



BMS INSTITUTE OF TECHNOLOGY AND MANAGEMENT

YELAHANKA BENGALURU – 560 064

Research Projects – Ongoing

Date: 30.06.2023

| Sl. No. | Name of the PI/Co-PI | Department | Title of the Project | Sponsoring agency | Amount Rs. in lakhs | Date and Financial Year of sanction |
|---------|---------------------------------|------------|--|---|---------------------|-------------------------------------|
| 1 | Dr. Daruka Prasad (PI) | Physics | Zinc oxide Nanocomposites preparation using modified sono chemical method suitable for solar cells and battery applications | VGST-RFTT | 5.00 | 30-01-2018 2017-18 |
| 2 | Dr. Ramakrishnappa (PI) | Chemistry | Chemical functionalization of Si with 2Dstructures: Anode materials for lithium ion battery with significantly improved volumetric capacity | Department of Science and Technology-Materials for Energy Storage (DST-MES) | 35.508 | 29-06-2018 2019-22 |
| 3 | Dr Jyoti Roy Choudhuri (PI) | Chemistry | Application of substitutionally doped graphyne, graphdiyne and penta-graphene nanomaterials in Lithium-ion battery: An ab initio study | DST-TARE | 18.30 | 14-03-2019 2019-22 |
| 4 | Dr. Bharathi M.A (PI) | AI&ML | Establishment of centre for design and research of health care applications using Artificial Intelligence | VGST-K-FIST | 20.00 | 27-12-2019 2019-20 |
| 5 | Dr. Jyoti Roy Choudhuri (Co-PI) | Chemistry | New 2-D carbon-based anode materials in Na-ion battery: Effects of heteroatom doping on Na storage capacity, charge mobility and open circuit voltage via ab initio simulation study | DST-CRG | 5.00 | 29-01-2020 2020-23 |
| 6 | Dr. Jyothi C Abbar (PI) | Chemistry | Organic Electroactive Materials for High Performance Mg-Ion Rechargeable batteries | DST-TARE | 18.30 | 15-12-2020 2019-22 |

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|--------------------------|--|-------------|--|--|----------------|-----------------------|
| 7 | Dr. Kiran M.D (PI) (Dr. Sangamesh) | ME | Infrastructure development for synthesis and fabrication of lead-free piezoelectric materials and it's devices | VGST-K-FIST(L1) | 15.00 | 19-02-2021 2020-21 |
| 8 | Dr. C Kavitha (PI) | Physics | Efficiency improvement of ultra-capacitors using binary metal oxide nano composites | VGST-K-FIST(L2) | 20.00 | 19-11-2021 2021-22 |
| 9 | Dr. Suresh Kumar (PI) | Chemistry | Edge functionalized graphene nanoplatelets with quinones as cathode materials for Li-ion battery applications | DST-SERB-Teachers Associateship for Research Excellence (TARE) | 18.30 | 26-01-2022 2021-24 |
| 10 | Dr. Bharathi Malakreddy A (PI) Dr. G. Lohtin (CoPI) | AI&ML | A product of Risk Estimation in Neurocognitive Disorders, Enabled with radio genomics and Digitised Neurocognitive Test Batteries (Development of Imaging Analytics Pipeline for oncological medical Images) | VTU – Research Grant Scheme - 2021 | 15.00 | 02-03-2022 2021-22 |
| 11 | Dr. Seema Singh (PI) Mrs. Chandra Prabha R (CoPI) | ETE | An Automated Support System for Diagnosis of Cervical Cancer deep learning based artificial intelligence for mass screening | VTU – Research Grant Scheme - 2021 | 11.00 | 02-03-2022 2021-22 |
| 12 | Dr. Deepak M S | Civil Engg. | Advancement and Applications of High-Strength High-Performance Concrete Utilising Electrical Arc Furnace Steel Slag Residue and Copper Slag Aggregates | DST-SERB-Teachers Associateship for Research Excellence (TARE) | 18.30 | 31-10-2022 2022-25 |
| 13 | Dr. Sabina Rahaman | ECE | Fabrication of low-cost Cu ₃ BiS ₃ /ZnS - based thin film solar cell using ultrasonic spray pyrolysis | DST-SERB-Teachers Associateship for Research Excellence (TARE) | 18.30 | 31-10-2022 2022-23 |
| 14 | Dr. Basavaraj R B | Physics | Inorganic Organic Hybrid Core/Shell Materials for Optoelectronic and Security ink Applications | VGST-K-FIST(L1) | 15.00 | 21-01-2023 2022-23 |
| Total INR (Lakhs) | | | | | 233.008 | - |