

3.2.3 Number of research projects per teacher funded by government and non-government agencies during the last five years (5)

| S.no | Name of the Project/ Endowments, Chairs | Name of the Principal Investigator / Co Investigator | Name of Funding Agency | Type (Government/Non-Government) | Department of Principal Investigator / Co Investigator | Year of Award | Funds Provided (In Lakhs) | Duration of the project |
|------|---|--|---|----------------------------------|--|---------------|---------------------------|-------------------------|
| 1 | Bio Incubator Grant (Bio Nest) | Dr. M. Parvez Alam & Dr.S.Hemalatha | Biotechnology Industry Research Assistance Council (BIRAC) | Government | CIIC & Life Sciences | 2018-19 | 240.00 | 3 Years |
| 2 | Supply, Erection, Installation, Commissioning, Operation and Maintenance of Co-Digestion plant for Organic Fraction of Leftover Food waste, Vegetable peels and Fruit peels for Biogas generation from Hotel industry on Turnkey basis - Biogas Plant | Dr. T. Harinarayana | CSIR-Central Leather Research Institute funded by Department of Science and Technology (CLRI & DST) | Government | Mechanical Engineering | 2018-19 | 21.70 | 1 Year |
| 3 | Formulating antibiotic resistance breakers to control multidrug resistant pathogenic bacteria | Dr. S. Hemalatha & Mrs. Ranjai | Department of Biotechnology (DBT) | Government | Life Sciences | 2018-19 | 30.34 | 3 Years |
| 4 | "Synthesis and Characterization of ZrO ₂ Dispersed Ti, Ti-6Al-4V, Ti-6Al-5V, Ti-6Al-7Nb composite" | Dr. Karunanithi | Science and Engineering Research Board (SERB) | Government | Aerospace Engineering | 2018-19 | 18.30 | 3 Years |
| 5 | Design of Antennas for 5G Applications | Ms.Sivashanmuga Valli | Science and Engineering Research Board (SERB) | Government | Electronics and Communication Engineering | 2018-19 | 18.30 | 3 Years |
| 6 | Light induced process of Hierarchical electron cascade system, Materials and Devices for Solar energy conversion | Dr. Asha Jhonsi Mariadoss | Science and Engineering Research Board (SERB) | Government | Chemistry | 2018-19 | 18.30 | 3 Years |
| 7 | Mechanistic anti-tumour activity of vernodaline isolated from centratherum anthelminticum on colorectal cancer cells | Dr. P. Ashok Kumar | Science and Engineering Research Board (SERB) | Government | Life Sciences | 2018-19 | 18.30 | 3 Years |
| 8 | Cellular Automata Models for Propagation of Tsunami Waves | Dr. E.Syed Mohamed | Science and Engineering Research Board (SERB) | Government | Computer Science and Engineering | 2018-19 | 12.48 | 3 Years |
| 9 | Triazole based New Functional Chromophores for optoelectronics and Biological Application | Dr. K. Karthikeyan | Tamil Nadu State Council for Science and Technology (TNSCST) | Government | Chemistry | 2018-19 | 3.2 | 2 Years |
| 10 | An empirical Investigation of Minimum support price on Agriculture Commodities | Dr. Mohd. Amir & Dr. Afzalur Rahman | Tamil Nadu State Council for Science and Technology (TNSCST) | Government | Commerce | 2018-19 | 1.80 | 1 Year |
| 11 | Training program on "Automotive Embedded System" | Dr.C.Tharini | M/s. Jasmin Infotech | Non Government | Electronics and Communication Engineering | 2018-19 | 40.00 | 3 Years |
| 12 | Automation of Climate Control inside a naturally ventilated polyhouse (GREEN HOUSE) | Dr. M. Parvez Alam & Mr. Kannan Ganapathi | Government of Tamilnadu, Entrepreneurship Development and Innovation Institute (TN-EDI) | Government | Management Studies | 2018-19 | 10.00 | 1 Year |
| 13 | A smart intravenous dripper System for centralized monitoring and automatic control of intravenous fluid. | Dr. M. Parvez Alam & Mr.Radhakrisnan Jothiram | Government of Tamilnadu, Entrepreneurship Development and Innovation Institute (TN-EDI) | Government | Management Studies | 2018-19 | 10.00 | 1 Year |

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|----|--|--|---|----------------|---|---------|--------|---------|
| 14 | Health and Sanitation of Wheels | Dr. M. Parvez Alam & Mr. Ravi Senji | Government of Tamilnadu, Entrepreneurship Development and Innovation Institute (TN-EDII) | Government | Management Studies | 2018-19 | 2.15 | 1 Year |
| 15 | End to End Water Management Solution | Dr. M. Parvez Alam & Mr.Mohideen | Government of Tamilnadu, Entrepreneurship Development and Innovation Institute (TN-EDII) | Government | Management Studies | 2018-19 | 2.00 | 1 Year |
| 16 | Islets Cells Transplantation | Dr. M. Parvez Alam & Dr. Nithya Kalyani | Government of Tamilnadu, Entrepreneurship Development and Innovation Institute (TN-EDII) | Government | Management Studies | 2018-19 | 5.00 | 1 Year |
| 17 | Development of Hybrid Rocket Motor | PI – Dr.P.N.Kadiresh CO-PI – Sri Nithya Mahottmannada | Aeronautics Research & Development Board (AR&DB), (DRDO) | Government | Aerospace Engineering | 2017-18 | 9.79 | 3 Years |
| 18 | Prof. S. Peer Mohamed Endowment Fund | Mr. Hamanulla N | Prof. S. Peer Mohamed Endowment Fund | Non Government | Physical Education | 2018-19 | 1.27 | 1 Year |
| 19 | Patient monitoring System for Scheizophrenia Research Foundation (SCARF) organization | Dr.C.Tharini | M/s.Jasmin Infotech | Non Government | Electronics and Communication Engineering | 2018-19 | 0.70 | 1 Year |
| 20 | Dr. Raja Sir Muthiah Chettiar of Chettinad Endowment Fund | Mr.T. Velmurugan | Dr. Raja Sir Muthiah of Chettinadu | Non Government | Physical Education | 2017-18 | 0.3 | 1 Year |
| 21 | Fault diagnosis on single stage helical planetary gearbox using machine learning algorithms | Aquib Yousuf, Aravind.V.K, Aravinda Krishnan.A, Farhanuddin.S.M. Syed Shaul Hameed | Tamilnadu State Council For Science And Technology (TNSCST) | Government | Mechanical Engineering | 2018-19 | 0.08 | 1 Year |
| 22 | Phycoremediation of CO2 Level in sub urban area via CO2 Sequestration by native microalgae : an eco friendly approach | Dr D Mubarak Ali, M Santhosh Kumar A Aravindh | Tamilnadu State Council For Science And Technology (TNSCST) | Government | Life Sciences | 2018-19 | 0.08 | 1 Year |
| 23 | ROBOLAB-4.0 engineering students for educational and skill purpose | Dr. S. Rasool Mohideen | M/s.Prag Robotics Pvt Ltd | Non Government | Mechanical Engineering | 2018-19 | 120.00 | 3 Years |
| 24 | Structural Behaviour of Corroding Prestressed Concrete Systems and Extension of Service Life using Cathodic Protection (In Collaboration with IIT, Madras) | Dr. M.S. Haji Sheik Mohammed (Co PI) | Science and Engineering Research Board (SERB) | Government | Civil Engineering | 2017-18 | 49.50 | 3 Years |
| 25 | Mira crab STP-1m3 Capacity advanced japanese waste water technology | T. Harinarayana | M/s.Kankyo Cleantech (I) Pvt Ltd | Non Government | Civil Engineering | 2017-18 | 20.00 | 3 Years |
| 26 | Vermi filter 1m3 capacity vermi operated STP | T. Harinarayana | M/s.Kankyo Cleantech (I) Pvt Ltd | Non Government | Civil Engineering | 2017-18 | | 3 Years |
| 27 | Biobox Biogas 50 kg capacity containarised bio gas technology. | T. Harinarayana | M/s.Kankyo Cleantech (I) Pvt Ltd | Non Government | Chemistry | 2017-18 | | 3 Years |
| 28 | Piro cracker 25 kg capacity plastic pirolysis unit | T. Harinarayana | M/s.Kankyo Cleantech (I) Pvt Ltd | Non Government | Physics | 2017-18 | | 3 Years |
| 29 | Antimicrobial Efficacy and Mechanisms of Whole Plant Extract of Acacia Arabica with Triphala on Biofilm Forming Cariogenic Microorganisms | Dr. Karthikeyan Ramalingam | The Ministry of Ayurveda, Yoga & Naturopathy, Unani, Siddha, Sowa Rigpa and Homoeopathy (AYUSH-EMR) | Government | Life Sciences | 2017-18 | 33.00 | 3 Years |
| 30 | Synthesis of antimicrobial nanoemulsions for the treatment of multi-drug resistant ESKAPE pathogens | Dr. Karthikeyan Ramalingam | Science and Engineering Research Board (SERB) | Government | Life Sciences | 2017-18 | 23.28 | 3 Years |
| 31 | Demo vehicle for mechanical / automobile engineering students for study and training purpose | Dr. Ashok Ghosh | M/s. Ford India Pvt. Ltd. | Non Government | Automobile Engineering | 2018-19 | 14.97 | Nil |
| 32 | Development of 17 hp Tractor for Indian Environment | Dr. R. Rajendran | M/s. SAEINDIA Pvt. Ltd. | Non Government | Mechanical Engineering | 2018-19 | 4.00 | Nil |
| 33 | Development of hybrid nano based BLDC motor and validation of the design by using VLSI technology | Dr. K. Boopathy | Defence Research and Development organisation (DRDO) | Government | Electrical and Electronics Engineering | 2017-18 | 9.79 | 2 Years |

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| 34 | Corrosion protection and service life extension of reinforced concrete roofing systems in existing buildings | Ms.Roopaa | Science and Engineering Research Board (SERB) | Government | Civil Engineering | 2017-18 | 18.30 | 3 Years |
| 35 | Endophytic diversity of herbal plant Hibiscus | Dr.Wasima. M | Department of Biotechnology (DBT) | Government | Life Sciences | 2017-18 | 8.00 | 1 Year |
| 36 | Tamil Tholkappiam | Dr. Shriram | Tamil Virtual Academy (TVA) | Government | Computer Science and Engineering | 2017-18 | 2.50 | 1 Year |
| 37 | Tamil Plagiarism Checker | Dr. Shriram | Central Institute of Classical Tamil (CICT) | Government | Computer Science and Engineering | 2017-18 | 2.15 | 1 Year |
| 38 | Velayutham mudaliar scheme Endowment Fund | Dr. Raja Prabu | Velayutham mudaliar scheme Endowment Fund | Non Government | Electrical and Electronics Engineering | 2018-19 | 1.00 | 1 Year |
| 39 | Prof. S. Peer Mohamed Endowment Fund | Dr . R. Auvai | Prof. S. Peer Mohamed Endowment Fund | Non Government | Physical Education | 2017-18 | 0.6 | 1 Year |
| 40 | Dr. Raja Sir Muthiah Chettiar of Chettinad Endowment Fund | Mr.T. Velmurugan | Dr. Raja Sir Muthiah of Chettinadu | Non Government | Physical Education | 2017-18 | 0.3 | 1 Year |
| 41 | A novel access to indolizidines and quinolizidine alkaloids through stereoselective N-tethered intramolecular cyclopropanation of pyridine | Dr. J. Elangovan | Department of Science and Technology (DST-SERB) | Government | Chemistry | 2016-17 | 48.70 | 3 Years |
| 42 | Construction of optical logic gates using soliton collisions and study of electrical solitons in nonlinear transmission lines | Dr. M. Vijaya jayanthi | Science and Engineering Research Board (SERB) | Government | Physics | 2016-17 | 32.44 | 3 Years |
| 43 | Development of Graphene and Metal Nanoparticles Reinforced Flexible Polymer nanocomposites for Effective Electromagnetic Interference (EMI) Shielding Applications | Dr. M. Basheer Ahamed | Science and Engineering Research Board (SERB) | Government | Physics | 2016-17 | 28.01 | 3 Years |
| 44 | Immunosuppressive cells within inflammatory Tumor Microenvironment | Dr. Neesar Ahmed | Science and Engineering Research Board (SERB) | Government | Life Sciences | 2016-17 | 25.00 | 3 Years |
| 45 | Antioxidant gene polymorphisms and ROS in cancer risk | Dr. Soumen Bera | Department of Biotechnology (DBT) | Government | Life Sciences | 2016-17 | 24.75 | 3 Years |
| 46 | Demo vehicle for mechanical / automobile engineering students for educational and demo purpose | Dr. Ashok Ghosh | M/s. Hyundai motor india foundation | Non Government | Automobile Engineering | 2016-17 | 8.08 | 3 Years |
| 47 | Dr. Raja Sir Muthiah Chettiar of Chettinad Endowment Fund | Dr . R. Auvai | Dr. Raja Sir Muthiah of Chettinadu | Non Government | Physical Education | 2016-17 | 5.0 | 1 Year |
| 48 | Prof. S. Peer Mohamed Endowment Fund | Dr . R. Auvai | Prof. S. Peer Mohamed Endowment Fund | Non Government | Physical Education | 2016-17 | 1.46 | 1 Year |
| 49 | Dr. Raja Sir Muthiah Chettiar of Chettinad Endowment Fund | Mr. Hamanulla N | Dr. Raja Sir Muthiah of Chettinadu | Non Government | Physical Education | 2016-17 | 0.44 | 1 Year |
| 50 | Seismic performance of exterior beam column joint using ferrocement jacket | Dr. J. Revathy | Tamilnadu State Council For Science And Technology (TNSCST) | Government | Civil Engineering | 2016-17 | 0.10 | 1 Year |
| 51 | Application of nano particles in green concrete for sustainable built environment | Dr. J. Revathy | Tamilnadu State Council For Science And Technology (TNSCST) | Government | Civil Engineering | 2016-17 | 0.10 | 1 Year |
| 52 | Development of Graphene SrTiO ₃ based hybrid photocatalytic system for the production of solar fuels | Dr. Noor Aman Ahrar Mundari | Science and Engineering Research Board (SERB) | Government | Chemistry | 2015-16 | 24.98 | 3 Years |
| 53 | Synthesis of Novel Low Band Gap Polymer Materials for Solar Cell Applications | Dr. Vajiravel Murugesan | Science and Engineering Research Board (SERB) | Government | Chemistry | 2015-16 | 23.78 | 3 Years |
| 54 | Investigation of multirate properties of rare earth and transition metal doped bismuth for functional applications | Dr. Shameem banu | Science and Engineering Research Board (SERB) | Government | Physics | 2015-16 | 23.55 | 3 Years |
| 55 | Synthesis, characterization and optimization of QDs on TiO ₂ surface for quantum dot solar cells | Dr. M. Asha Jhonsi | Science and Engineering Research Board (SERB) | Government | Chemistry | 2015-16 | 19.76 | 3 Years |
| 56 | Identifying the molecular basis of peroxidase activity of Peroxiredoxin 6 - An approach for designing Antioxidant Peptides and Inhibitors | Dr. Md Khurshid Alam Khan | Science and Engineering Research Board (SERB) | Government | Life Sciences | 2015-16 | 14.30 | 3 Years |
| 57 | Synthesis and characterization of multiferroite nano composite for functional applications | Dr. Shameem banu | Department of Science and Technology (DST) | Government | Physics | 2015-16 | 14.19 | 3 Years |

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|-----------------------------|---|---------------------------|--|----------------|----------------------------------|---------|----------------|-----------|
| 58 | Evaluation of sacrificial anode cathodic protection (SACP) system for reinforced concrete applications | Prof. Haji Sheik Mohammed | M/s.Radhe Structorepair Pvt Ltd., | Non Government | Civil Engineering | 2018-19 | 8.40 | 1.5 Years |
| 59 | The effect of aluminum on TiAlN, CrAlN and ZrAlN coatings using RF powered Magnetron Sputtering | Dr. S. Beer Mohamed | University Grants Commission -DAE consortium for Scientific Research | Government | Mechanical Engineering | 2015-16 | 8.21 | 3 Years |
| 60 | Prof. S. Peer Mohamed Endowment Fund | Dr. K. M. Mehata | Prof. S. Peer Mohamed Endowment Fund | Non Government | Computer Science and Engineering | 2015-16 | 5.03 | 1 Year |
| 61 | Sesmic retrofitting of pre-stressed concrete beams externally bonded with fibre reinforced polymer composites | Dr. J. Revathy | Science and Engineering Research Board (SERB) | Government | Civil Engineering | 2015-16 | 4.50 | 3 Years |
| 62 | gpX1 gene polymorphisms and mitochondrial ROS signaling in cancer risk | Dr. Soumen Bera | Science and Engineering Research Board (SERB) | Government | Life Sciences | 2015-16 | 4.00 | 3 Years |
| 63 | Prof. S. Peer Mohamed Endowment Fund | Dr. K. M. Mehata | Prof. S. Peer Mohamed Endowment Fund | Non Government | Computer Science and Engineering | 2015-16 | 4.37 | 1 Year |
| 64 | Prof. S. Peer Mohamed Endowment Fund | Dr . R. Auvai | Prof. S. Peer Mohamed Endowment Fund | Non Government | Physical Education | 2015-16 | 1.28 | 1 Year |
| 65 | Dr. Raja Sir Muthiah Chettiar of Chettinad Endowment Fund | Mr. Hamanulla N | Dr. Raja Sir Muthiah of Chettinadu | Non Government | Physical Education | 2015-16 | 0.56 | 1 Year |
| 66 | Palladium catalysed Buchwald Hartwig coupling of 2-C hydroxymethyl D glycols and aryl halides : Synthesis of functionalized C – Aryl Glycosides | Dr. Bhagavathy | Department of Science and Technology (DST) | Government | Chemistry | 2014-15 | 42.60 | 3 Years |
| 67 | Investigation of chaotic and strange nonchaotic phenomena in coupled nonlinear circuits and systems | Prof. I Raja Mohamed | Science and Engineering Research Board (SERB) | Government | Physics | 2014-15 | 32.46 | 3 Years |
| 68 | Seismic performance of FRP confined concrete filled steel tubular columns | Dr. P. Gajalakshmi | Ministry of Earth Sciences (MOES) | Government | Civil Engineering | 2014-15 | 29.10 | 3 Years |
| 69 | Preparation of rare-earth doped molybdate nanostructures using soft chemical route for opto electronic applications | Dr. J. Thirumalai | Science and Engineering Research Board (SERB) | Government | Physics | 2014-15 | 23.64 | 3 Years |
| 70 | Development of Oil Absorbing Polymer Product for Efficient Removal of Oil Spills in Sea water | Dr. R. Vasanthakumari | Naval Research Board (NRB) | Government | Ploymer Nanotechnology | 2014-15 | 20.04 | 2 Years |
| 71 | Applications of Gold Catalysis For The Synthesis Of Bioactive Heterocyclic And Natural Product Mimic | Dr.K.Karthikeyan | Science and Engineering Research Board (SERB) | Government | Chemistry | 2014-15 | 19.66 | 3 Years |
| 72 | Bismuth titanite quantum photo voltage application | Ms. Saai Harini | Department of Science and Technology (DST) | Government | Chemistry | 2014-15 | 18.14 | 3 Years |
| 73 | Demo vehicle for mechanical engineering students for study and training purpose | Dr. S. Rasool Mohideen | M/s. Ford India Pvt. Ltd. | Non Government | Mechanical Engineering | 2014-15 | 14.00 | 3 Years |
| 74 | To study the effect of diagnosis and ortholight on protein stability in renal disfunction | Dr. Shazia Jamal | Science and Engineering Research Board (SERB) | Government | Life Sciences | 2014-15 | 13.60 | 3 Years |
| 75 | Wear behavior of duplex coated steels | Dr.R.Rajendran | University Grants Commission -DAE consortium for Scientific Research | Government | Mechanical Engineering | 2014-15 | 5.37 | 2 Years |
| 76 | Prof. S. Peer Mohamed Endowment Fund | Dr. K. M. Mehata | Prof. S. Peer Mohamed Endowment Fund | Non Government | Computer Science and Engineering | 2014-15 | 1.29 | 1 Year |
| 77 | Dr. Raja Sir Muthiah Chettiar of Chettinad Endowment Fund | Dr . R. Auvai | Dr. Raja Sir Muthiah of Chettinadu | Non Government | Physical Education | 2014-15 | 0.42 | 1 Year |
| 78 | Prof. S. Peer Mohamed Endowment Fund | Dr. K. M. Mehata | Prof. S. Peer Mohamed Endowment Fund | Non Government | Computer Science and Engineering | 2014-15 | 4.37 | 1 Year |
| TOTAL (Rs. In Lakhs) | | | | | | | 1327.15 | |