
| 27 | CSE | Prof. P. V. Sudha                    | ImplementingEnergy Management using Software Defined Networks for Cloud environment   | UCE-TEQIP II  | 01-01-2015 | 1 year  | 100000  | Completed |

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| 28 | CSE | Prof. K. Shyamala       | Parallel implementation of minimum spanning tree for large graphs on GPU  | UCE-TEQIP II                    | 01-01-2015 | 1 year   | 100000  | Completed |
| 29 | CSE | Prof S. Ramachandram    | Building an adaptive resource provisioning framework for applications with multiple constraints in Cloud environments | UGC                             | 01-01-2016 | 3 years  | 604000  | Completed |
| 30 | CSE | Mr. L.K Suresh Kumar    | Secure routing in mobile adhoc networks   | UGC-SERO Minor Research Project | 01-01-2017 | 3 years  | 380000  | Completed |
| 31 | CSE | Dr. B.Sujatha           | FOL based Intelligent Language Interface to Knowledge Base  | UGC-SERO Minor Research Project | 26-03-2017 | 2 years  | 210000  | Completed |
| 32 | CSE | E.Pragnavi              | A Security framework for Saas Services in cloud using SQUARE methodology  | UGC-SERO Minor Research Project | 30-07-2017 | 2 years  | 190000  | Completed |
| 33 | CSE | Dr. V.B.Narasimha       | Impact of Machine Learning and Term weig  | UGC-SERO Minor Research Project | 30-07-2017 | 2 years  | 140000  | Completed |
| 34 | CSE | Prof.K.Shyamala         | Power and Energy Aware Secure Routing Protocol in Wireless Sensor Networks  | SERB-DST                        | 27-02-2019 | 3 years  | 2639000 | ongoing   |
| 35 | ECE | Prof. P. Chandra Sekhar | GNSS Software Receiver Baseband with FPGA   | UGC-Major Research Project      | 16-07-2012 | 3 years  | 1500000 | Completed |
| 36 | ECE | Prof. L. Nirmala Devi   | Security and data transmission issues in mobile adhoc networks  | SERB-DST                        | 01-01-2013 | 3 years  | 600000  | Completed |
| 37 | ECE | Prof. P. Chandra Sekhar | Design and Development of FPGA based dual threshold WAM technique for Multilateration Systems                         | DRDO-DLRL-CARS Project          | 31-12-2014 | 9 months | 975000  | Completed |

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| 38 | ECE | Prof. D.Ramakrishna     | Analysis Design and simulation of W-band antenna for FMCW Applications  | DRDO-RCI   | 01-01-2015 | 3 years  | 990000   | Completed |
| 39 | ECE | Prof. B.Rajendra Naik   | Visvesvaraya PHD Scheme for Electronics and IT  | Digital India Corporation                              | 02-02-2016 | 5 years  | 21929000 | ongoing   |
| 40 | ECE | Prof. L. Nirmala Devi   | Energy Management in Wireless sensor network.   | MeiTy Spon Res Project New Delhi                       | 16-08-2016 | 3 years  | 2787400  | Completed |
| 41 | ECE | Prof. L. Nirmala Devi   | Perfomance analysis of crop monitoring  | UGC-SERO Minor Research Project                        | 01-01-2017 | 3 years  | 425000   | Completed |
| 42 | ECE | Prof. Naveen kumar      | Investigation & Analysis of Ionospheric Time Delay Effects using NavIC data for Civilian Navigation Applications. | SAC/ISRO   | 01-10-2017 | 3 years  | 1981700  | Completed |
| 43 | ECE | Prof. P. Chandra Sekhar | Design and Development of IP core for SDR/ GNSS Receiver Using VHDL/ Verilog                                      | DRDO-RCI-CARS Project                                  | 08-11-2017 | 9 months | 990000   | Ongoing   |
| 44 | ECE | Prof. P. Chandra Sekhar | Comparative studey on multi communication protocol for SDR application  | DRDO-RCI   | 01-01-2018 | 1 year   | 990000   | Completed |
| 45 | ECE | Prof. B.Rajendra Naik   | Advanced TERCOM Aided Inertial Navigation System by Velocity and Position Corrections.                            | DRDO CARS PROJECT                                      | 30-07-2018 | 2 years  | 943000   | Completed |
| 46 | ECE | Prof. D.Rama Krishna    | Studies on meta-material based compact antennas for mobile communications.  | Department of Science & Technology, New Delhi, (WOS-A) | 24-10-2018 | 3 years  | 2403000  | Completed |
| 47 | ECE | Prof. B.Rajendra Naik   | Non - Invasive Measurement of Hemoglobin for Rural Indian using Artificial Intelligence Algorithms.               | SERB-DST   | 15-02-2019 | 3 years  | 2217500  | Completed |

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| 48 | ECE | Prof. D.Ramakrishna     | Antenna and RFPCB Component Characterization  | Math Work India Pvt.Ltd.                                 | 01-01-2021 | 30 months | 2540000  | ongoing   |
| 49 | ECE | Prof. L. Nirmala Devi   | Crop Protection through Bird Scaring using Artificial Intelligence Assistant Unmanned Aerial Vehicles (UAVs)  | TSCOST   | 01-03-2022 | 1 year    | 400000   | Completed |
| 50 | ECE | Prof. L. Nirmala Devi   | An Autonomous Bird Deterrent System for Crop Protection using UAVs  | TiHAN, IIT Hyd   | 20-09-2022 | 18 Months | 2447995  | ongoing   |
| 51 | ECE | Prof. P. Chandra Sekhar | The design, Fabrication and Development of silicon proven IP core for High Resolution ADPLL   | Ministry of Electronics & Information Technology, Gol    | 18-05-2023 | 5 years   | 19150000 | ongoing   |
| 52 | EED | Dr. P. Satish Kumar     | Investigation, Implementation and Performance Evaluation of Multilevel Inverter using Space Vector Pulse Width Modulation Algorithms  | UGC, New Delhi – Major research project                  | 01-04-2013 | 3 years   | 849000   | Completed |
| 53 | EED | Prof. P. Satish Kumar   | Investigation, Implementation and Performance Evaluation of Multilevel Inverters using Space Vector Pulse Width Modulation Investigation, Implementation and Performance Evaluation of Multilevel Inverters using Space Vector Pulse Width Modulation | Science and Engineering Research Board (SERB), New Delhi | 20-11-2013 | 3 years   | 2010000  | Completed |
| 54 | EED | Prof. M. Manjula        | Mitigation of harmonics in a non- linear load   | UCE-TEQIP-II   | 01-11-2015 | 1 year    | 100000   | Completed |
| 55 | EED | Prof. E. Vidyasagar     | Reliability Improvement of Distribution Systems using Fault Passage Indicators  | UCE-TEQIP-II   | 01-11-2015 | 1 year    | 100000   | Completed |
| 56 | EED | Prof.B. Mangu           | Grid Connected PV-Wind-Battery Based Multi-Input Transformer Coupled Bidirectional DC-DC Converter For Household Applications   | UCE-TEQIP-II   | 16-11-2015 | 1 year    | 100000   | Completed |

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| 57 | EED | Dr. J. Upendar                       | Design and implementation of transmission line simulator laboratory model   | DST-PURSE-II   | 01-07-2017 | 3 years | 500000  | Completed |
| 58 | EED | Prof. P. Srinivas                    | Implementation of bidirectional DC – DC converter   | DST-PURSE-II   | 01-07-2017 | 3 years | 500000  | ongoing   |
| 59 | EED | Prof. B. Mangu                       | Integrated PV-Wind-Battery based Stand-alone Single-phase System for Household Application  | DST-PURSE-II   | 29-07-2017 | 3 years | 500000  | ongoing   |
| 60 | EED | Prof.P.Satish Kumar                  | Design and Development of Hybrid Wind–Solar Power Generation System using Multilevel Inverter for Grid Connected Application  | DST, New Delhi (Indo-Sri Lanka Joint Project)            | 19-01-2018 | 3 years | 2599780 | Completed |
| 61 | EED | Prof.P.Satish Kumar                  | Performance Enhancement of Grid Connected Multilevel Inverter based Wind Energy Conversion System with Low Voltage Ride Through Capability using Power Conditioners | DST, New Delhi (India - Slovenia Joint Research Project) | 01-01-2022 | 3 years | 2080000 | ongoing   |
| 62 | EED | Prof.B. Mangu                        | Design and Implementation of Control Techniques to Mitigate High Solar PV Penetration Issues into the Grid"   | SERB   | 01-03-2022 | 3 years | 2800000 | ongoing   |
| 63 | EED | Prof.P.Satish Kumar & Dr. J. Upendar | Design, development & cost evaluation of DC house prototype to promote the use of renewable energy for rural electrification  | TSCOST-DST   | 20-03-2022 | 1 year  | 400000  | Completed |
| 64 | MED | Prof. A. Krishanaiah                 | production of UFG copper tools by ECAE for micro-machining  | UGC-SERO Minor Research Project                          | 25-03-2013 | 3 years | 810000  | Completed |
| 65 | MED | Dr.E.Madhusudan Raju                 | Development of a EEG (Electroencephalogram) signals based Brain Machine Interface (BMI) for the control of a 2 DOF robot arm with joint flexibility.                | UGC-SERO Minor Research Project                          | 30-06-2017 | 2 years | 450000  | Completed |
| 66 | MED | Dr.Siva Rama Krishna                 | Assessment of Dimensional Accuracy of Facial bone   | UGC-SERO Minor Research Project                          | 30-06-2017 | 2 years | 500000  | Completed |

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| 67 | MED | Prof. Sriram Venlatesh                         | Advanced High Temperature Oxidation Resistant Titanium Aluminide Inter Metallic's With Rare Earth Additions | DRDO, New Delhi   | 18-04-2018 | 3 years | 4713480 | ongoing   |
| 68 | MED | Dr.Siva Rama Krishna                           | MODROBS in CAD/CAM laboratory of Mechanical Engineering Dept.   | AICTE             | 20-07-2020 | 2 years | 1658823 | Completed |
| 69 | MED | Prof. Sriram Venlatesh                         | Development of Components for Servo System through 3D Printing Machines                                     | DRDO-CARS Project | 22-04-2021 | 2 years | 2000000 | ongoing   |
| 70 | MED | Prof.K.Saraswathamma & Dr. T. R. V. Padmalatha | simulated and Experimental Investigation of Stretch Forming of AA2014 Aluminium Alloy-01 Job                | DRDO              | 08-06-2021 | 2 years | 998000  | ongoing   |