

2017-18

S No.	File no.	Project title	P.I Name & Address	Durations	Project Cost
1.	DST/TMD/MES/2k16/02	Development of Phase Change Material Based Solar Thermal Energy Storage System for combined Heating and Cooling Applications	Dr. A. Sreekumar, Centre for Green Energy Technology Pondicherry University Puducherry	36 months	Rs. 42,46,215/-
2.	DST/TMD/MES/2k16/09	Flexible solid-state supercapacitor device	Dr. B. R. Sankapal, Department of applied Physics, Visvesvaraya National Institute of Technology, Nagpur.	36 months	Rs. 60,63,623/-
3.	DST/TMD/MES/2k16/10	Development of Low Pressure–High Volume Biomethane Storage Cylinder for Transportation of Bottled Biogas for Cooking and Automotive Fuel Applications	Dr. Virendra Kumar Vijay, Centre for Rural Development and Technology Indian Institute of Technology Delhi, HauzKhas, New Delhi	36 months	Rs. 62,48,352/-
4.	DST/TMD/MES/2k16/20	Design and Development of PCM based Pilot Solar Hybrid Thermal Storage System for Low Temperature Application	Dr. R. Velavan, Department of Mechanical Engineering, PSG College of Technology, Peelamedu, Coimbatore	36 months	Rs. 39,73,000/-
5.	DST/TMD/MES/2k16/37	Nanostructured carbon decorated with metal nanoparticle loaded metal doped monochalcogenide thermoelectric with remarkable ZT and power factor: Performance	Dr. Kamal K Kar, Department of Mechanical Engineering and Materials Science Programme Indian Institute of Technology	36 months	Rs. 46,64,000/-

		evaluation with commercially available thermoelectric devices	Kanpur		
6.	DST/TMD/MES/2k16/50	Reversible Alkali Metal Based Hydrides for High Temperature Thermal Energy Storage	Dr. E. Anil Kumar, Department of Mechanical Engineering Indian Institute of Technology Tirupati, A.P	36 months	Rs. 1,44,44,750/-
7.	DST/TMD/MES/2k16/77	Hierarchically Nanostructured Energy Materials for Next Generation Na-Ion Based Energy Storage Technologies and Their Use in Renewable Energy Systems	Dr. Amreesh Chandra, Department of Physics, Indian Institute of Technology Kharagpur, West Bengal	36 months	Rs. 94,97,644/-
8.	DST/TMD/MES/2k16/83	Development of Low Cost Iron Based Flow Batteries for Grid Level Energy Storage	Dr. H.B. Muralidhara, Center for Incubation, Innovation, Research and Consultancy, Jyothy Institute of Technology, Bangalore	36 months	Rs. 1,37,50,000/-
9.	DST/TMD/MES/2k16/85	Materials and related storage devices for grid-deprived communities	Dr. S. Sampath, Inorganic & Physical Chemistry; Indian Institute of Science; Bengaluru.	36 months	Rs. 1,94,76,600/-
10.	DST/TMD/MES/2k16/94	Design & processing of nanostructured hybrid composite materials for electrochemical energy storage	Dr. Narayanan Unni K. N., Photosciences & Photonics Section, Chemical Science & Technology Division (CSTD), CSIR-NIIST, Thiruvananthapuram	36 months	Rs. 50,34,920/-
11.	DST/TMD/MES/2k16	PCM integrated Solar Powered Space	Mrs. Nidhi Agrawal,		

	/95	Heating System	Pluss Advanced Technologies Pvt. Ltd. Gurgaon	36 months	Rs. 58,46,500/-
12.	DST/TMD/MES/2k16 /98	Development of functional phase change materials for enhanced energy efficiency of thermal energy storage system	Dr. V. Kumaresan , Institute for Energy Studies, Department of Mechanical Engineering, Anna University, Chennai	36 months	Rs. 45,41,800/-
13.	DST/TMD/MES/2k16 /108	Design & development of Solar dish concentrator with thermal storage options for electricity generation	Dr K. Hemachandra Reddy , Department of Mechanical Engineering, JNTUA College of Engineering, JNT University - Ananthapuramu, Andhra Pradesh	36 months	Rs. 55,16,500/-
14.	DST/TMD/MES/2k16 /114	Hybrid Energy Storage Devices based on Multifunctional Nanocomposite Materials	Dr. M. M. Shaijumon , School of Physics, Indian Institute of Science Education & Research Thiruvananthapuram	36 months	Rs. 1,04,07,200/-
15.	DST/TMD/MES/2k16 /116	Scale-up Process Development of Highly Efficient Innovative Core-Shell Structured Electrode Materials and Investigate their Electrochemical Performance by Fabricating Lithium Batteries for Clean Energy Storage	Dr. A. Vadivel Murugan , Centre for Nanoscience and Technology, Madanjeet School of Green Energy Technologies, Pondicherry University (A Central University)	24 months	Rs. 1,04,66,500/-
16.	DST/TMD/MES/2k16 /125	Mobilized Latent Thermal Storage for Heat/Cold Energy Transportation by Utilizing Phase Change Materials	Dr. Shanmuga Sundaram Anandan , Department of Mechanical Engineering, Sree Sastha Institute of Engineering and	36 months	Rs. 45,13,234/-

			Technology, Chembarambakkam, Chennai		
17.	DST/TMD/MES/2k17 /08	Condition monitoring and prediction of thermal runaway through experiments, numerical modeling and estimation of state-of-charge in Lithium-ion cells	Dr. Amit Gupta IIT, Delhi	36 months	Rs.90,48,160/-
18.	DST/TMD/MES/2k17 /13	Development, via innovative, but facile, processing route, and understanding of superior carbon nanotube reinforced electrode materials for Na-ion and Li-ion batteries	Dr. Amartya Mukhopadhyay IIT Bombay	36 months	Rs. 81,40,880/-
19.	DST/TMD/MES/2k17 /24	Simultaneous THERMOELECTRIC “waste heat to Electrical Energy Conversion” and DIELECTRIC “Energy Storage” by Germanium Telluride (GeTe) and its derivatives	Dr. Kanishka Biswas JNCASR	36 Months	Rs. 85,59,780
20.	DST/TMD/MES/2k17 /25	Development and heat transfer analysis of material for encapsulated phase change material for medium and high temperature solar applications	Dr. Sandip Kumar Saha IIT Bombay	36 Months	Rs. 70,77,950/-
21.	DST/TMD/MES/2k17 /29	Development of Hybrid 3D Architecture Electrodes for High Energy Density Supercapattery	Dr. R. Ananthakumar Central Institute of Plastic Engineering and Technology	36 Months	Rs. 47,81,834/-
22.	DST/TMD/MES/2k17 /46	Development of low-cost sodium ion batteries for grid and off-grid storage applications.	Dr.Bijoy Kumar Das ARCI Chennai	36 Months	Rs. 64,54,080/-

23.	DST/TMD/MES/2k17/47	High voltage carbon encapsulated-graded LiMn ₂ O ₄ :LiNi _{1-x-y} CoxAlyO ₂ cathodes for rechargeable Li-ion pouch cells	M. B. Sahana ARCI Chennai	36 Months	Rs. 62,56,400/-
24.	DST/TMD/MES/2k17/51	Scalable Manufacturing of Asymmetric Micro Supercapacitors for Next Generation Energy Storage Devices.	Dr.ViswanathBalakrishnan IIT Mandi	36 Months	Rs. 68,60,600
25.	DST/TMD/MES/2k17/65	Development of light weight heat sink integrated with phase change material (PCM) for cooling applications	Dr. Santosh Kumar Sahu IIT Indore	36 Months	Rs. 28,85,520
26.	DST/TMD/MES/2k17/70	Development of layered transition metal dichalcogenides for efficient energy storage: Synthesis and supercapacitor applications	Dr.VenkataramananMahalingam IISER Kolkata	36 Months	Rs. 61,46,800
27.	DST/TMD/MES/2k17/73	Electrospun Nanofibers as Effective Polysulfide Trap for Advanced Lithium-Sulfur Batteries	Dr.BhanuNandan IIT Delhi	36 Months	Rs. 68,38,480
28.	DST/TMD/MES/2k17/74	Development of high capacity NMC cathode materials for Lithium ion rechargeable batteries	Prof Rajendra Kumar Singh Banaras Hindu University	36 Months	Rs. 36,08,770
29.	DST/TMD/MES/2k17/78	Development of low cost sodium-ion battery: Fabrication and application of NASICON based electrodes	Dr Rajiv Prakash IIT (BHU)	36 Months	Rs. 82,89,600
30.	DST/TMD/MES/2k17/93	Self-charging energy storage devices for Wearable applications	Dr.Dipti Gupta IIT Bombay	24 Months	Rs. 44,73,600

31.	DST/TMD/MES/2k17/94	Innovative Supercapacitors for Energy Storage Solutions - From Materials Modelling to Device Fabrication	Dr.Sujin P. Jose Madurai Kamaraj University	36 Months	Rs.52,79,560
32.	DST/TMD/MES/2k17/99	Low cost, Flexible crack free Metal Oxide/Conducting polymer Inverse opal structures for Supercapacitors	Dr.Pravin P. Ingole IIT Delhi	36 Months	Rs. 35,15,480
33.	DST/TMD/MES/2k17/102	Development of sustainable and safe hybrid supercapacitor (SC) with high energy density (~100 WhKg ⁻¹), power density (2 kWKg ⁻¹) and long cycle life (>20,000 cycles) for high end applications such as space, defence and hybrid electric vehicles.	Dr.Yogesh K. Sharma IIT Roorkee	24 Months	Rs.50,12,000
34.	DST/TMD/MES/2k17/103	Covalent Organic Framework and Metal Organic Framework as Solid Electrolytes for Batteries and Fuel Cells and as Charge Storage Matrix for Supercapacitors and Organic Electronics	R. Vaidhyanathan IISER, Pune	36 Months	Rs. 85,67,900
35.	DST/TMD/MES-TS/2k17/24	Development of novel 'hybrid' battery-supercapacitor device based on innovative nanostructured electrode materials.	Prof. Rajiv O Dusane IIT Bombay	36 Months	Rs. 1,95,05,600