Projects supported under DST- SERI Programme(2016-2017)

Sl. No	File No	Title	PI Name & Institution Address	Duration (Months)	Total Cost (Rs.)
1.	DST/TM/CERI/C167	Development of CZTS based solar cells by co-evaporation method	Prof. Udai P Singh School of Electronic Engineering, KIIT University, Bhubaneswar-751024, Odhisa	36	2849600
2.	DST/TM/CERI/C285	Colored Fluorescent Conducting Oligomers/Monomers for Dye Sensitized Solar Cells	Prof. N Sekar Dye stuff Technology Department, Institute of Chemical Technology, Matunga, Mumbai-400019	36	4190412
			Dr. S S Soni Department of Chemistry, Sardar Patel University, Vallabh Vidyanagar-388120 Gujarat	36	4687687
3.	DST/TM/CERI/D48	Electric vehicle charging station as a voltage and frequency regulator, within the real time capability of the Evs available, in presence of intermittent renewable energy sources.	Prof. Sukumar Mishra Department of Electrical Engineering, IIT Delhi-110016	36	12436840
			Dr. Neeraj Kumar Computer Science Engineering Department, Thapar University, Patiala, Punjab	36	4421560
4.	DST/TM/CERI/C63	Development of Flexible Perovskite solar Cells using TiO2 nanostructures grows on Kapton substrates	Dr. Somnath Chanda Roy Department of Physics, Indian Institute of Technology Madras, Chennai-600036	36	8030000
5.	DST/TM/CERI/C51	Development and study of the effect of valence plasmonic features and band	Dr. Shaibal Mukherjee Indian Institute of Technology Indore,	36	3762000

		alignment on the performance of cadmium-free and cost-effective chalcopyrite and kesterite heterojunctions for photovoltaic applications	PACL Building, Indore-453446, Madhya Pradesh		
6.	DST/TM/CERI/D11	Roll to too high efficient Pet based dye sensitized solar cells fabrication through high temperature sintering processes	Dr. Duraisamy Kumaresan, Associate Professor, Department of Chemical Engineering and Material Sciences, Amrita Vishwa Vidyapeetham University, Amrita Nagar, Coimbatore, Tamil Nadu	36	6762000
7.	DST/TM/CERI/C199	Investigation of Compositional Engineering for Efficient Perovskite Solar cells	Dr. Avijit Ghosh, Assistant Professor, Center for Applied Physics, Central University of Jharkhand, Brambe, Ranchi, Jharkhand-835205	36	9964200
8.	DST/TMD/CERI/C19	Design and Fabrication of an Integrated Optofluidic Device for Solar Irradiated Water-splitting using bio-Synthesized Metal/TiO2 Photocatalysts	Dr. Nageswara Rao Peela Department of Chemical Engineering, IIT Guwahati-781039, Assam.	36	4419200
9.	DST/ TMD/CERI/C166	Solar Cell Using Type-II core-shell Nano-Platelets for efficient charge separation	Dr. Sameer Sapra, Associate Professor, Department of Chemistry, Indian Institute of Technology Delhi, Hauz khas, New Delhi-110016	36	4000000
10.	DST/ TMD/CERI/C24	Luminescent solar concentrator based hybrid sunlight harvesting system for	Dr. D. S Mehta Department of Physics, Indian Institute of	36	4750439

		day light saving	Technology Delhi, Hauz khas, New Delhi-110016		
11.	DST/TM/CERI/C196	A Novel Reusable Ash and Nanomaterials based Battery for Power Generation	Dr. Suman Amity Institute of Advanced Research and Studies (M&D), Amity University, Sector-125, Noida-201303, Uttar Pradesh	24	940000
12.	DST/TMD/CERI/C16	Sodium Ion Batteries for Efficient and Sustainable Energy Storage	Dr. A. S Prakash Senior Scientist, CSIR Central Electrochemical Research Institute, Chennai Unit, CSIR Madras Complex, Taramani, Chennai-600113	36	4438800
13.	DST/TM/CERI/D16	Advance Energy Storage System for hybrid and electric vehicles	Dr. Satishchandra B. Ogale Department of Physics, Indian Institute of Science Education & Research, Dr. Homi Bhabha Road, Pashan, Pune, Maharashtra	36	11597134
14.	DST/ TMD/CERI/C247	Atmospheric processing of large-area perovskite solar cell with >10% efficiency	Dr. Easwaramoorthi Ramasamy Centre for Solar Energy Materials, ARCI, Balapur PO, Hyderabad, Telangana-500005	36	4006800
15.	DST/ TMD/CERI/C281	Harmonic Compensation using Distributed Solar PV Inverters	Dr. Sandeep Anand, Assistant Professor, ACES-103, Department of Electrical Engineering, IIT Kanpur,Kanpur-208016, Uttar Pradesh	36	5826000

16.	DST/ TMD/CERI/C4	Design and fabrication of spectrally selective absorber coatings high temperature solar thermal power applications	Dr. Harish C Barshilia, Scientist 'G', Nanomaterials Research Lab, Surface Engineering Division, CSIR-National Aerospace Laboratories HAL Airport, Kodihalli, Bangalore-560017	36	6320400
17.	DST/TMD/CERI/C140	Interface Engineering and Development of Hole-Transporting Materials for Perovskite Solar Cells	Dr. Raju Kumar Gupta Department of Chemical Engineering, IIT Kanpur, Kanpur-208016, Uttar Pradesh	36	7266000
18.	DST/TM/CERI/C99	Hybrid perovskite films and nanoparticles for solar cell and optoelectronics applications	Dr. Satishchandra B. Ogale, Professor, Department of Physics, Indian Institute of Science Education & Research, Dr. Homi Bhabha Road, Pashan, Pune-411008 Maharashtra	36	6156480
19.	DST/TM/CERI/D13	Development of a 10 kW Cogeneration Unit based on Microchannel Heat Exchangers for Efficient Utilization of Solar Energy	Dr. Udaya Bhaskar Reddy Ragula Department of Chemical Engineering and Material Sciences, Amrita Vishwa Vidyapeetham University, Amrita Nagar, Coimbatore-641112, Tamil Nadu	36	10499700
20.	DST/ TMD/CERI/C65	Deposition of earth abundant ternary CuZnS thin films and Fabrication of Cadmium free solar cells	Dr. M. C Santhosh Kumar Department of Physics, National Institute of Technology, Tiruchirappalli-620015, Tamil Nadu	36	2929520
21.	DST/TM/CERI/C28	Fabrication of super-hydrophobic	Dr. Abhilasha Mishra Assistant Professor,	36	3895685

		antireflective coating on solar panels to enhance its efficiency	Uttaranchal University, Dehradun, Uttarakhand-248007		
22.	DST/TM/CERI/D27	Silicon solar cells with carrier selective contacts	Dr. Kunal Ghosh School of computing and Electrical Engineering, IIT mandi, Mandi-175001, Himachal Pradesh	36	2256600
			Dr. Saurabh Lodha Department of electrical Engineering, IIT Bombay, Powai-400076Maharashtra	36	12901580
23.	DST/TMD/CERI/C30	Enhancing the Performance of passivated interface heterojunction silicon solar cells by improving junction properties and by using plasmonic light trapping	Dr. Vamsi Krishna Komarala Center for Energy Studies, Indian Institute of Technology Delhi, Hauz Khas, New Delhi-110016	36	7462000
24.	DST/TM/CERI/2k15/370	Dual use of land for farmers using a combination of Solar Photovoltaic Panels and Agriculture: Agrivoltaics	Dr. V K Jain, Distinguished Scientist & Professor, Amity Institute of Advance Research & Studies, Amity University Sector-125, Noida-201303, Uttar Pradesh	12	2490000
25	DST/ TMD/CERI/C47	Development, Testing and Standardization of heat pump water heaters using solar photovoltaic thermal hybrid evaporators	Dr. S Jayaraj, Professor, Department of Mechanical Engineering, National Institute of Technology Calicut, Calicut-673701, Kerala	36	3836800
26.	DST/TM/SERI/C278	Non-Imaging Optics Based Low Concentrating Photovoltaic Thermal (LCPVT) Hybrid System	Dr. Bala Pesala CSIR- Central Electromics Engineering Research Institute (CEERI), CSIR	36	6306800

			Road, Taramani, Chennai-600113, Tamil Nadu		
			Dr. K Srinivas Reddy Department of Mechanical Engineering, Indian Institute of Technology Madras, Chennai-600036, Tamil Nadu.	36	2380000
27.	DST/TM/CERI/C264	Impact of Morphology, Interfacial Modification in the Electrodes and Novel Pb2+ free Device Architecture on the Performance of Perovskite Solar Cell by Microwave Assisted Solvothermal and Ultrasonic Spray Pyrolysis Methods	Dr. A Vadivel Murugan Centre for Nanoscience and Technology, Madanjeet School of Green Energy Technologies, Pondicherry University, Dr. R. V. Nagar, Kalapet, Puducherry-605014	36	6626000
			Dr. Soumya Dutta Department of Electrical Engineering, Indian Institute of Technology Madras, Chennai-600036, Tamil Nadu	36	2320000
28.	DST/TM/CERI/C245	Fabrication of efficiency enhanced nanostructured InGaN/GaN solar cells	Dr. Govind Physics of Energy Harvesting, National Physical Laboratory Delhi, Dr. K. S Krishna Marg, New Delhi-110012	36	4050400
			Dr. Rajendra Prasad Department of Physics, Indian Institute of Technology Delhi, Hauz khas, New Delhi-110016	36	1908500
29.	DST/TM/CER/D31	Development of SMART Grid-Interactive SPV Systems	Dr. Sujit K Biswas, Professor and Former Head, Department of	36	6073000

			Electrical Engineering, Jadavpur University, Kolkata, West Bengal		
			Dr. Sumana Chowdhuri, Assistant Professor, Department of Applied Physics, University of Calcutta, University of Science and Technology, Kolkata	36	3357000
30.	DST/TM/CERI/D55	Application of Ultra capacitor based Energy Storage as smart grid initiative for recuperation and reuse of enegy in elevators for high rise buildings in smart cities	Mr. Amit Raje Aartech Solonics Limited, CTO and M.D., E-2/57, Area Colony Bhopal, MP-462016	24	4290000
31.	DST/TM/CERI/D09	Development of carrier selective tunneling rear contact on n-type and p-type silicon wafers for ultra-low surface recombination velocity and their implementation for lab scale (3"*3") high efficiency (>20%) solar cells.	Prof. Hiranmay Saha, Chair Professor and Coordinator, Indian Institute of Engineering Science and Technology, Shibpur, Howarh, West Bengal-700150.	36	29387290
32.	DST/TM/CERI/D05	Incorporation of DLN in a solar cell structure as a replacement of silicon nitride	Dr. Debashish De, Assistant Professor, Meghnad Saha Institute of Technology, Kolkata-700150 West Bengal	36	11994450
			Dr. Chanden Banerjee National Solar Science Fellow Indian Institute of Engineering Science and Technology shibpur, Howarah, West Bengal	36	2102800
33.	DST/TMD/SERI/S75	Development of Solar	Prof. H. Raheman,	36	3622600

		Energy Operated Agricultural Machinery for Paddy Crop	Professor, Agricultural and Food Engineering Department, Indian Institute of Technology Kharagpur, West Bengal-721302		
34.	DST/TMD/SERI/D41	Design of expander having volumetric control to have high turndown and high part load efficiency to handle variable thermal input from solar collector for power generation ranging from 5kwe to 100kwe	Dr. Satyanarayanan S, Assistant Professor, Department of Applied Mechanics, Indian Institute of Technology Madras, Chennai-600036, Tamil Nadu	36	4930436
35.	DST /TMD/SERI/D46	Development of Semi-Automatic Equipment for large Area Dye-Sensitized Solar Module Fabrication	Dr. Narayanan Unni K.N, Principal Scientist &Head, Photo science and Photonic Section, CSIR-National Institute of Interdisciplinary Science, & Technology, Thiruvananthapuram-695019 Kerela	36	17745649
			Dr. L. Giribabu, Senior Scientist, CSIR- Indian Institute of Chemical Technology, Tarnaka, Hyderabad-500007- Telangana.		4710528
36.	DST/TMD/SERI/D65	Re-synchronizable Grid Interactive Inverters for Indian Rooftop Solar PV Systems	Prof. Parthasarathi Sensarma, Professor, Development of Electrical Engineering, Indian Institute of Technology Kanpur, Kanpur-208016 Uttar Pradesh	30	19764000

37.	DST/TMD/SERI/D9	Design and Development of Solar PV Integrated System with Island and Resynchronization Capabilities	Prof. Bhim Singh, Professor, Department of Electrical Engineering, Indian Institute of Technology Delhi, Hauz Khas, New Delhi-110016	36	23397600
38.	DST/TMD/SERI/D16	Development and Fabrication of 2-inch square CIGS Thin Film Solar Cell Module	Dr. C.J. Panchal, Associate Professor, Faculty of Technology and Engineering, The Maharaja Sayajirao University of Baroda, Vadodara-390002, Gujarat.	36	9999400
39.	DST/TMD/SERI/D33	Technology development for silicon heterojunction solar cells with > 20% efficiency over large are (inch wafer) by HWCVP	Prof. R.O. Dusane, Professor, Department of Met. Engg. And Material Sc., Indian Institute of Technology Bombay, Powai, Mumbai-400076.	36	28670800