**Composition of CSR Committee as on 31.03.2021**

1. Prof. Ashok Misra - ‘Chairman’

2. Mr. Vineet Joshi - ‘Member’

3. Mr. C Jayakumar - ‘Member’

4. Dr. Rishikesha Thiruvenkata Krishnan - 'Member’

**CSR Projects approved in the FY 2020-21**

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| **Sl. No.** | **Name of Institute**  **(Project Incharge)** | **Title of the Project** | **Objective & Time Frame** | **Project Cost**  **(Rs.)** | **Approved Cost (Rs.)** | **Social Impact** |
| 1 | IIT Guwahati  (Prof. T.G. Sitharam, Director) | Systematic & Real Time Monitoring of Quality and Quantity of Surface Water using Geospatial technology | To generate algorithms to extrapolate field measurements to derive spatial maps on water quality parameters in large dams and reservoirs.  (16 months) | 60 lakhs | 50 lakhs | The aim of the proposed project is to have a GIS based real time monitoring system on water quality & quantity for surface water bodies especially dams & reservoirs in India. Therefore, the main potential user will be Ministry of Jal Shakti and Central Water Commission. It will also help State & District Water Authorities in ensuring clean drinking water to urban & rural areas. |
| 2 | NIT Calicut  (Dr. Praveen Sankaran) | A learned machine for early breast cancer detection | Development of a data base combining mammogram and histopathology images in collaboration with the MVR Cancer centre ad Research Institute to enable the Research Institute to do a co-relation analysis of BIRADS scoring with histopathological image information. | 29 lakhs | 25 lakhs | The CAD system will take an image, detect, segment and classify visual object (breast lesion) using a single model and a unified training process.  It will help in early detection of breast cancer. |
| 3 | IIT Gandhinagar  (Dr. Sharad Gupta) | Functional Peptides and DNA based nano-assemblies for therapeutic intervention in Alzheimer’s disease and related Neurodegenerative Disorders. | Synthesis, purification and development of peptides to achieve different intermolecular interactions between peptide based monomers thereby controlling the supramolecular5nanostructures.  (3 years) | 140 lakhs | 55 lakhs | The custom made peptide based materials can diagnose early events in Alzheimers and Parkinsons and using the same scaffolds, have therapeutics materials for delivery and regeneration of brain cells which will act as a regenerative medicine in curing Alzheimer and Parkinsons. |
| 4 | IIT Jodhpur  (Dr. Anand K. Plappally) | UF Membrane Assisted Sorption Based Water Purification Systems in Rural Village Schools of Jodhpur District, Rajasthan | Design and develop a de-centralized water purification unit based on the Ultra-Filtration(UF) membrane assisted sorption process.  (3 years) | 40 lakhs | 40 lakhs | The water purification technology is a low carbon water purification solution as it consumes less energy, hence more eco friendly and sustainable. |
| 5 | Dr. B R Ambedkar National Institute of Technology, Jalandhar  (Prof. Arun Khosla) | Development and Evaluation of Virtual Reality Interventions for Improving Cognitive and Vocational Skills in individuals with Autism Spectrum Disorder. | Designing the framework for real life and naturalistic VR environment for improving Cognitive and Vocational Skills.  Development of proposed framework into real system.  (2 years) | 10 lakhs | 10 lakhs | The system will help in measurement of physiological signal in measuring emotional related characteristics of individuals with ASD. The enhancement in cognitive skills will improve the confidence of individuals with ASD while interacting with others & performing daily life task. |
| 6 | NIT Raipur  (Dr. Varsha Singh & Dr. Swapnajit Pattnaik) | Design and Development of photovoltaic interface compact single stage multilevel inverter using wideband devices. | To develop a high density DC-DC converter for PV application using wideband gap devices.  To propose a cost effective DC-DC converter and study its performance with real time photovoltaic interface.  (3 years) | 29.00 lakhs | 25 lakhs | This project will contribute towards energy sustainability, energy efficiency and supply reliability in state and at national and global level. This will also help to reduce carbon footprint and provide a clean source of energy. |
| 7 | MANIT Bhopal  (Dr. Vijay Bhaskar Semwal) | Development of Heterogeneous Computing Model for Post Injury Walking Pattern Restoration and Postural Stability: Cognitive Robotics Approach. | Design of heterogeneous computing model for analysis and restoration of human walking deformity and posture instability.  (3 years) | 31.92 lakhs | 25 lakhs | The model will be utilized for development of exoskeleton based assistive technology for physically disabled and elderly subject for walking. |
| 8 | NIT Calicut  (Prof. Naseer M.A) | Development of a Cost-effective and Sustainable Thermal Insulation Technique for Retrofitting RCC Roofs in Warm Humid Climate. | Experimental study to understand and analyze the thermal behaviour of existing RCC roofs and to identify significant performance parameters.  (3 years) | 56.37 lakhs | 40 lakhs | A thermal retrofit of concrete roofs by passive means can greatly improve the existing uncomfortable conditions and reduce the electricity consumption for space cooling. |