

















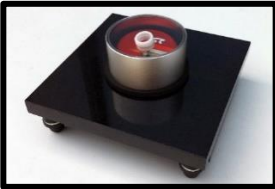



Directorate of Sponsored Research






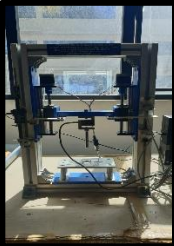
Equipment Obtained Through Sponsored Research

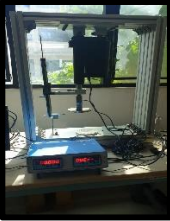





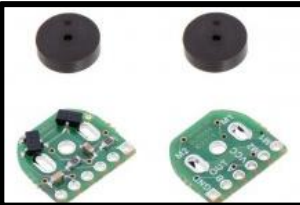
| Sl. No. | Faculty | Project Title | Date | Funding Agency and Duration of the Project | Principal Investigator | Details of Equipment | Picture |
|---------|---------|--|----------|--|------------------------|---|---|
| 1 | FET | Development of MoS ₂ Nanorods for Photovoltaic Applications | 31-03-14 | Department of Science and Technology (DST) | Dr. S. Srikari | Chemical Vapour Deposition |  |
| 2 | FET | Development of Multifunctional Agricultural Robot | 01-04-14 | GoK-University of Agriculture Dept. | Prof. S.R. Shankpal | TC make BLDC Motor |  |
| 3 | FET | Development of Vision Based Auto Pilot System for Indoor Navigation of MAV | 07-07-14 | Aeronautics Research and Development Board (AR&DB) | Prof. S.R. Shankpal | FPGA Development Board |  |
| | | | | | | E&C Lab Equipment and Boards |  |

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| 4 | FPH | Development of Mucoadhesive Nasal inserts containing Anti-Asthmatic Drug | 18-03-15 | Vision Group of Science and Technology (VGST) | Dr. S. Bharath | Digital PH Meter |  |
| | | | | | | Digital Balance |  |
| 5 | FDS | Development of Novel Zirconia Reinforced Mica Glass Ceramic Composite for Dental Restorative Applications | 01-05-15 | DBT-Wellcome Trust | Dr. Sivaranjani Gali | Platinum Crucible |  |
| | | | | | | | |
| 6 | FET | Design and Development of Long Range Video-Transmitter for MAV Application | 12-01-16 | Aeronautics Research and Development Board (AR&DB) | Prof. Govind R. Kadambi | PCB Board Fabricator |  |
| | | | | | | |  |
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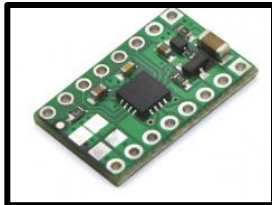
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|---|-----|--|----------|--|----------------|--|---|
| 7 | FET | Development of Heat Flux Sensor for Aero Gas Turbine Engine Combustors | 19-01-17 | Aeronautics Research and Development Board (AR&DB) - GTMAP | Dr. S. Srikari | High Temperature Furnace |  |
| | | | | | | Sputter Deposition (DC and RF combined- Magnetron) |  |
| 8 | FET | R & D Centre for Hardened Steel Machining | 03-02-17 | Karnataka Council for Technology Upgradation (KCTU) | Dr. R. Suresh | CNC Wire EDM Machine |  |
| | | | | | | Optical Measuring Microscope |  |
| | | | | | | Piezo Based Mill Tool Dynamometer |  |
| | | | | | | Digital Tool Tip Temperature Indicator |  |

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| 9 | FET | R & D Centre for Composite Materials and Technologies | 12-07-17 | Karnataka Council for Technology Upgradation (KCTU) | Dr. Rahul M. Cadambi | <p>Brookfield Cone and Plate Viscometer</p> |  |
| | | | | | | <p>Naio Scanning Tunneling Microscope (STM)</p> |  |
| | | | | | | <p>Rheometer Thermosel System</p> |  |
| | | | | | | <p>Shimadzu UV-Vis Spectrophotometer</p> |  |
| | | | | | | <p>Brookfield Viscometer</p> |  |

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|----|-----|--|----------|---|-------------------------|---|---|
| 10 | FET | R & D Centre for Automated Farm Machinery Design and Development for Small Farmers | 12-07-17 | Karnataka Council for Technology Upgradation (KCTU) | Dr. N. C. Mahendra Babu | Hydraulic Press with Accessories for Sheet Metal Working and Testing |  |
| | | | | | | 3D Printer |  |
| | | | | | | MIG Welding Equipment with all Accessories |  |
| | | | | | | Dynamic Balancing Machine |  |
| | | | | | | Wheel Balancing Machine |  |
| | | | | | | Experimental set up with all equipment's and Accessories to Evaluate Mechanical Properties of Plant Materials |  |

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|----|-----|---|----------|-------------------------------------|--|---|---|
| | | | | | | |  |
| | | | | | | Set of electrical motors with different power rating and related accessories |  |
| | | | | | | Set of Petrol /Diesel Engines with different Power Ratings and Accessories |  |
| | | | | | | |  |
| | | | | | | Tools and Accessories Required for Prototype Development |  |
| 11 | FET | Design and Development of a Multi DOF Bionic Arm with Control Assist Mode Functionality | 21-12-17 | Life Sciences Research Board (LSRB) | Dr. Govind R. Kadambi and Mr. L.S. Praveen | 100:1 Micro Metal Gearmotor HP 6V with Extended Motor Shaft |  |
| | | | | | | Magnetic Encoder Pair Kit for Micro Metal Gearmotors, 12 CPR, 2.7-18V (HPCB compatible) |  |

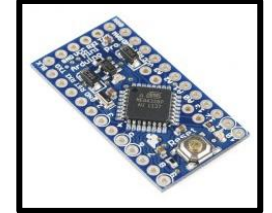
DRV8833 Dual Motor Driver
Carrier



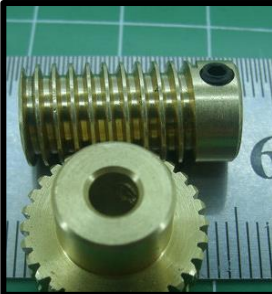
6V, 2.5A Step-Down Voltage
Regulator D24V22F6



Arduino Pro Mini 328 -
5V/16MHz



Worm Drive - 1:20, 0.5
Modulus



MyoWare Muscle Sensor



Electrodes for MyoWare
Muscle Sensors (Pack of 6)



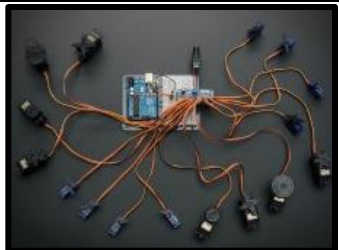
IMU - MPU-9250



Servo - Metal Gear



Servo Driver - PCA9685



Bluetooth Module - HC-06













Keypad - 12 Key - 4x3 Matrix











Force Sensitive Resistor 0.5"



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| | | | | | | LiPo Battery 11.1V 3S 5200mAh |  |
| | | | | | | LiPo Battery Charger - iMAX-B6AC |  |
| | | | | | | Total Number of Hands to be Developed |  |
| | | | | | | | |
| 12 | FDS | Evaluation and Correlation of the Prognosis of Cystic Lesions to Decompression by Clinical, Histological, Radiographic Assessment and Molecular Marker Expression | 02-01-18 | Vision Group on Science and Technology (VGST) | Dr. Parimala Sagar | Trinocular Optical Microscope |  |
| | | | | | | | |
| 13 | FDS | Prognostic Significance of ALDH1, Bmi1 & OCT4 in Oral Epithelial Dysplasia and Oral Squamous Cell Carcinoma | 02-01-18 | Vision Group on Science and Technology (VGST) | Dr. Roopa S. Rao | IHC Lab, Ph Meter, Decloaking Chamber and Hot Air Oven |  |

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| | | | | | | IHC Lab, Humidifying Chamber and Paraffin/Processing and Staining Section |  |
| 14 | FMPS | Design and Development of High Performance Magnetostrictive Cobalt Ferrite Thin Films for Sensors and Actuator Applications | 12-03-19 | Science and Engineering Research Board | Dr. Anantharamiah P. N. | <p>Magnetostriction Measurement Instrument</p>  <p>Magnetostriction Measurement Instrument</p> | |
| | | | | | | <p>Die Sets</p>  <p>55 mm and 10 mm Die sets to make pellets</p> | |
| 15 | FDS | Experimental and Simulation Studies on Prediction of Crack Initiation and Propagation of Fracture in Dental Ceramic Restorations | 30-09-19 | India Alliance Fellowship | Dr. Sivaranjini Gali | <p>Ball Milling Machine</p>  | |
| 16 | FET | Design and Analysis of an Integrated Optic Microring Resonator Array based Sensor System for Detection of Multiple Gases | 21-08-17 | ISRO RESPOND | Dr. S. Malathi | <p>Academic Lab Suite IC Design Server and IPMI Management Module for Connoi Server SSP Prime</p>  <p>DELL Precision Tower 3820 XCTO Base</p> | |

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| 17 | FET | Performance Enhancement of a Single Stage Transonic Axial Compressor Through Reduction of Tip Leakage and Secondary Flow Losses | 18-01-17 | Aeronautics Research and Development Board (AR&DB) – Propulsion Panel | Dr. Mahesh K. Varpe Mr. S. Subbaramu | Special Equipment (Work Station) |  Special Equipment (Work Station) |
| 18 | FMPS | Development of Thermal Conductive Elastomeric Composites for Liquid Cooled Garments to Mitigate Thermal Stress | 14-02-20 | Life Sciences Research Board (LSRB) | Dr. Niranjana Prabhu | Thermal Conductivity Analyzer |  |
| 19 | FDS | Characterization of Liquid Platelet Rich Fibrin as a Novel Drug Delivery System for Mineral Trioxide Aggregate and Biodentine | 15-10-19 | Indian Council for Medical Research (ICMR) | Dr. Shruthi N. | Bench Top Centrifuge |  |
| | | | | | | Deep Freezer |  Deep Freezer -80 C |

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| 20 | FPH | Development of a Reversible Cervix Plug as a Novel Next Generation Contraceptive Device | 20-12-19 | Vision Group on Science and Technology (VGST) | Dr. B. V. Basavaraj | <p>UV Visible Spectrophotometer (Systronics)</p>  | |
| | | | | | | <p>Probe Sonicator (Labman)</p>  | |
| | | | | | | <p>High Pressure Homogenizer (IKA)</p>  | |
| | | | | | | <p>Digital Balance</p>  | |