

**List**  
**of**  
**New Projects**  
**Sanctioned**  
**During the financial year**  
**2011-2012**  
**Under**  
**Technology systems Development PRogramme**  
**(TSDP)**  
**DST**

**New Projects sanctioned during 2011-2012**

| Sl. No | Dated of Issue of Sanction/ | Total Cost/<br>Duration       | File No.                    | Project Title                                                                                                                                                               | Name & Address of PI                                                                                                                                                                                   |
|--------|-----------------------------|-------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.     | 05.07.2011                  | Rs.16,56,960/-<br>(24 months) | DST/TSG/<br>ME/2009/10<br>8 | Development of a biosensor for estimation of polyphenols in apple juice.                                                                                                    | Dr. Suman Singh,<br>Scientist-B,<br>Material Research and Bio-nano Technology Group, Central Scientific Instruments Organization (CSIO), Sector-30-C, Chandigarh – 160 030, Punjab.                    |
| 2.     | 05.07.2011                  | Rs.14,05,600/-<br>(24 months) | DST/TSG/<br>AF/2009/6<br>8  | Screening and improving biomass production, lipid accumulation and oil recovery of microalgae from estuary region (Khambhat, Gujrat) by conventional and modern approaches. | Dr. Sudha Sahay,<br>Biochemist,<br>Sardar patel renewable energy research institute (SPRERI),<br>Post Box No 2, Vallabh Vidyanagar-388 120, Anand, Gujarat                                             |
| 3.     | 05.07.2011                  | Rs.10,24,800/-<br>(24 months) | DST/TSG/<br>ME/2010/42      | Developing Hydrogen Gas sensor based on conducting polymer nano-composite materials.                                                                                        | Dr. M. Paramasivam,<br>Scientist: E-II,<br>Central Electrochemical Research Institute (CECRI), Karaikudi – 630 006, TamilNadu.                                                                         |
| 4.     | 05.07.2011                  | Rs.16,33,920/-<br>(24 months) | DST/TSG/<br>ME/2010/57      | Ion Conducting Polymer-Metal Nano-composite (ICMPN) Based electrochemical sensors for Biological Fluids.                                                                    | Dr. Vinod Kumar Shahi,<br>Scientist Gr. IV (4),<br>Elctro-Membrane Process Division,<br>Central Salt & Marine Chemicals Research Institute (CSMCRI), Gijubhai Badheka Marg, Bhavnagar-364 002. Gujrat. |
| 5.     | 05.07.2011                  | Rs.20,62,080/-<br>(24 months) | DST/TSG/<br>ME/2010/62      | Validation of auto range capacitance measurement instrumentation as clinical biochemical analyser.                                                                          | Prof. J. Kumar Director,<br>Crystal Growth Centre,<br>Anna University,<br>Chennai-600025.<br>Tamil Nadu                                                                                                |
| 6.     | 15.07.2011                  | Rs.45,38,400/-<br>(24 months) | DST/TSG/P<br>T/2007/71      | Studies on high efficient nano-Tungsten oxide solid state electro-chromic                                                                                                   | Dr. A. Subrahmanyam,<br>Professor,<br>Department of Physics,<br>Indian Institute of Technology Madras                                                                                                  |

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|     |            |                                |                            | devices for possible applications to Helmets.                                                                                         | (IIT-M)<br>Chennai-600 036 Tamil Nadu                                                                                                                                                                                                   |
| 7.  | 13.07.2011 | Rs. 41,58,969/-<br>(36 months) | DST/TSG/Glass/2009/33      | Development of new designs and new products based on the indigenous materials, skills and infrastructure of Purdilnagar bead cluster. | Dr. Neelima Hasija,<br>Associate Senior Designer,<br>Industrial Design,<br>& Coordinator,<br>Ceramic and Glass Design<br>Discipline,<br>National Institute of<br>Design (NID),<br>Paldi, Ahmedabad-380<br>007, Gujrat.                  |
| 8.  | 13.07.2011 | Rs.44,64,687/-<br>(36 months)  | DST/TSG/P<br>T/2010/11     | Nanosensor Array based on Conducting Polymer Functionalized SWNTs for Real-Time Monitoring of Toxic Air.                              | Dr. Mahendra D.<br>Shirsat,<br>Professor,<br>Intelligent Material<br>Research Laboratory,<br>Dept. of Physics,<br>Dr. Babasaheb<br>Ambedkar Marathwada<br>University,<br>Aurangabad – 431 004,<br>Maharastra.                           |
| 9.  | 15.07.2011 | Rs.30,39,600/-<br>(24 months)  | DST/TSG/<br>AF/2009/6<br>6 | Corrosion behaviour of a few industrial metals in selected biodiesels                                                                 | Dr. R. Shyamala,<br>Professor & Head,<br>D/o Chemistry,<br>Avinashilingam<br>University for women,<br>Coimbatore-641 043,<br>Tamil Nadu                                                                                                 |
| 10. | 01.08.2011 | Rs.60,18,000/-<br>(30 months)  | DST/TSG/N<br>TS/2009/32    | Development of Fiber Bragg Grating (FBG) based distributed strain Sensor system for concrete bridges                                  | Dr. Subhash Chander Jain,<br>Scientist-G, DU-4<br>(Photonics),<br>Central Scientific<br>Instruments Organization<br>(CSIO),<br>Sector—30-<br>CChandigarh – 160 030.<br><br><b>And</b><br><br>Dr. R..K. Garg,<br>Sceintist, CRRI, Delhi. |

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| 11. | 03.08.2011 | Rs.86,25,600/-<br>(24 months) | DST/TSG/<br>ME/2010/50          | Design and Development of a rapid diagnosis test for early detection of HIV infection.                       | Prof. S. Mahalingam, 403, Lab. Of Molecular Virology and Cell Biology, Department of Biotechnology, Indian Institute of Technology-Madras (IIT-M), Chennai – 600 036, Tamil Nadu. |
| 12. | 09.8.2011  | Rs.31,94,000/-<br>(24 months) | DST/TSG/<br>ME/2010/27          | New Materials and methods for the efficient organic photovoltaic devices.                                    | Dr. K. R. Justin Thomas Assistant Professor, Department of Chemistry, Indian Institute of Technology (IIT), Roorkee – 247 667. Uttarakhand.                                       |
| 13. | 10.8.2011  | Rs.13,68,960/-<br>(24 months) | DST/TSG/<br>ME/2010/37          | Molecular Characterization of soil bacterium for plastic degradation.                                        | Dr. N. Hemashenpagam, Associate Professor, PG & Research Department of Microbiology, Hindustan College of Arts and Science, Coimbatore- 641 028, Tamil Nadu.                      |
| 14. | 23.8.2011  | Rs.69,92,400/-<br>(24 months) | DST/TSG/C<br>eramic/2009<br>/55 | Development and Pilot production of nano-ZnO for electronics and deep-desulphurisation catalyst applications | Dr. V. Kumar, Scientist-E, Centre for Materials for Electronics Technology (C-MET) Shornur Road, M.G. Kavu, Athani: P.O., Thrissur – 680 771, Kerala                              |
| 15. | 09.9.2011  | Rs.44,67,415/-<br>(36 months) | DST/TSG/<br>AF/2010/0<br>1      | Thermo Chemical Characterization of Non-Edible Seedcake for Gasification.                                    | Shri P.K. Srividhya, Assistant Professor, Department of Mechanical Engineering, Periyar Maniammai University, Periyar Nagar, Vallam, Thanjavur – 613 403, Tamil Nadu.             |

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| 16. | 09.9.2011  | Rs.23,80,560/-<br>(36 months)  | DST/TSG/NTS/2011/73 | Development of hybrid bio-ceramic coatings on surface treated titanium alloy for implant applications.                                              | Dr. D. Gopi<br>Assistant Professor<br>Department of Chemistry<br>Periyar University<br>Salem – 636 011<br>Tamil Nadu                                                               |
| 17. | 14.9.2011  | Rs.19,08,720/-<br>(18 months)  | DST/TSG/AF/2011/104 | Analysis and improvement of oxidation behavior of biodiesel                                                                                         | Dr. Bhawna Yadav Lamba,<br>Assistant Professor,<br>University of Petroleum and Energy Studies (UPES),<br>Energy Acres, Bidholi via Prem Nagar,<br>Dehradun-248 007,<br>Uttaranchal |
| 18. | 15.11.2011 | Rs. 22,80,960/-<br>(24 months) | DST/TSG/ME/2011/89  | Development of nanopiezoelectric sensor                                                                                                             | Dr. S. K. Parasar,<br>Associate Professor,<br>School of Applied Sciences, Kalinga Institute of Industrial Technology (KIIT) University,<br>Bhubaneswar – 751 024, Orissa.          |
| 19. | 15.11.2011 | Rs. 30,40,800/-<br>(24 months) | DST/TSG/PT/2009/104 | Development of Azidothymidine (Anti HIV drug) and its reactive phase-I metabolic electrochemical sensor based on low cost screen printed electrode. | Dr. Rajiv Prakash,<br>Institute of Materials Science & Technology,<br>Institute of Technology,<br>Banaras Hindu University (BHU), Varanasi – 221 005, Uttar Pradesh                |
| 20. | 15.11.2011 | Rs. 59,86,631/-<br>(36 months) | DST/TSG/NTS/2010/58 | Development of Uniaxial Pressure and Modified Bridgman Anvil Devices for Transport and Magnetic Measurements                                        | Prof. S. Arumugam<br>Coordinator<br>Centre for High Pressure Research<br>School of Physics,<br>Bharathidasan University<br>Tiruchirappalli-620 024.<br>Tamil Nadu.                 |
| 21. | 15.11.2011 | Rs. 50,52,400/-<br>(36 months) | DST/TSG/AF/2011/48  | HCCI mode of operation to reduce emissions in internal combustion engines:                                                                          | Dr. Sreedhara Sheshadri<br>Associate Professor<br>Department of Mechanical Engineering                                                                                             |

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|     |            |                                  |                                  | Experimental and numerical investigations                                                                                    | Indian Institute of Technology-Bombay (IIT-B)<br>Powai<br>Mumbai- 400 076,<br>Maharashtra                                                                            |
| 22. | 15.11.2011 | Rs. 33,91,600/-<br>(36 months)   | DST/TSG/<br>Ceramic/20<br>09/109 | Development of functionally graded porous ceramic perform and ceramic-metal composites for engineering applications          | Dr. TPD Rajan, Scientist-C, Materials and Minerals Division, National Institute for Interdisciplinary Science & Technology (NIIST), Trivendrum – 695 019, Kerala.    |
| 23. | 15.11.2011 | Rs. 1,51,99,800/-<br>(36 months) | DST/TSG/N<br>TS/2010/85          | A study of BF slag chemistry and mineralogy with respect to its flow characteristics for optimizing BF operation             | Dr. U.K. Mohanty<br>Professor<br>M.M. Engineering<br>Department<br>National Institute of<br>Technology<br>Rourkela – 769 008<br>Sundergarh, Orissa                   |
| 24. | 16.11.2011 | Rs. 31,51,150/-<br>(24 months)   | DST/TSG/<br>ME/2011/51           | Organized assemblies of peptides and proteins immobilized in nanoporous templates: Designing a tool to study fibrillogenesis | Dr. (Ms) Aruna<br>Dhathathreyan<br>Scientist F<br>Chemical Lab, Central<br>Leather Research<br>Institute (CLRI)<br>Adyar, Chennai – 600 020<br>(Tamil Nadu)          |
| 25. | 16.11.2011 | Rs. 34,36,347/-<br>(36 months)   | DST/TSG/<br>ME/2011/16           | Flow Injection Analysis – Electro-chemical Detector (FIA - ECD) for Biochemical Analysis                                     | Dr. A. Senthil Kumar<br>Professor<br>Room No. 525, Techno<br>Tower<br>VIT University<br>School of Advanced Science<br>Vellore - 632 014.<br>Tamil Nadu               |
| 26. | 16.11.2011 | Rs. 34,30,000/-<br>(36 months)   | DST/TSG/P<br>T/2009/116          | Polymer Composites as advanced electrode material for supercapacitor                                                         | Prof. Ashok Kumar<br>Sharma, Dept. of<br>Material Science &<br>Technology, DCR<br>University of Science &<br>Technology, Muruthal,<br>Sonapat – 131 039,<br>Haryana. |

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| 27. | 16.11.2011 | Rs. 54,29,200/-<br>(36 months) | DST/TSG/<br>ME/2011/38     | Design, Development and Technology Transfer of high power diode pumped Nd: YAG laser with frequency doubled output                                        | Prof. S.K. Sreenivasan Nair<br>Professor<br>Toc H Institute of Science & Technology<br>Arakkunnam<br>Ernakulam – 682 313,<br>Kerala                                                        |
| 28. | 16.11.2011 | Rs. 64,10,000/-<br>(36 months) | DST/TSG/N<br>TS/2009/56    | Development of immunology and molecular tools for diagnosis and management of Aspergillus flavus infection and aflatoxin contamination in foods and feeds | Dr. R. Velazhahan,<br>Professor, Department of Plant Pathology, Centre for Plant Protection Studies, Tamil Nadu Agricultural University (TNAU), Coimbatore.                                |
| 29. | 16.11.2011 | Rs. 49,61,068/-<br>(24 months) | DST/TSG/N<br>TS/2009/44    | Development of a compact liquid nitrogen plant unit of 7-10 litre/hr capacity utilizing the successful conceptual design                                  | Dr. Swapan Chandra Sarkar, Deputy Director, Centre for Rural and Cryogenics Technologies (CRCT), Jadavpur University, Kolkata – 700 032, West Benagal.                                     |
| 30. | 17.11.2011 | Rs. 54,40,000/-<br>(36 months) | DST/TSG/A<br>F/2010/65     | Production of Green Diesel from Non-Edible Oils Using Supported Nano Metal Catalysts                                                                      | Dr. Sunil Kumar Maity, Assistant Professor, Department of Chemical Engineering, Indian Institute of Technology (IIT) Hyderabad, Ordnance Factory Estate, Yeddumailaram-502 Andhra Pradesh. |
| 31. | 17.11.2011 | Rs. 29,82,000/-<br>(36 months) | DST/TSG/A<br>F/2009/45     | Green diesel production from hydro cracking of karanja oil                                                                                                | Dr. P D Vaidya, Dept. of Chemical Engineering, Institute of Chemical Technology (ICT), Matunga, Mumbai – 400 019, Maharashtra.                                                             |
| 32  | 17.11.2011 | Rs. 40,70,000/-<br>(36 months) | DST/TSG/<br>WM/2010/4<br>4 | Adapting a suitable technology for the recycling of the Paper Pulp and Textile dye Industry wastes                                                        | Prof. D. Ravi,<br>Assistant Professor<br>PG & Research<br>Department of Botany<br>Government Arts College,<br>2F, 12B Category,<br>Coimbatore -641 018<br>Tamil Nadu.                      |
| 33. | 21.11.2011 | Rs.74,49,000/-                 | DST/TSG/N                  | Development of cost                                                                                                                                       | Dr. K. Perumal                                                                                                                                                                             |

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|     |            | (36 months)                    | TS/2010/75         | effective process for enhanced dye production from selected micro fungi <i>Curvularia</i> , <i>Phoma</i> , <i>Pestalotiopsis</i> sp., large scale testing and formulation as industrial textile dyes | Deputy Director (R&D and Administration)<br>Shri AMM Murugappa Chettiar Research Centre (MCRC)<br>Taramani<br>Chennai-600 113.<br>Tamil Nadu<br><br>And<br><br>Dr. P. Palani, Dept for advanced studies in Botany, University of Madras, Chennai. |
| 34. | 21.11.2011 | Rs. 16,43,117/-<br>(24 months) | DST/TSG/ME/2011/40 | Performance Appraisal of a FG MOS Transistor by using QD Floating Gate in 45nm Regime                                                                                                                | Dr. Vivekanand Mishra<br>Associate Professor<br>Electronics Engineering Department<br>S.V. National Institute of Technology (SVNIT)<br>Ichchhanath, Surat – 395 007, Gujarat                                                                      |
| 35. | 25.11.2011 | Rs. 19,44,000/-<br>(24 months) | DST/TSG/AF/2011/97 | Physico-chemical Characteristics and Storage Studies of Jatropha and Karanja Seeds, Oils and Biodiesel                                                                                               | Mrs. K.N. Prasanna Rani<br>Scientist E1<br>Centre for Lipid Research<br>Indian Institute of Chemical Technology (IICT) (CSIR)<br>Tarnaka, Hyderabad-500 007,<br>Andhra Pradesh                                                                    |
| 36. | 25.11.2011 | Rs. 46,69,385/-<br>(36 months) | DST/TSG/AF/2010/63 | Industrial Scale Production of Biodiesel by the Transesterification of Jatropha/Castor Oil Over Nanocatalysts                                                                                        | Dr. Binitha N.N.,<br>Lecturer,<br>Department of Chemistry,<br>Sree Neelakanta Govt. Sanskrit College,<br>Pattambi, Palakkad (DT),<br>Kerala – 679 306                                                                                             |
| 37. | 25.11.2011 | Rs. 53,04,600/-<br>(24 months) | DST/TSG/AF/2010/33 | Fuel Spray and Combustion Visualization Using Endoscope in Biodiesel Fuelled Direct Injection Engine for Optimal Fuel Injection Strategy and                                                         | Dr. Avinash Kumar Agarwal,<br>Associate professor,<br>Engine Research Laboratory,<br>Department of Mechanical Engineering,                                                                                                                        |



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|     |            |                                  |                       | Emission reduction                                                                  | Indian Institute of Technology (IIT), Kanpur-208 016,Uttar Pradesh                                                                                                                                                              |
| 38. | 25.11.2011 | Rs. 1,85,34,000/-<br>(36 months) | DST/TSG/AF/2011/67    | Production of second and third generation biofuels (Biomass-to-liquid)              | Shri. Anil Kumar Sinha<br>Scientist E-I<br>Hydroprocessing Lab<br>Catalyst Conversion and Process Division (CCPD)<br>Indian Institute of Petroleum (IIP)<br>Haridwar Road,<br>Mohkampur<br>Dehradun-248 005,<br>Uttarakhand     |
| 39. | 25.11.2011 | Rs. 45,40,000/-<br>(36 months)   | DST/TSG/AF/2011/155   | Valorization of glycerol for biodegradable base fluids and new biofuel formulations | Dr. Savita Kaul<br>Scientist E-II,<br>Area Leader, Biofuel Division, Indian Institute of Petroleum (IIP),<br>Haridwar Road<br>Mohkampur,<br>Dehradun-248 005,<br>Uttarakhand.                                                   |
| 40. | 30.12.2011 | Rs. 40,30,000/-<br>(36 months)   | DST/TSG/AF/2011/62    | Value Addition to Biodiesel via biolubricants                                       | Dr. Amit P Pratap<br>Assistant Professor<br>Department of Oils, Oleochemicals and Surfactants Technology<br>Institute of Chemical Technology (ICT)<br>Nathalal Parekh Marg,<br>Matunga (East)<br>Mumbai-400 019,<br>Maharashtra |
| 41. | 30.12.2011 | Rs. 57,84,033/-<br>(24 months)   | DST/TSG/S TS/2011/123 | Eco-friendly bricks: A new material in Civil Engineering                            | Dr. Janki N. Thakker,<br>Assistant Professor,<br>Department of Biotechnology,<br>PD Patel Institute of Applied Science,<br>Charotar University of Science & Technology (CHARUSAT),<br>Changa – 388 421, Gujarat.                |

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| 42. | 30.12.2011 | Rs. 19,20,000/-<br>(36 months) | DST/TSG/I<br>CT/2010/08 | Development of Computational Framework for the Automated Quantitative Analysis of Cardiac MRI                                                | Mrs. G. Dharanibai<br>Associate Professor<br>School of Electronics Engineering,<br>Vellore Institute of Technology University,<br>Vellore – 632 014<br>Tamil Nadu.                   |
| 43. | 30.12.2011 | Rs. 11,16,240/-<br>(12 months) | DST/TSG/T<br>C/2010/78  | Design and Development of roof tile production mechanism using advanced embedded processor control                                           | Dr. K. Krishnamurthy,<br>School of Building and Mechanical Sciences,<br>Kongu Engineering College,<br>Perundurai, Erode-638 052,<br>Tamilnadu.                                       |
| 44. | 30.12.2011 | Rs. 29,95,200/-<br>(36 months) | DST/TSG/I<br>CT/2011/56 | An Efficient Multimodal Human Identification System with Reduced Recognition Time                                                            | Prof. Poonam Sharma<br>Assistant Professor<br>CSE Department<br>Madhav Institute of Technology & Science (MITS)<br>Gwalior – 474 005<br>Madhya Pradesh.                              |
| 45. | 30.12.2011 | Rs. 27,90,960/-<br>(24 months) | DST/TSG/A<br>F/2011/103 | Installation of novel biomass pyrolysis pilot plant and its performance evaluation for bio-oil production using different biomass feedstocks | Dr. G. Sanjay Kumar Lumar<br>Assistant Professor,<br>University of Petroleum and Energy Studies (UPES),<br>Energy Acres, Bidholi via Prem Nagar,<br>Dehradun-248 007,<br>Uttaranchal |
| 46. | 30.12.2011 | Rs. 16,21,795/-<br>(36 months) | DST/TSG/T<br>C/2011/70  | Application and standardization of natural dyes on natural fibres to enhance the quality of Handicraft products.                             | Dr. A. Usha Raja Nanthini<br>Assistant Professor<br>Department of Biotechnology<br>Noorul Islam College of Arts and Science<br>Kumaracoil,<br>Thuckalay-629 180,<br>Tamil Nadu       |
| 47. | 30.12.2011 | Rs. 75,59,200/-<br>(24 months) | DST/TSG/A<br>F/2011/96  | Development of Biodegradable Surfactants from                                                                                                | Dr. RBN Prasad,<br>Scientist - G,<br>Centre for Lipid Research                                                                                                                       |

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|     |            |                                  |                      | Karanja and Jatropha Oilseed Cakes                                                                 | Indian Institute of Chemical Technology (IICT) (CSIR)<br>Tarnaka, Hyderabad-500 007,<br>Andhra Pradesh                                                                                                                                                                            |
| 48. | 30.12.2011 | Rs. 1,04,25,520/-<br>(24 months) | DST/TSG/AF/2011/100  | Safety Evaluation of vegetables cultivated using Karanja Seed Cake                                 | Dr. Pradosh P. Chakrabarti,<br>Scientist E-I,<br>Centre for Lipid Research<br>Indian Institute of Chemical Technology (IICT) (CSIR)<br>Tarnaka, Hyderabad-500 007, Andhra Pradesh<br><br>And<br>Dr. B. Dinesh Kumar, NIN-Hyderabad.<br><br>And<br>Dr. Dilip Babu, APHU-Hyderabad. |
| 49. | 30.12.2011 | Rs. 1,31,36,000/-<br>(36 months) | DST/TSG/S TS/2011/22 | New Building System for Affordable Mass Housing using Glass Fibre Reinforced Gypsum (GFRG) panels. | Dr. Devdas Menon<br>Professor<br>Department of Civil Engineering<br>Indian Institute of Technology-Madras (IIT-M)<br>Chennai - 600 036. Tamil Nadu.                                                                                                                               |
| 50. | 06.1.2012  | Rs. 27,16,000/-<br>(36 months)   | DST/TSG/S TS/2011/44 | Demolition Wastes as raw materials for low cost construction products.                             | Dr. A.K. Minocha<br>Senior Scientists<br>Central Building Research Institute<br>Roorkee - 247 667,<br>Uttarakhand                                                                                                                                                                 |
| 51. | 13.1.2012  | Rs. 19,86,890/-<br>(24 months)   | DST/TSG/TC/2010/77   | Digital imaging of stone inscriptions and transliteration of ancient texts                         | Dr. V. Subbiah Bharathi,<br>Professor,<br>DMI College of Engineering,<br>Palanchur<br>Chennai-602 103, Tamil Nadu                                                                                                                                                                 |
| 52. | 13.1.2012  | Rs. 42,69,825/-                  | DST/TSG/AF/2011/47   | Utilization of biodiesel waste for                                                                 | Dr. S.N. Naik<br>Professor                                                                                                                                                                                                                                                        |

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|     |           | (24 months)                      |                         | production of emulsifier                                                                                                         | Centre for Rural Development Technology (CRDT), Indian Institute of Technology, Hauz Khas, New Delhi-110 016                                                                        |
| 53. | 10.2.2012 | Rs. 25,40,000/-<br>(36 months)   | DST/TSG/AF/2011/86      | Design and Development of Horizontal Gasifier for Biomass materials                                                              | Dr. S.P. Singh<br>Director<br>Centre of Energy Studies and Research (SEES)<br>Devi Ahilya Vishwavidyalaya (DAVV)<br>Takshila Campus, Khandwa Road<br>Indore-452 001, Madhya Pradesh |
| 54. | 15.2.2012 | Rs.1,12,42,400/-<br>(36 months)  | DST/TSG/S TS/2011/19    | Health Monitoring of Buildings using Wireless Sensor Network.                                                                    | Er. Ajay Chourasia<br>Scientist<br>CSIR – Central Building Research Institute<br>Roorkee – 247 667, Uttarakhand<br><br>And<br>Dr. Kota Solomon Raju,<br>Scientist, CEERI, Pilani.   |
| 55. | 21.2.2012 | Rs. 25,60,960/-<br>(24 months)   | DST/TSG/Ceramic/2011/59 | Development of $Ti_3SiC_2$ Ternary Ceramic Compound by Spark Plasma Sintering.                                                   | Dr. S. Kumaran<br>Assistant Professor<br>Department of Metallurgical & Materials Engineering<br>National Institute of Technology (NIT)<br>Tiruchirappalli – 620 015, Tamil Nadu     |
| 56. | 21.2.2012 | Rs. 2,38,49,600/-<br>(24 months) | DST/TSG/AF/2011/95      | Development of alternative basestocks and raw materials based on renewable vegetable oils and fats for application in lubricants | Dr. (Mrs.) K.V. Padmaja<br>Scientist E1<br>Centre for Lipid Research<br>Indian Institute of Chemical Technology (IICT) (CSIR)<br>TaranakaHyderabad-500 007, Andhra Pradesh          |

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| 57. | 21.2.2012 | Rs. 9,35,520/-<br>(12 months)    | DST/TSG/AF/2011/08       | Detoxification of jatropha curcas oil seeds & press cake by radiation processing                                              | Dr. Ajay Kumar<br>Assistant Director and Chief<br>Shriram Institute for Industrial Research<br>19, University Road,<br>Delhi-110 007                                                                                                                          |
| 58. | 21.2.2012 | Rs. 24,00,800/-<br>(24 months)   | DST/TSG/AF/2011/66       | Production of biodiesel from low cost feed stocks using heterogeneous catalyst                                                | Dr. Neeraj Atray<br>Scientist C<br>Biofuel division,<br>Indian Institute of Petroleum<br>Haridwar Road<br>Mohkampur<br>Dehradun- 248 005,<br>Uttarakhand                                                                                                      |
| 59. | 06.3.2012 | Rs. 1,01,10,000/-<br>(36 months) | DST/TSG/Ceramic/2011/142 | Development of Low-Carbon Steel Plant Refractories with Non-oxide Ceramic Additives.                                          | Dr. Debasish Sarkar<br>Associate Professor<br>Department of Ceramic Engineering<br>National Institute of Technology (NIT)<br>Rourkela - 769 008,<br>Orissa                                                                                                    |
| 60. | 06.3.2012 | Rs. 59,68,000/-<br>(36 months)   | DST/TSG/S TS/2011/28     | Development of Technology for making flooring and wall tiles using Kota Stone waste.                                          | Dr. (Mrs.) Rajni Lakhani,<br>Principal Scientist-F<br>Organic Building Materials Division<br>Central Building Research Institute<br>Roorkee - 247 667,<br>Uttarakhand                                                                                         |
| 61. | 06.3.2012 | Rs. 39,13,580/-<br>(36 months)   | DST/TSG/S TS/2011/92     | Experimental and Analytical studies for the short and long - term behaviour of Epoxy bonded steel-concrete composite bridges. | Dr. Sandeep Chaudhary<br>Associate Professor<br>Department of Structural Engineering<br>Malaviya National Institute of Technology<br>Jaipur, JLN Marg<br>Jaipur - 302 017.<br>Rajasthan.<br><br>And<br>Dr. A K Nagpal, Dept. of Civil Engineering, IIT-Delhi. |
| 62. | 07.3.2012 | Rs. 78,39,600/-<br>(36 months)   | DST/TSG/AF/2011/90       | Glycerol-based Carbon Acid Catalyst for the Production of Ethanol                                                             | Dr. B.L.A. Prabhavathi<br>Devi<br>Scientist-E1                                                                                                                                                                                                                |

|     |           |                                         |                         |                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                |
|-----|-----------|-----------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |           |                                         |                         | and Value-added<br>Chemicals from<br>Biomass                                                                                           | Lipid Science &<br>Technology Division<br>Indian Institute of Chemical<br>Technology (IICT)<br>Hyderabad-500 007Andhra<br><br>And<br><br>Dr. Ashok Pandey, Head,<br>Biotechnology Division &<br>Centre for Biofuels,<br>National Institute for<br>Interdisciplinary Science<br>and Technology (NIIST)<br>Industrial Estate PO<br>Trivandrum-695 019,<br>Kerala |
| 63. | 07.3.2012 | Rs.<br>1,28,55,000/-<br><br>(36 months) | DST/TSG/S<br>TS/2011/82 | Development of respons<br>with masonry infills<br>under dynamic loading<br>conditions.                                                 | Dr. S. Suresh Babu<br>Professor & HOD<br>Department of Civil<br>Engineering<br>Adhiyamaan College of<br>Engineering<br>Dr. M.G.R. Nagar<br>Hosur- 635 109.<br>Tamil Nadu.                                                                                                                                                                                      |
| 64. | 07.3.2012 | Rs. 90,38,400/-<br><br>(24 months)      | DST/TSG/A<br>F/2010/48  | Value-addition of<br>Karanja cake by<br>gasification to syngas                                                                         | Dr. B. Satyavathi,<br>Scientist-E1,Chemical<br>Engineering Division,<br>Indian Institute of<br>Chemical Technology<br>(IICT), Taranaka,<br>Hyderabad-500 007,<br>Andhra Pradesh.                                                                                                                                                                               |
| 65. | 15.3.2012 | Rs. 88,39,200/-<br><br>(24 months)      | DST/TSG/A<br>F/2011/49  | Development of a mode<br>switching biogas –<br>biodiesel/diesel HCCI<br>engine with a high<br>pressure common rail<br>injection system | Dr. A. Ramesh, Internal<br>Combustion Engine<br>Laboratory, Dept. of<br>Mechanical Engineering,<br>Indian Institute of<br>Technology- Madras<br>(IIT-M), Chennai- 600<br>036, Tamailnadu.                                                                                                                                                                      |
| 66. | 20.3.2012 | Rs.<br>7,03,13,800/-                    | DST/TSG/S<br>H/2011/106 | Generation, Storage<br>and distribution of<br>Solar Hydrogen                                                                           | Dr. Muralidhar, Dept. of<br>Mechanical Engineering,<br>Indian Institute of                                                                                                                                                                                                                                                                                     |

|  |  |             |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--|--|-------------|--|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  | (24 months) |  |  | <p>Technology (IIT), Kanpur-208 016, Uttar Pradesh.</p> <p>Dr. Raj G Pala, Dept. Of Mechanical Engineering, Indian Institute of Technology (IIT), Kanpur-208 016, Uttar Pradesh.</p> <p><u>PIs:</u></p> <p>i) Dr. S Sreenivasa Murthy, Dept. of Mechanical Engineering, IIT-M Chennai.</p> <p>ii) Dr. S. Ravichandran, Scientist, CECRI, Karaikudi.</p> <p>iii) Dr. H S Sodaye, Scientist, BARC, Mumbai.</p> <p>iv) Dr. (Mrs) S R Bhardwaj, Scientist, BARC, Mumbai.</p> <p>v) Dr. Rakesh K. Sharma, Dept. of Chemistry, IIT-R, Jodhpur.</p> <p>vi) Dr. Sahab Dass, Dept. of Chemistry, Dayalbagh Educational Institute, Agra.</p> |
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