

Projects Supported under DST- SERI Programme(2014-2015)

| Sl. No | File No | Title | PI Name & Institution Address | Duration (Months) | Total Cost (Rs.) |
|--------|----------------------|---|--|-------------------|------------------------|
| 1 | DST/ TM/SERI/2k12/72 | Synthesis and Characterization of Iron Chalcogenide, FeS ₂ (Pyrite) and Fe ₂ SiS ₄ Thin-Films for Photovoltaic Application | Dr. Sarang Ingole, Assistant Professor, Department of Materials Science and Engineering, Western Labs Buildings, Lab # 204, Indian Institute of Technology Kanpur, Kanpur-208016, U.P. | 36 | 4934000 |
| 2. | DST/ TM/SERI/2k12/39 | Molecular Engineering of New Hybrid Organic-Inorganic Sensitizers for Applications in dye Sensitized solar cells | Dr. P Raghavendra Kumar, Assistant Professor in Chemistry, Centre for Nanoscience Research (CNR), Tumkur University, B.H.Road, Tumkur-572103, Karnataka Dr. Vamsi Krishna Komarala, Assistant Professor, Indian Institute of Technology Delhi, New Delhi – 110030 | 36 | 5150000 1298000 |
| 3. | DST/ TM/SERI/2k12/71 | Surface modified GaN/InGaN heterostructures with AlGaIn barrier layers for photovoltaics application | Dr. K. Baskar, Director & Professor, Crystal Growth Centre, Anna University, Chennai-600025 | 36 | 6551800 |
| 4. | DST/ TM/SERI/2k12/34 | Realization of novel low-cost, high optical absorption nanostructured design for photovoltaics solar cell device | Dr. RanuNayak, Assistant Professor, Amity Inst of Nanotechnology, Amity University, Sector-125, Noida -201301, U.P. | 36 | 1540000 |
| 5. | DST/ TM/SERI/2k12/68 | Fabrication of high performance quantum dot-sensitized solar cells through synthesis of high quality colloidal quantum dots | Prof. A. SreekumaranNair, Assistant Professor, Amrita Centre for Nanoscience & Molecular Medicine, Amrita Institute of Medical Sciences, Amrita Viswa Vidya Peetham, AiMSPonekkara PO Kochi – 682041, Kerala | 24 | 2248000 |

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| 6. | DST/ TM/SERI/2k12/63 | Development and Application of Atomic Layer Deposition for High Efficiency c-Si Photovoltaic Solar cells | Dr. B R Singh, Professor, Division of Electronics and Microelectronics, Indian Institute of Information Technology, Deoghat, Jhalwa, Allahabad-211012 | 36 | 21662000 |
| 7. | DST/ TM/SERI/2k12/74 | Simultaneous power and cooling production using solar operated absorption refrigeration system for cold storage applications | Dr. R Saravanan, Professor, Institute of Energy Studies, Anna University, Chennai-600025 | 36 | 5022000 |
| 8. | DST/ TM/SERI/2k12/60 | Efficiency enhancement of Scheffler dish solar concentrating technology | Dr. V Siva Reddy, Principal Scientist, Sardar Patel Renewable Energy Research Institute (SPRERI), Near BVM Engineering College, VallabhVidhyanagar, Anand (DIT), Gujarat-388120 | 36 | 7995200 |
| 9. | DST/ TM/SERI/2k12/70 | Design and Development of a Smart Micro Grid with Optimal Solar/Grid Power synergy | Prof. D. Bhagwan Das, Department of Electrical Engineering, Faculty of Engineering, Dayalbagh Educational Institute, Dayalbagh, Agra-282110 Uttar Pradesh | 36 | 5849400 |
| 10. | DST/ TM/SERI/2k12/59 | Development of Thermal Storage System using phase Change Material for ORC based Solar Thermal Plant | Dr. Sandip Kumar Saha, Assistant Professor, Department of Mechanical Engineering, Indian Institute of Technology Bombay, Powai, Mumbai-400076, | 36 | 5314200 |
| 11. | DST/ TM/SERI/2k12/40 | Fabrication of Solid State Dye Sensitized Solar Cells for Stability Enhancement and Improvement Performance | Prof. P. Ramaswamy, Dean (Research), SSN College of Engineering, Kalavakkam, Chennai-603110 | 36 | 5338000 |
| 12. | DST/ TM/SERI/2k12/15 | Cost-effective thin-film polycrystalline-silicon solar modules | Dr. Somenath Chatterjee, Associate Professor, International Centre for Nano Technology and Applied Adhesion (ICNTAA), Sikkim Manipal | 36 | 5998434 |

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| | | | Institute of Technology (SMIT), Majitar, East Sikkim, Sikkim-737136 | | |
| 13 | DST/ TM/SERI/2k12/57 | Electrochemical Deposition of CZTS for solar Cell Applications | Dr. S. Noyel Victoria, Assistant Professor, Department of Chemical Engineering, National Institute of Technology Karnataka, Surathkal, Srinivasanagar, Mangalore-575025. | 36 | 2744650 |
| 14. | DST/ TM/SERI/2k12/38 | Experimental study on solar steam generation system with compressed water thermal energy storage system | Dr. K. KalidasaMurugavel Professor and Head, National Engineering College, K.R.NagarKovilpatti, Tuticorin District, Tamil Nadu-628503 | 24 | 2549500 |
| 15. | DST/ TM/SERI/2k12/26 | Development and Implementation of MPPT Algorithm for Solar Photovoltaic System under Uniform and Non-Uniform Shaded Conditions | Dr. D. Devaraj, Dean Planning and Development, Kalasalingam University, Anandnagar, Krishnankoil, Srivilliputhur, Virudhunagar-626126 Tamil Nadu | 24 | 659000 |
| 16. | DST/ TM/SERI/2k12/81 | Solar Energy based Desiccant Loop Air-conditioning | Dr. L. Ashok Kumar, Associate Professor, PSG College of Technology, Avinashi Road, Peelamedu, Tamil Nadu, Coimbatore-641004 | 36 | 2765000 |
| 17. | DST/ TM/SERI/2k12/82 | A Multi-dimensional smart energy Grids Analysis for Indian Scenario | Prof. S N Singh, Professor, ACES-105, Department of Electrical Engineering, IIT Kanpur-208016, U.P. Dr. Bharat Singh Rajpurohit, Assistant Professor, School of Computing & Electrical Engineering, IIT Mandi, Mandi-175001, H.P | 36 | 13496100 |
| 18. | DST/ TM/SERI/2k12/83 | Integration and Intelligent management of Renewable Via ICT for Smart Micro-Grid | Dr. Nirod Chandra Sahoo, School of Electrical Sciences ,IIT Bhubaneshwar, Orissa | 36 | 8824000 |

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| | | Networks | Dr. Sukumar Mishra, Department of Electrical Engineering, IIT Delhi, HauzKhas, New Delhi- 110016 | | 3012000 |
| 19. | DST/TM/SERI/2k12/84 | Design and Development of a Smart Energy Grid Architecture with Energy Storage | Prof. Rajendra K Pandey, Professor, Department of Electrical Engineering, IIT (Banaras Hindu University), Varanasi- 221005, Dr. Anshu Bharadwaj, Director, Centre for Study of Science, Technology and Policy, (CSTEP) Raja Ramanna Complex, High Grounds, Raj Bhavan circle, Bangalore-560001 | 36 | 18574000 2812000 |
| 20. | DST/ TM/SERI/2k12/85 | Solar Energy Based DC Micro-Grid Power System with Hybrid Battery to power Rural and Remote areas | Prof. A K Shukla, Honorary Professor, Solid State & Structural Chemistry Unit, Indian Institute of Science (IISc), Bangalore – 560012, Karnataka. | 24 | 7848000 |
| 21 | DST/ TM/SERI/FR/94 | Improving Organic Solar Cell performance in large area architecture by use of Active Encapsulation and Aging studies | Prof. K. S. Narayan, Professor, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore- 560064 | 36 | 6654800 |
| 22 | DST/ TM/SERI/2k12/65 | Design, Development and Deployment of A low-Temperature Solar Desalination System | Dr. Balakrishnan Shankar, Associate Dean, Amrita Vishwa Vidyapeetham, (Amrita University), Amritapuri, Clappana P.O., Kollam District, Kerala-690525, | 24 | 2570400 |