

List of Research & Development Projects Approved Under NTTM

| S. No. | PI Name | Implementing Institute | PI Contact Number | Project Title | Cost (INR Cr.) | Duration (Years) | MSG |
|---------------|--------------------------|-------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------|------------|
| 1 | Dr. T.V. Sreekumar | BTRA | 9004031170 | Development of Carbon anotube Reinforced crylic Precursors for Carbon Fibre | 21.096 Cr | 3 years 6 months | 1st |
| 2 | Prof Prakriti Tayaliya | IIT Bombay | 9769742728 | Biodegradable & bioactive nanofibrous face mask' under the research topic "Surface modification of Carbon Fiber | 2.034226 Cr | 4 years 0 months | 1st |
| 3 | Prof Prakriti Tayaliya | IIT Bombay | 9769742728 | Carbon based Dermal Patch for Vitiligo Therapy | 3.399 Cr | 4 years 6 months | 1st |
| 4 | Dr.Ashwini K. Agrawal | IIT Delhi | 9810585313 | High performance composite Fibres | 27.79 Cr | 4 years 6 months | 1st |
| 5 | Dr. Javed Sheikh | IIT Delhi | 9818808423 | A technology platform for design and manufacturing of advanced and multi-functional 3D woven Textile Structural Composites using High performance and natural fibres | 21.2848012 Cr | 4 years 0 months | 1st |
| 6 | Dr.Chandra Sekhar Sharma | IIT Hyderabad | 8374461784 | Activated and Patterned Carbon Nanofibers based Advance Design Configuration for High Performance Lithium-Ion Batteries and Supercapacitors | 0.9802052 Cr | 3 years 0 months | 1st |
| 7 | Dr.Chandra Sekhar Sharma | IIT Hyderabad | 8374461784 | Scaling up of electro- spinning process for nano- fibers | 1 Cr | 3 years 6 months | 1st |
| 8 | Dr. Niraj Sinha | IIT Kanpur | 05122597038 | Engineering Fibers for Fog | 1.55 Cr | 4 years 0 months | 1st |

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| | | | | Harvesting and Interfacial Solar Water Purification | | | |
| 9 | Dr. K Rajkumar | IRMRA | 8655095342 | Development of Tyre Tread Compound using Graphene in combination with Carbon & Silica as a Reinforcing Filler for Reducing the Rolling Resistance (RR) and Improving Fuel Efficiency | 1.3634524 Cr | 4 years 0 months | 1st |
| 10 | Dr. Prakash Vasudevan & Dr. L Amalarparamary | SITRA | 9600975208 | Design and development of facile high throughput needle less electrospinning set-up | 1.9971 Cr | 3 years 0 months | 1st |
| 11 | Dr. Dharitri Rath | IIT Jammu | 0191-274-1141 | MicroRNA Diagnostic Kit using Doped Carbon Nanofibers | 0.6947 Cr | 3 years 0 months | 1st |
| 12 | Dr. Bipin Kumar | IIT Delhi | 9990240340 | Knitting for Composite Preform Developments using Technical Yarns | 1.2092064 Cr | 3 years 3 months | 2nd |
| 13 | Prof. Mangala Joshi | IIT Delhi | 9818927946 | Development of Multifunctional Graphene incorporated High Molecular Weight Polyethylene (HMWPE) or High Density Polyethylene (HDPE) fibres by an alternative melt route | 0.9421824 Cr | 2 years 6 months | 2nd |
| 14 | Dr. Bhanu Nandan | IIT Delhi | 8800762528 | Carbon Fiber-based functional electrode materials for | 1.24864 Cr | 3 years 0 months | 2nd |

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| | | | | energy storage applications | | | |
| 15 | Dr. Vijay N Baheti | IIT Delhi | 7507899702 | Development of EMI shielding and heat generating activated carbon fabrics from textile wastes | 0.42 Cr | 2 years 0 months | 2nd |
| 16 | Dr Prof.B. K.Behera | IIT Delhi | 9818808423 | Development of multifunctional structural geotextiles using Textile wastes and Hybrid fabrics | 5.98 Cr | 3 years 6 months | 2nd |
| 17 | Dr. Mudrika Khandelwal | IIT Hyderabad | 9966355510 | Biodegradable self-sanitizing bacterial nano cellulose fabric for air and water filtration | 0.5084 Cr | 2 years 0 months | 2nd |
| 18 | Dr. Sireesh Saride | IIT Hyderabad | 91 40 2301 6302 | Laboratory And Field Investigations on PET Geo grid-Reinforced Base/Sub base Courses. | 2.1500569 Cr | 3 years 0 months | 2nd |
| 19 | Prof. B. Umashankar | IIT Hyderabad | 9652505789 | Use of geosynthetics in pavements over soft and expansive subgrades: A sustainable solution. | 0.5093568 Cr | 3 years 0 months | 2nd |
| 20 | Asst. Prof. Nilanjan | IIT Kharagpur | 8442953215 | Development of biocompatible glass fibre composite for healthcare applications | 2.0495 Cr | 3 years 0 months | 2nd |
| 21 | Prof Swambabu Varanasi | IIT Kharagpur | 9760434880 | Synthesis of Carbon nanofibres from textile/cotton waste | 0.6325 Cr | 3 years 0 months | 2nd |
| 22 | Dr. Shaikh M. Mobin | IIT-INDORE | 9713030406 | Combating Pandemics through textiles: An Approach to | 0.9550816 Cr | 2 years 0 months | 2nd |

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| | | | | Ease Viral/ Bacterial Infections using advanced Nano Fibrous fabrics | | | |
| 23 | Dr. Yogesh Sharma | IIT-Roorkee | 01332284861 | Mass Production of High Performance Carbon Fibers and Nanofibric Separators by Electro-spinning Techniques for Rechargeable Batteries and Super- capacitors | 1.4416 Cr | 2 years 3 months | 2nd |
| 24 | Dr. Anil Kumar Mishra | IIT Guwahati | 9678069513 | Performance evaluation of Water Hyacinth as an alternate geotextile material. | 0.21148 Cr | 2 years 0 months | 2nd |
| 25 | Dr Manisha Sathe | DRDE, DRDO, Gwalior | 9926640542 | Next Generation lightweight, breathable Activated Carbon Fabric (ACF) & Nano web based multilayered chem.-bio facemask for protection against Toxic Chem-Bio Agents | 1.5 Cr | 2 years 0 months | 2nd |
| 26 | Dr. AK Saxena | ADRDE, DRDO, Agra | 9440534906 | PTFE coated Glass/Para- aramid fabric for large Inflatable Randomes | 3.5 Cr | 2 years 0 months | 2nd |
| 27 | Dr. AK Saxena | ADRDE, DRDO, Agra | 9440534906 | Development of Parachute material using high molecular weight/ high strength polyethylene yarns | 3.37 Cr | 2 years 0 months | 2nd |
| 28 | Dr. Kaushik Ghosh | Institute of Nano Science and | 8427017574 | Scalable Manufacturing of MXene / | 1.55098 Cr | 7 years 6 months | 2nd |

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| | | Technology, Mohali | | Graphene / 2D material Impregnated Hollow Flexible Carbon Fibers for Energy Storage and Conversion Applications | | | |
| 29 | Dr. Raja Shunmugam | IISER-Kolkata | 9748897367 | Design of fibre-like crosslinked high stable polymeric material to remediation of textile generated waste management | 0.795408 Cr | 3 years 0 months | 2nd |
| 30 | Dr.Pronobesh Chattopadhyay | DRL, DRDO, Assam | 9435183212,8755843333 | Insecticide incorporated Agronets: Green Technology to minimize the insecticide burden to biosphere | 0.97 Cr | 2 years 0 months | 2nd |
| 31 | Dr.T.V. Sreekumar | BTRA | +91-22-62023666 | Development of High Performance Gel Spun UHMwPE Fibres and Tapes for Bullet Proof and Geo-Grids/Geo-Composites Applications | 6.14 Cr | 2 years 6 months | 3rd |
| 32 | Dr. Vijay N Baheti | IIT Delhi | 7507899702 | Development of long lasting and biodegradable electrospun/ needle punch nonwoven composite mulch using natural fibrous wastes. | 1.9180454 Cr | 3 years 0 months | 3rd |
| 33 | Dr. Apurba Das | IIT Delhi | +91-11-26591413 (O), +91-9871648134 (M) | Thermo-acoustic Insulation Textiles for Automotive | 1.8657824 Cr | 3 years 0 months | 3rd |
| 34 | Dr. Abhijit Majumdar | IIT Delhi | 01126591405 | A Circular Approach for the Development of | 10.3416 Cr | 3 years 0 months | 3rd |

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| | | | | Durable Antibacterial and Moisture Management Polyester Fibres for Sports Textiles | | | |
| 35 | Dr. Sireesh Saride | IIT Hyderabad | 040 2301 6302 | Development and Feasibility Studies on Drainage and Reinforcement Functions of 3D Geocomposites in Pavements | 2.3334 Cr | 3 years 0 months | 3rd |
| 36 | Dr. Anil Agarwal | IIT Hyderabad | +91-40-2301 (6312) | Use of Perforated Basalt Fabric Reinforced Cementitious Matrix in Structural Strengthening Applications | 0.924 Cr | 3 years 0 months | 3rd |
| 37 | Dr. Adinpunya Mitra | IIT Kharagpur | +91 3222 283168 | Evaluation of natural fibre based agro-textile products in protected eco-friendly structures for production of high value horticultural crops | 1.75 Cr | 2 years 0 months | 3rd |
| 38 | Dr. Abhijeet Joshi | IIT-INDORE | 91-731-660 (3344) | Functional textiles for tackling organophosphate insecticides, pesticides and nerve agents' toxicity | 0.6 Cr | 3 years 0 months | 3rd |
| 39 | Dr. Debrupa Lahiri | IIT-Roorkee | 91-1332-28-5137 | Carbon nanotube reinforced polyethylene fiber and fabric for high strength application | 0.4998186 Cr | 2 years 0 months | 3rd |
| 40 | Dr. Ranjan Jha | IIT-Bhubaneswar | +91-674-713-5136 | Fiber reinforced cotton and polyester | 0.7193004 Cr | 3 years 0 months | 3rd |

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| | | | | photonics fabrics with thermal comfort and illumination functionality | | | |
| 41 | Dr. Amit Jaiswal | IIT-Mandi | 01905-267-154 | Development of 2D nanomaterial-based photo thermally active antimicrobial nanocoated Fabrics and PPE | 0.32 Cr | 2 years 0 months | 3rd |
| 42 | Dr. Amar Patnaik | MNIT-Jaipur | 01418888888 | Development of E-glass/Carbon textile reinforced hybrid polymer composites for wind turbine Blade application | 0.4140288 Cr | 3 years 0 months | 3rd |
| 43 | Dr. Amar Patnaik | MNIT-Jaipur | 01418888888 | Development of Ceramic and UHMWPE Textile Based Hybrid Polymer Composite Armor | 3.6336384 Cr | 3 years 0 months | 3rd |
| 44 | Dr. M S Parmar | NITRA | 1202807390 | Development of Specialized Firefighting Suit | 9.0436 Cr | 3 years 0 months | 3rd |
| 45 | Dr. Arindam Basu | NITRA | 1202807390 | Development of flame-retardant Nylon 66 yarn/fibre indigenously | 2.6016 Cr | 3 years 0 months | 3rd |
| 46 | Dr. Madappa VR Sivasubramanian | NIT-Puducherry | 04368-265233,265235-108 | Polyethylene Engineered Cementitious Composites (PE-ECC) for High Resilient Infrastructure | 0.71 Cr | 3 years 0 months | 3rd |
| 47 | Dr. Arunangshu Mukhopadhyay | NIT-Jalandhar | 94632 83698 | Development and manufacture of Ultra High Molecular Weight Polyethylene (UHMWPE) nano-fabrics and its composite for | 0.55 Cr | 1 years 6 months | 3rd |

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| | | | | reusable respiratory masks | | | |
| 48 | Dr. Sanjay Saini | SASMIRA | 9867215320 | Development of High Strength Cost effective Seamless Technical Circular Fabric from Heavy Denier Multifilament Yarns for Geotechnical Applications | 7.025 Cr | 3 years 0 months | 3rd |
| 49 | Chandra Shekhar Malvi | MITS-Gwalior | 9993207600 | Development of Multi-layered Firefighter's suit for Protection against Thermal Hazards and Pressurized Steam | 0.8732 Cr | 2 years 0 months | 3rd |
| 50 | Dr. V. Gayathri | Thiagarajar College of Engineering, Madurai | NA | Development of smart cloth using carbon nano tube reinforced nano composites | 0.83 Cr | 2 years 0 months | 3rd |
| 51 | Dr. A.K. Srivastava | CSIR-AMPRI-Bhopal | 91 (0)755 2457105 | Development Of Carbon Nanofiber Materials From Cow Dung/ Bio-sludges For Smart Fabric Textile And Selective CO2/H2 Energy Storage Applications By 3D Printing Technology. | 0.7763272 Cr | 3 years 0 months | 3rd |
| 52 | Dr. Susanta Kumar De | Bidhan Chandra Krishi Viswa Vidyalaya, West Bengal | 9433438870 | Use of Jute Agro Textiles as prospective mulching material to test the suitability of mango based intercropping systems towards | 3.05268 Cr | 3 years 0 months | 3rd |

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| | | | | increasing crop productivity and promotion of livelihood security for the backward farming community Red and Lateritic Zones of West Bengal | | | |
| 53 | Dr. Sapna Gautam | C S K Himachal Pradesh Agricultural University, Palampur | 9418011205 | Sustainable use of unconventional fibres of Indian Himalayas for Agro textiles | 3.1486 Cr | 3 years 0 months | 3rd |
| 54 | Dr. Prasanta Kumar Panda | BTRA | 8850274854 | Development of alkaline resistance polyester for the geosynthetic applications | 3.8067784 Cr | 3 years 0 months | 4th |
| 55 | Dr. Asim Tewari | IIT Bombay | 91-22-2576-7521 | Hydrogen pressure vessel manufacturing using Textile based Composites – TeCoPV India | 24.34 Cr | 3 years 0 months | 4th |
| 56 | Dr. Harun Vekantesan | IIT Delhi | 01126548717 | Mission for Developing Aerogels Based Textile Materials for Civilian, Industrial and Defense Applications. | 5.8545897 Cr | 2 years 0 months | 4th |
| 57 | Dr. Vijay N Baheti | IIT Delhi | 7507899702 | Development of metallized textiles for applications in personal protective equipment. | 0.5 Cr | 1 years 0 months | 4th |
| 58 | Dr. Manjesh Kumar | IIT Kanpur | 8858612169 | Development of UHMWPE Fibers and Disentangled Melt for impact mitigation | 0.6504 Cr | 1 years 0 months | 4th |

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| 59 | Dr. Prakash Vasudevan | SITRA | 9600975208 | Development of natural herbal extract coated seed protection bag using natural fiber with long lasting mechanical and insecticidal properties | 0.59624 Cr | 2 years 1 months | 4th |
| 60 | Dr. Chandra Sekhar Tiwary | IIT Kharagpur | 8078317531 | Development of Strong and multifunctional (fire Resistant/Anti-Bacterial/Hydrophobic) fabric Using Graphene (Activated Carbon from agricultural Waste) and White-Graphene (hBN) Composite with research to product goals | 1.6896 Cr | 3 years 0 months | 4th |
| 61 | Dr. Amit Shaw | IIT Kharagpur | +91 03222 283424 | Ramie fibre in defence applications: Development of low-cost protective units | 0.13 Cr | 1 years 0 months | 4th |
| 62 | Dr. Sarang Gumfekar | IIT-Ropar | 7620063191 | Development of Indigenous Encapsulated Phase Change Material (PCM)-based Active Wear Textiles and Demonstration of Commercial-scale Manufacturing | 19.61 Cr | 2 years 0 months | 4th |
| 63 | Prof. G. Madhavi Latha | IISc-Bengaluru | 9886050600 | Design of Reinforced Earth (RE) Retaining wall & RE Abutments for HSR and Railway applications | 0.5 Cr | 1 years 7 months | 4th |

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| 64 | Dr. K. Muthukkumaran | NIT-Trichy | 0091 9443651836 | Municipal Solid Waste (Soil Like Material) and Geotextile Interaction Study for Pavement Subgrade and Embankment Applications in Soft Ground | 0.303152 Cr | 1 years 0 months | 4th |
| 65 | Dr. M S Parmar | NITRA | 01202807390 | Cellulose-based indigenous high Clo value and low-density surface modified natural fibre for developing thermal layers of extreme cold climate clothing | 1.5648 Cr | 3 years 0 months | 4th |
| 66 | Dr. Arindam Basu | NITRA | 0120-2807390-95 | Development of 3D High Performance Knitted Sports Textiles with Thermo-Physiological Comfort and Impact Protective Properties | 1 Cr | 1 years 9 months | 4th |
| 67 | Dr. Arindam Basu | NITRA | 0120-2807390-95 | Development of Crop cover, mulch, soil protection fabrics and other products using Sun hemp and Banana Fibre | 1.0004 Cr | 1 years 8 months | 4th |
| 68 | Dr. V. Senthilkumar | NIT-Puducherry | +91 9600678311, +91 7904210697 | Design, Development and Performance Assessment of Coir Geotextile Barriers for Landslide Mitigation | 0.294966 Cr | 2 years 0 months | 4th |
| 69 | Ravi Prakash Singh | SASMIRA | 9833345769 | Development of Energy Responsive Agrotextile for low cost | 0.49896 Cr | 1 years 0 months | 4th |

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| | | | | opportunities to grow off-season vegetable/fruits | | | |
| 70 | Dr. KK Misra | WRA | 9558434628 | Development of eco-friendly natural fibres based sustainable agro-textiles for packaging of agro products with protection against rodents, microorganisms including bacteria, fungi and viruses and UV repellent properties | 1.79 Cr | 2 years 0 months | 4th |
| 71 | Dr Laxmikanta Nayak | ICAR-Kolkata | 9433152846 | Development of jute bags for protection and quality preservation of stored seeds | 0.5 Cr | 1 years 8 months | 4th |
| 72 | Dr Nilimesh Mridha | ICAR-Kolkata | 8587976995 | Natural fibre waste to planting growth media: development characterization and evaluation in soilless crop production system | 0.49 Cr | 1 years 8 months | 4th |
| 73 | Dr. Sanjeev Kumar | Punjab Engineering College | 9466326131 | Lead free ferroelectric-PVDF electrospun fibre composites for energy harvesting textile applications | 0.17 Cr | 1 years 0 months | 4th |
| 74 | Dr. Apurba Das | IIT Delhi | 9871648134 | Cut, Slash, Stab, and Impact-Cut Resistant Textiles for Protection | 4.2005904 Cr | 3 years 6 months | 5th |
| 75 | Dr Asha Syamakumari | CSIR-NCL | 9420482376 | Development of spinnable grade meta and para-aramid polymers | 8.9906352 Cr | 3 years 0 months | 5th |

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| | | | | and their fibre spinning | | | |
| 76 | Dr Shital S Palaskar | BTRA | 7447494667 | Plasma assisted waterless dyeing of high-performance textiles using supercritical fluid for application in technical textiles | 13.566 Cr | 3 years 0 months | 5th |
| 77 | Dr. Santosh K. Misra | IIT Kanpur | 8217227498 | Preparation and Production of Technical Textile "ElecTex" with Electro-responsive Properties for Improved Wound Healing Properties | 0.5352 Cr | 2 years 0 months | 5th |
| 78 | Dr. Rik Rani Koner | IIT-Mandi | 9816978554 | Multi-Metal and Hetero atom Decorated Lignin Derived Carbon Fibers as Energy Storage Materials | 0.79728 Cr | 2 years 0 months | 5th |
| 79 | Dr. Ethayaraja Mani | IIT-Madras | 9655498769 | 3D Printed protein-based textile fibers | 1 Cr | 1 years 6 months | 5th |
| 80 | Dr. Soumyadip Choudhury | IIT Kharagpur | 8420489453 | Binder Free, Self-Supported Hierarchical Porous carbon Fiber For Inversely Vulcanized Li-S Battery Electrodes | 0.61182 Cr | 1 years 6 months | 5th |
| 81 | Dr. Supriya Pal | NIT-Durgapur | 9434788154 | Development of nanocomposite jute-geotextile for high-speed railway embankment system to enhance the durability and its remotely health monitoring using | 0.99704 Cr | 1 years 6 months | 5th |

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| | | | | Internet of Things (IoT) | | | |
| 82 | Dr. Prasanta Kumar Panda | BTRA | 8850274854 | Preparation of Lyocell CNT Composite High Strength Carbon Fibers | 1.008 Cr | 1 years 4 months | 5th |
| 83 | Dr. Somenath Ganguly | IIT Kharagpur | 03222 282037 | Electrodes for charge storage by (i) electrochemical deposition of transition metal oxide on carbon cloth and (ii) electrospun fiber from lignin based sources with subsequent carbonization | 0.474 Cr | 1 years 0 months | 5th |
| 84 | Dr.K Rajkumar | IRMRA | 8655095342 | Development of electro-spun carbon fibers using Bio-waste for energy storage application | 0.5 Cr | 1 years 0 months | 5th |
| 85 | Prof. Vijayan Pallippattu | IIT Jammu | 9324625833 | Poly 3-Hydroxybutyrate (PHB)-based bioplastics (polymer textile): An alternative eco-friendly solution to commercial plastics for packaging industry | 0.4086096 Cr | 1 years 0 months | 5th |
| 86 | Dr. Rupesh S. Devan | IIT-Indore | 8308208880 | Textile electrodes coated with agri/bio-wastederived activated carbon for high-performance, eco-friendly, flexible all-solidstate supercapacitors | 0.4995672 Cr | 1 years 0 months | 5th |

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| 87 | Dr. R. Velmurugan | IIT-Madras | 9791109144 | Studies on the Ballistic Energy Absorption of Polyethylene Coated Aramid Fabrics | 0.269 Cr | 1 years 6 months | 5th |
| 88 | Dr. Hemlata Kapil Bagla | Kishinchand Chellaram College | 9821420698 | Self-healing cement based on electro spun polymer composite nanofibers | 0.49754 Cr | 1 years 6 months | 5th |
| 89 | Dr. Sanjay Rangnat Dhakate | CSIR-NPL | 01145609388,8375964184 | Coal tar pitch-based fibers and its conversion into carbon fibers | 2.7035872 Cr | 2 years 0 months | 6th |
| 90 | Dr. Mallika Datta | Government College of Engineering and Textile Technology, Serampore | 9163058150 | Development of natural fibre-based hybrid composite for acoustic insulation | 1.0467928 Cr | 3 years 0 months | 6th |
| 91 | Dr. Trishikhi Raychoudhury | IIT -Jodhpur | 91-7759076650 | Performance evaluation of selected geotextile-based liner material against seepage loss in water conservation system under a wide range of temperature | 1.49 Cr | 1 years 6 months | 6th |
| 92 | Dr. Bipin Kumar | IIT Delhi | 9990240340 | Sustainable process optimization for high-performance fibrous waste management and valorization | 8.8795776 Cr | 3 years 0 months | 6th |
| 93 | Dr. Arun Kumar Patra | UPTTI-Kanpur | 9992397043 | Functionalized Textiles for Germicidal applications | 0.987704 Cr | 1 years 6 months | 6th |

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| 94 | Dr. Ashutosh Sharma | IIT Kanpur | 9935397366 | Development of indigenous High-Performance Ultra High Molecular Weight Polyethylene (UHMWPE) fibres/shields for bullet proof applications in defence and civil domains | 3.3294 Cr | 2 years 0 months | 6th |
| 95 | Dr. R Gnanamoorthy | IIT-Madras | 91 9935397366 | Additive Manufacturing of Technical Textiles for Sustainable Mobility- Agro Waste Based Materials and Product Design | 0.99946 Cr | 2 years 0 months | 6th |
| 96 | Dr Premnath Ram Surwase | SASMIRA | 9600087590 | Development of special 3D engineered fabric impregnated with graphene and speciality chemicals | 0.8844 Cr | 1 years 0 months | 6th |
| 97 | Dr Anand Kishore Kola | NIT-Warangal | 0870-2462623,91-9966541095 | Fabrication of multifunctional polypropylene doped graphene oxide incorporated polyaniline nanofiber for antistatic, anticorrosion and antimicrobial applications | 0.369454 Cr | 1 years 6 months | 6th |
| 98 | Dr. J Ramkumar | IIT Kanpur | 0512-259-7546 | Development of Prototype Melt-Spinning Machine for manufacturing Tri-lobal Cross-section Bi-Component Fibers | 0.993168 Cr | 2 years 0 months | 6th |

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| 99 | Dr. Sahil Bansal | IIT Delhi | 8968054656 | Development of High-Performance Fiber- Reinforced Concrete for Building Applications | 0.996 Cr | 1 years 6 months | 6th |
| 100 | Ms. Komal Kukreja | BTRA | 9794945733 | Preparation of cellulose-based aerogels and its composite for thermal insulation application | 0.5 Cr | 1 years 6 months | 6th |
| 101 | Dr. Archana Samanta | IIT Delhi | 7011967800 | Development of optically responsive melt spun bi-component filaments from recycled polyesters for thermo-regulatory smart textiles | 0.5 Cr | 1 years 0 months | 6th |
| 102 | Dr. Shushil Kumar | IIT-Roorkee | 01332-284944 | Conversion of coal tar pitch and natural fibre (lignocellulosic biomass) to carbon fibre | 0.5 Cr | 1 years 3 months | 6th |
| 103 | Dr. Md. Vaseem Chavhan | NIFT-Telangana | 9885520876 | Development of biobased phase change material (PCM) microencapsulate thermoregulating finish for active wear application | 0.4993 Cr | 1 years 0 months | 6th |
| 104 | Dr. Kothandaraman R | IIT-Madras | 044-22574249,9444231700 | Boron-doped diamond coated corrosion-resistant carbon materials for electro-organic synthesis, energy, and clean water applications | 6.999 Cr | 3 years 0 months | 6th |

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| 105 | Dr. Lek haz Devulapalli, BTRA | BTRA | 9959107673 | The Development of treated Geosynthetic reinforced Asphalt Pavements | 6.5376 Cr | 3 years 0 months | 6th |
| 106 | Prof. Sandeep Verma | IIT Kanpur | 9935081810 | 3D Printed Technical Textiles for Defence Exosuits: Custom Fabrics for Physiological Monitoring and Decontamination Applications | 7.13472 Cr | 3 years 0 months | 6th |
| 107 | Dr. Debayan Bhattacharya | IIT Delhi | 91 11 26548547,91 9687957134 | Performance based design of geosynthetic reinforced soil (GRS) walls and bridge abutments for high- speed railway (HSR) subjected to seismic loading | 14.956288 Cr | 3 years 0 months | 6th |
| 108 | Dr. G. Krishna Prasad | ICAR-CIRCOT | 7666642100 | Development of High- Performance Woven Protective Gloves and Seamless Knitted gloves for Industrial Uses | 1.21 Cr | 2 years 0 months | 6th |
| 109 | Miss. Shreyasi Nandy | BTRA | 9831675072 | Development of Flame Retardant Aircraft Interior Fabrics By Plasma Assisted Chemical Treatment | 11.2824 Cr | 3 years 0 months | 7th |
| 110 | Mrs. Deepali Plawat | ATIRA | 8076915085 | Development of the Indigenous HEPA Filters using Nanofibre Technology | 8.973 Cr | 2 years 0 months | 7th |
| 111 | Dr. Bijay Prakash Tripathi | IIT Delhi | 8178263966 | Development of thermoregulating smart textiles | 5.4445 Cr | 3 years 0 months | 7th |

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| | | | | with encapsulated nano/micro sized phase change materials for sportswear application | | | |
| 112 | Dr. Rajiv K. Srivastava | IIT Delhi | 9871851968 | Valorization of textile waste to value-added, reverseprocessable porous scaffolds for selective sorption and separation | 2.5510584 Cr | 3 years 0 months | 7th |
| 113 | Dr. Sumit Sinha Ray | IIT Delhi | 9748159620 | Indigenous development of meltblowing system for fabrication of waste plastic bottle derived nonwoven | 3.37902 Cr | 3 years 0 months | 7th |
| 114 | Dr R. T. Durai Prabhakaran | IIT Jammu | 7051102533 | Low-cost Prosthetics Design and Fabrication using Advanced Textile and Composites Technology | 2.8782192 Cr | 3 years 0 months | 7th |
| 115 | Dr. Vinay Midha | NIT-Jalandhar | 9815948608 | Runoff Erosion Control using Jute and Coir Biaxial Stitch Bonded Nonwoven Geotextiles | 2.1578 Cr | 2 years 0 months | 7th |
| 116 | Dr. Mukesh Bajya | NIT-Jalandhar | 7014943972 | Development of cost effective ballistic and stab resistance soft body armour by using different high-performance materials | 1.884568 Cr | 2 years 0 months | 7th |
| 117 | Dr. Palaniswamy N.K | NIT-Jalandhar | 9942373108 | Solution Blow Spinning (SBS) of micro/nanofibre fabrics for air filtration: A | 1.8093 Cr | 3 years 0 months | 7th |

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| | | | | potential and scalable technique alternative to Electrospinning | | | |
| 118 | Dr. Zunjarrao Bapuso Kamble | NIT-Jalandhar | 9340327716 | Design And Manufacturing Of Advanced And Multifunctional Textile Structural Composite Materials Using Textile Waste | 1.0590632 Cr | 1 years 6 months | 7th |
| 119 | Dr. Bratin Ghosh | IIT Kharagpur | 9831064495 | Design of efficient wearable textile antennas | 0.7183488 Cr | 2 years 0 months | 7th |
| 120 | Dr. Sutapa Ghosh | CSIR IICT Hyderabad | 8309584340 | Fabrication of Polymer Waste derived Carbon Nanofiber and Composite based Biodegradable Electrospun Membranes for Water purification and beyond | 0.593 Cr | 3 years 0 months | 7th |
| 121 | Dr.T.Palanisamy | NIT-Karnataka | 9994862226 | Pre-oriented carbon fibre grid for Pozzolan based Low energy power source | 0.32516 Cr | 3 years 0 months | 7th |
| 122 | Dr. Anshul Faye | IIT-Bhilai | 9589272087 | Application of Bamboo fibre-reinforced composite components for sports goods | 0.21288 Cr | 2 years 0 months | 7th |
| 123 | Dr. Chinnaiah Sivakumar | CSIR-CECRI | 9443289771 | Fabrication of flexible conductive fibres/fabric for wearable electronic textiles | 1 Cr | 1 years 6 months | 7th |
| 124 | Prof. Soumitra Satapathi | IIT-Roorkee | 8126916483 | Development of Perovskite Solar | 1 Cr | 1 years 6 months | 7th |

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| | | | | Cells Based Smart E-Textiles | | | |
| 125 | Dr. Mrinal Kanti Mandal | NIT-Durgapur | 9434788188 | Development of an IoT Based Organic-Inorganic Contaminants Removal System (CRS) for Purifying Domestic Wastewater through Constructed Wetland using Durable, Nano-Composite Jute-Geotextile Sandwiched LECA Cartridges | 0.9996444 Cr | 1 years 6 months | 7th |
| 126 | Prof. S. Ramakrishnan | IIT-Madras | 9841093383 | Design and development of fabric antibody embedded matrix for tuberculosis screening | 0.5 Cr | 1 years 0 months | 7th |
| 127 | Dr. Hemant Kumar Shukla | NAL (CSIR) | 8296848414 | Development of intermediate modulus grade carbon fibre. | 77.9036 Cr | 3 years 0 months | 8th |
| 128 | Dr. T Gangopadhyay | ATIRA | 9662018410 | Design and development of CFRP composites slotted waveguide antenna for space and ground applications | 10.2954327 Cr | 1 years 6 months | 8th |
| 129 | Dr. Dipayan Das | IIT Delhi | 9718448992 | Electroconductive Fabric for Health and Safety | 3.361248 Cr | 3 years 0 months | 8th |
| 130 | Shri Ravindra V. Adivarekar | Institute of Chemical Technology (ICT), Mumbai | 9821227276 | Development of material for Flame Retarding Textile applications | 2.72261 Cr | 3 years 0 months | 8th |
| 131 | Dr. Mallika Datta | Government College of | 9163058150 | Development of glass filament | 0.78 Cr | 1 years 0 months | 8th |

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| | | Engineering and Textile Technology, Serampore | | wound type-4 pressure vessels. | | | |
| 132 | Dr. Pandiaraj Manickam | CSIR-CECRI | 9442771880 | Conductive yarns embroidered e-textile wearable systems for health and sports application. | 0.55548 Cr | 3 years 0 months | 8th |
| 133 | Dr. Murugan Veerapandian | CSIR-CECRI | 7339210030 | Development of Seaweed-derived Cellulose and Phytochemicals as Cost-efficient Additive Composite for Medical-grade Textiles | 0.5148264 Cr | 3 years 0 months | 8th |
| 134 | Dr. Prithviraj Mukhopadhyay | IIT Delhi | 8015764391 | Development of Spunlace Natural Fibre based Fabrics for Technical Textile Applications. | 0.9999996 Cr | 2 years 6 months | 8th |
| 135 | Dr. Arunangshu Mukhopadhyay | NIT-Jalandhar | 9463283698 | Development of Nonwoven Composite with Metal-Organic Frameworks (MOFs) for Efficient Automotive Cabin Air Filtration | 1 Cr | 2 years 6 months | 8th |
| 136 | Dr Shantanu Dhara | IIT Kharagpur | 9434701616 | Development of Woven/Non-woven nano-micro-fibrous Hierarchical Textile for Medical Applications. | 1.9971102 Cr | 3 years 0 months | 9th |
| 137 | Dr R Siva Chidambaram | CSIR-CBRI | 9634430889 | Technical Textiles as Sustainable Building Materials for Various | 3.98 Cr | 3 years 0 months | 9th |

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| | | | | Structural, Non-Structural and Geotechnical Applications in Construction | | | |
| 138 | Mr Gottumukkala Bharath | CSIR-CRRI | 9154111114 | Development of Performance Prediction Models for Geosynthetic-Reinforced Pavements | 2.31 Cr | 3 years 0 months | 9th |
| 139 | Dr. Vineet Aniya | CSIR-IICT | 9581971743 | Sustainable Process for Production of Biodegradable Polymers from PET Bottle Scrap | 1.000476 Cr | 3 years 0 months | 9th |
| 140 | Dr.(Ms.)Smita Gopinath | CSIR- SERC | 9840518300 | Saline resistant Textile Reinforced Concrete for Coastal Constructions | 0.48 Cr | 2 years 0 months | 9th |
| 141 | Prof Deepti Gupta | IIT Delhi | 9810854239 | Development of Leather-like Bio-composite for use in Automobiles Mobiltech | 0.9998 Cr | 3 years 0 months | 9th |
| 142 | Dr. S. Anitha Priya Dharshani | NIT Warangal | 9489192069 | Geogrids for reinforcement of concrete slabs | 0.2213472 Cr | 3 years 0 months | 9th |
| 143 | Dr Dipti Gupta | IIT Bombay | 9967680827 | Developing Internet of Things (IoT) enabled Textile-Based Wearable Electronics for Healthcare, Sports and Military Applications | 1 Cr | 2 years 0 months | 9th |
| 144 | Dr Subhasish Basu Majumder | IIT Kharagpur | 9433611775 | Waste Fibre or Textile Fabric Reinforced Greener Engineered Cementitious Composites – A Replacement of Conventional | 1.5 Cr | 2 years 0 months | 9th |

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| | | | | Concrete for Sustainable Infrastructure | | | |
| 145 | Dr Bhupendra Singh Butola | IIT Delhi | 9818811183 | Fabrication and evaluation of the gamma protective clothing | 1 Cr | 1 years 8 months | 9th |
| 146 | Ms. Nishad Fatima N | CSIR-CLRI | 9840747478 | Functionalized Carbon Fiber Composites from Tannery Waste: A Sense and Shoot Platform for Chemical Warfare Agents. | 0.993 Cr | 1 years 10 months | 9th |
| 147 | Prof. Binod Kumar Kanaujia | NIT Jalandhar | 9868795834 | Design and Development of Flexible Smart Textiles Integrated with Antenna for Wearable Applications | 0.4994 Cr | 1 years 3 months | 9th |
| 148 | Dr. VG Vaidyanath | CSIR-CLRI | +91 44 2443 7142 | Development of Tunable Agrotextile with Smart Functionalities For Enhanced Crops Production | 0.47844 Cr | 1 years 3 months | 9th |
| 149 | Dr C Chandraprakash | IIT Kanpur | 0512-259-6743 | Development of foam-in-place packaging using agricultural residue | 0.495 Cr | 1 years 0 months | 9th |
| 150 | Dr. Sandeep Pandharinathrao More | Institute of Chemical Technology (ICT), Mumbai | 7057060888 | Azaacene Cored Anticounterfeiting Agents for Textiles | 0.5 Cr | 1 years 0 months | 9th |
| 151 | Dr Prakhar Gupta | IIT Hyderabad | (040) 2301 - 6677 | Design of next-generation flexoelectric-based piezoelectric fabrics | 0.11 Cr | 1 years 0 months | 9th |
| 152 | Dr. Srinivas Dharavath | IIT Kanpur | 0512-259-7826 | Indigenized production methods for both conventional | 0.49995 Cr | 1 years 0 months | 9th |

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| | | | | (petroleumbased) and sustainable (bio-based) PAN to create carbon fibers and their composites. | | | |
| 153 | Dr. A. Palaniappan | CSIR-CECRI | 8903484579 | Functional Textiles for Flame Retardant Application: Use of non-halogenated organophosphorus and nitrogen composite | 0.4999878 Cr | 1 years 3 months | 9th |
| 154 | Dr. Riya Bhowmik | IIT Jammu | 9717258801 | Geosynthetic-reinforced infrastructure in seasonally frozen regions of India | 4.153248 Cr | 3 years 0 months | 10th |
| 155 | Dr. Parvathi G. S. | CSIR-CRRI | 8171503754 | Development of an Ecofriendly Biodegradable 'Natural Prefabricated Vertical Drain (NPVD)' – A Sustainable Solution for Ground Improvement of Soft Soils | 2.5 Cr | 3 years 0 months | 10th |
| 156 | Dr. Raheena M | IIT-Ropar | 9633510266 | Investigating the viability of Recycled wool fabric as sustainable geosynthetic material | 0.499884 Cr | 1 years 3 months | 10th |
| 157 | Dr. Ramya Araga | NIT-Warangal | 7702097777 | Stearic acid blended polystyrene electrospun nanofibrous membrane embedded with exfoliated graphite for the separation of oil-water emulsions | 0.3906016 Cr | 2 years 0 months | 10th |

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| | | | | from produced water | | | |
| 158 | Dr. Debasish Sarkar | MNIT-Jaipur | 9549651472 | Development of Energy-Dense All-Carbon Lithium-ion Capacitor from Textile Waste derived Carbon Materials | 0.36 Cr | 2 years 0 months | 10th |
| 159 | Dr. S. Anitha Priya Dharshani | NIT-Warangal | 7569816659 | Braided fibre reinforced polymeric rebars for concrete structures | 0.5093472 Cr | 2 years 11 months | 10th |
| 160 | Dr. Anil Sharma | IJIRA | 9724399776 | Slope Protection and Erosion Control for clean water management & better infrastructure using natural fibres-based Geotextiles for Northeastern Region (M202) | 0.999 Cr | 2 years 0 months | 10th |
| 161 | Dr. Baadiga Ramu | IIT-INDORE | 7675015763 | Alternative Use of Iron Ore Tailings (IOT's) in Stabilization of Soft, Expansive Subgrade and Base Layers of Flexible Pavements in Conjunction with Geosynthetics: Transforming Waste into Engineered Material | 0.99996 Cr | 1 years 0 months | 10th |
| 162 | Archana Samanta | IIT Delhi | 7011967800 | Development of flexible supercapacitor components from textile wastes. (M267) | 1 Cr | 1 years 8 months | 10th |
| 163 | Dr. Nabanita Sadhuk | Institute of Chemical | 9926713685 | Lotus effect mimicking on cotton: Covalent | 0.5 Cr | 1 years 6 months | 10th |

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| | | Technology (ICT), Mumbai | | bond assisted dyeing, to obtain self-cleaning super hydrophobic cellulosic fabric. (M 353) | | | |
| 164 | Dr. Soumik Das | IIT Kanpur | 7518543773 | Cellulose nanocrystal/ Deep eutectic solvent based sustainable liquid crystalline nanocomposite fibres | 0.4991 Cr | 1 years 3 months | 10th |
| 165 | Dr. Anil Sharma | IJIRA | 9724399776 | Development of Different Extraction Techniques for Long Bamboo Fibre | 0.9438 Cr | 6 months | 10th |

Machinery Proposal Sanctioned Under NTTM

| S. No. | PI Name | Implementing Institute | PI Contact Number | Project Title | Cost (INR Cr.) | Duration (Years) | MSG |
|--------|----------------------|------------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------|-----|
| 1 | Mr. Madhu Sudan Dadu | Colorjet India Ltd | 9894991510 | Development of a Wide-Format Digital Printer to Print the Build-Tech applications | 4.0549 Cr | 1 years 0 months | 8th |
| 2 | Dr. M S Parmar | NITRA | 9810253731 | Development of Indigenous State-of-the-art Instruments to test Convective, Radiant and Conductive properties of Protective Textiles | 1.54976 Cr | 2 years 0 months | 8th |
| 3 | Dr Udayraj | IIT Bhilai | 7048971450 | Design and Development of a Sweating Thermal Mannequin Instrument for Performance Evaluation of Technical Textiles. | 2.1493 Cr | 3 years 0 months | 9th |