

Projects supported under DST- SERI Programme (2017-18)

S. No	File No	Title	PI Name & Institution Address	Duration (Months)	Total Cost (Rs.)
1	DST/TMD/SERI/S173	Experimental and Theoretical Investigations on the Novel Functional Materials used as Photo anodes, Sensitizers, Counter Electrodes and Electrolytes Enhancing the photo-voltaic characteristics of Dye Sensitized Solar Cells	Dr. Habib M Pathan, Assistant Professor, Department of Physics, Savitribai Phule Pune University, Ganeshkhind, Pune-411007, Maharashtra.	36	4273600
2	DST/TMD/SERI/S176	Development of Indigenous Floating System for Installation Solar PV Panels in Water Bodies	Dr. Sanjay K. Nayak, Director General, Central Institute of Plastics Engineering & Technology, TVK Industrial Estate, Guindy, Chennai-600036. Tamil Nadu	24	11460000
3	DST/TMD/SERI/D54	Corrosion studies in high-temperature molten salt fluids for advanced CSP plants	Prof. Bikramjit Basu, Professor, Materials Research Centre, Indian Institute of Science, Bangalore-560012. Karnataka.	36	7606225
4	DST/TMD/SERI/S56	Interface Engineering with CVD grown MoS ₂ ultra-thin layers for the improvement of Perovskite Solar Cell Performance”	Dr. Kusum Kumari, Assistant Professor, Department of Physics, National Institute of Technology Warangal, Warangal, Telangana.	36	3753200

5	DST/TMD/SERI/S136	Bulk Heterojunction hybrid solar cells based on Perovskite photo-active layers	Dr. Zishan Hussain Khan, Professor, Department of Applied Science and Humanities, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi-110025	36	5277892
6	DST/TMD/SERI/D51	Development of a Mini Solar Thermal Power Plant	Er. I. V. Dulera, Outstanding Scientist, Bhabha Atomic Research Centre, Trombay, Mumbai-400085	36	28370000 1150000
			Dr. R. P. Vedula, Professor, Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai-400076		
7	DST/TMD/SERI/S134	Flexible super capacitors based on carbon nano materials for energy storage	Dr. Nillohit Mukherjee, Assistant Professor, Centre of excellence for green energy and sensor system, Indian Institute of Engineering Science and Technology Shibpur, Howarah-711103, West Bengal	36	4056360
8	DST/TMD/SERI/D12	Development of High Temperature Thermal Energy Storage System for Solar Thermal Power Plant	Prof. P. Muthukumar, Professor, Department of Mechanical Engineering, Indian Institute of Technology Guwahati, Guwahati-781039. Assam	36	11546350
9	DST/TMD/SERI/D56	Corrosion studies of high performance alloys in high-temperature	Dr. Pramod Kumar, Professor, Department of Mechanical	36	8028044

		Supercritical-CO ₂ Brayton cycle power block for Concentrated Solar Power application	Engineering, Indian Institute of Science Bangalore, Bangalore-560012, Karnataka.		
10	DST/TMD/SERI/S15	Approaches to improve open circuit voltage and fill factor- Enhancing the power conversion efficiency in organic and organic-inorganic hybrid systems	Dr. Manoj A. G. Namboothiry, Assistant Professor, Indian Institute of Science Education and Research- Thiruvananthapuram, Thiruvananthapuram, Kerala	36	8834760
11	DST/TMD/SERI/S9	Development and Demonstration of 250 W, 1kWh Vanadium Redox Flow Battery Systems Rechargeable by Renewal Energy such as Solar and Wind Energy	Dr. R. Kothandaraman, Assistant Professor, Department of Chemistry, Indian Institute of Technology Madras, Chennai-600036	36	8137206
12	DST/TMD/SERI/S101	Brush Less DC Machine based Solar Pumping System	Dr. C. N. Bhende, Associate Professor, School of Electrical Science, Indian Institute of Technology Bhubaneswar, Bhubaneswar-751013, Odisha	36	6624292
13	DST/TMD/SERI/S38	Fabrication and study of Perovskite solar cells by Ultrasonic spray coating technique with targeted efficiency-15%	Dr. Sanjay S. Ghosh, Assistant Professor, Department of Physics, North Maharashtra University, Jalgaon-425001, Maharashtra	36	3858300
14	DST/TMD/SERI/S33	Design and Development of Carbon nanotubes based tandem absorber for high temperature solar thermal applications	Mr. N. Selvakumar, Scientist, Surface Engineering Division, National Aerospace Laboratories, Old Airport Road, Kodihalli, Bangalore-560017	36	4257000
15	DST/TMD/SERI/S165	Next Generation highly	Dr. Sandeep Kumar	36	8775272

		efficient and long term stable solar cell: Organic-Inorganic Perovskite Solar Cell	Pathak, Assistant Professor, Centre for Energy Studies, Indian Institute of Technology Delhi, Hauz Khas, New Delhi-110016		
16	DST/TMD/SERI/S182	Design and Development of Solar-Thermal and Thermal-Electrical Hybrid System	Dr. Soma Dutta, Senior Scientist, Materials Science Division, CSIR-National Aerospace Laboratories, Kodihalli, Bangalore-560017	36	8811880
17	DST/TMD/SERI/S103	Energy storage integration with the Grid at High Power Level	Dr. Suman Maiti, Assistant Professor, Department of Electrical Engineering, Indian Institute of Technology Kharagpur, Kharagpur-721302, West Bengal	36	6046700
18	DST/TMD/SERI/S49	Development of New Interfacial Layers for efficient and stable excitonic solar cells	Dr. Asit Patra, Senior Scientist, Physics of Energy Harvesting Division, CSIR-National Physical Laboratory, Dr. K. S. Krishna Marg, New Delhi-110012	36	9280480
19	DST/TMD/SERI/S111	Lead free Perovskites for stable and high efficient photovoltaic devices	Dr. Aswani Yella, Assistant Professor, Department of Metallurgical Engineering & Materials Science, Indian Institute of Technology Bombay, Powai, Mumbai-400076	36	6947600
20	DST/TMD/SERI/S25	Design and Development of open air compatible state-of-the-art solar selective coating for high	Dr. Krishna Valleti, Scientist 'D', International Advanced Research Centre for Powder	36	6411471

		temperature concentrated solar thermal power generation applications	Metallurgy and New Materials, Balapur PO, Hyderabad		
21	DST/TMD/SERI/S147	Fabrication of large are (1cm x 1 cm) uniform, pin hole free and highly efficient (upto 18%) stable Perovskite solar cells	Dr. Soumitra Satapathi, Assistant Professor, Department of Physics, Indian Institute of Technology Roorkee, Roorkee-247667 Uttarakhand.	36	4444000
22	DST/TMD/SERI/S81	Development for Ternary Organic solar cells on low cost flexible substrate”	Dr. Swati Gupta, Assistant Professor, Indian Institute of Technology Hyderabad, Kandi, Sangareddy-502285, Telangana.	36	4935000
23	DST/TMD/SERI/S170	Metallopolymer Grafted Graphene Based Nanohybrid Materials for High Performance Bulk Heterojunction Polymer Solar Cells	Dr. B. Neppolian, Professor, SRM Research Institute, SRM University, Kattankulathur, Chennai-603203.	36	7314600
24	DST/TMD/SERI/S91	Development of low cost solar paraboloid collector systems for process heat generation	Dr. Sunita Mahavar, Assistant Professor, Department of Physics, University of Rajasthan, Jaipur-302004, Rajasthan	36	4312220
25	DST/TMD/SERI/D26	Development of Solar Evacuated Tube Collectors with Inserted Baffles for Direct Air Heating in Industrial Applications	Dr. T. V. Arjunan, Professor and Head, Department of Mechanical Engineering, Coimbatore Institute of Engineering and Technology, Thondamuthur (via), Coimbatore-641109. Tamil Nadu.	36	9999280
26	DST/TMD/SERI/D05	Development of new small molecules and device architectures	Prof. G. D. Sharma, Professor, Department of	36	4486400

		for highly efficient and reliable organic solar cells	Physics, LNM Institute of Information Technology, Rupa ki Nangal, Sumel, Jamdoli, Jaipur-302301, Rajasthan		
			Dr. Rajneesh Mishra, Associate Professor, Department of Chemistry, IIT Indore-452001.		1773200
			Dr. Amresh Mishra, Reader, School of Chemistry, Sambalpur University, Sambalpur-768019. Odisha		4523200
			Dr. Rahul Singhal, Associate Professor, Department of Physics, Malaviya National Institute of Technology, Jaipur, Rajasthan 302017.		980000
27	DST/TMD/SERI/S127	Efficient large area semi transparent organic photovoltaic (STOPV) devices for power generating window applications.	Dr. Samarendra Pratap Singh, Assistant Professor, Department of Physics, School of Natural Science, Shivnadar University NH-91, Gautam Budh Nagar, U.P. -201314	36	4717240
28	DST/TMD/SERI/S83	“Recognition and characterization of Solar cell defects using combined thermography image and reconfiguration scheme”	Dr. A Srinivasan, Professor & PG Programme Head, Department of Electrical and Electronics Engineering, Sethu Institute of Technology, Pulloor-626115. Virudhunagar District, Tamil Nadu.	36	4029300
29	DST/TMD/SERI/S76	Fabrication of Stable Perovskite Solar Cells	Dr. M. Senthil Pandian Research	36	7773600

		using Inorganic Hole Transport Materials	Scientist, SSN Research Center, SSN College of Engineering, Chennai, Tamil Nadu-603110.		
30	DST/TMD/SERI/S46	Enabling investigations for high efficiency nanocrystalline a-si:H Hit Solar cells	Dr. T. K. Subramanyam, Associate Professor, R. V. College of Engineering, R. V. Vidyaniketan PO, Mysore Road, Bangalore-560059.	36	5564240
31	DST/TMD/SERI/S129	Fabrication of Low Cost Inverted Planner Perovskite Solar Cell	Dr. S Karuppuchamy, Associate Professor, Alagappa University, Karaikudi, Tamil Nadu-630003	36	5146592
32	DST/TMD/SERI/S32	Indigenous Development of Dye Sensitized Solar cells Modules with different electrolytes	Dr. S. Anandan, Associate Professor, Nanomaterials & Solar Energy Conversion Lab, Department of Chemistry, National Institute of Technology, Trichy-620015, Tamil Nadu	36	10713400