

## ONGOING RESEARCH PROJECTS

| <b>Sl. No.</b> | <b>Title of the Project</b>  | <b>Name of the Principal Investigator</b> | <b>Department</b> | <b>Date of Sanction</b> | <b>Year(s)</b> | <b>Project Period</b> | <b>Sanctioned Amount in Lakhs</b> | <b>Funding Agency</b>                  | <b>Total grant received in Lakhs</b> |
|----------------|--|---|-------------------|-------------------------|----------------|-----------------------|-----------------------------------|--|--------------------------------------|
| <b>1.</b>      | Evaluation of Tamil Language Development Contribution via Smart Phones   | Dr. S. Chidambaram                        | Tamil             | 18.09.2014              | 3              | 2015 - 2018           | 9.84                              | UGC                                    | Nil                                  |
| <b>2.</b>      | Documentation, Preservation and Dissemination of Folk and Tribal lore in Southern Districts of Tamil Nadu        | The Head                                  | Tamil             | --                      | 5              | 2015 - 2020           | 70                                | UGC -SAP                               | --                                   |
| <b>3.</b>      | Translation of Pudumaipithans Short Stories from Tamil to hindi  | Dr. K. Subramani                          | Hindi             | 26.03.2013              | 1              | 2013 - 2014           | 0.76                              | UGC                                    | 0.76                                 |
| <b>4.</b>      | Hindi Aur Marathi ki Dalit Aatmakathaavon mein Asmitaki Tala sh  | Dr. KhandareChandu Laxman                 | Hindi             | 26.03..2013             | 1              | 2013 - 2014           | 1.40                              | UGC                                    | 1.40                                 |
| <b>5.</b>      | A Study on the Role of PACS in Ensuring Access to Institutional Credit to Rural Women through SHGs in Tamil Nadu | Dr.K.Ravichandran                         | Cooperation       | 26.12.2013              | 2              | 2014 - 2016           | 9.00                              | ICSSR                                  | 3.60                                 |
| <b>6.</b>      | Preparation of Perspective plan under SBGF for Theni Dt.   | Dr.S.Ramaswamy                            | Economics         | 02.05.2013              | 2              | 2013 - 2015           | 2.00                              | District Planning Cell Theni under SPC | 2.00                                 |
| <b>7.</b>      | Concurrent Estimation of Coconut Production in Dindigul and Theni Dt.  | Dr.S.Ramaswamy                            | Economics         | 31.10.2013              | 6 Months       | 2014 - 2015           | 1.80                              | CDB, Kochin                            | 1.783                                |

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|------------|---|---------------------|--|------------|----|-------------|-------|---------------------------------------|-------|
| <b>8.</b>  | Export Potential in the Rural Economy with Special Reference to Agriculture – A Case Study of Dindigul District in Tamil Nadu | Dr.S.Nehru          | Economics  | 13.02.2013 | 3  | 2013 - 2015 | 7.00  | ICSSR                                 | 3.135 |
| <b>9.</b>  | Evaluating the Rural Infrastructure Building Scheme THAI in Tamil Nadu.   | Dr. G. Palanithurai | Political Science and Development Administration | 09.07.2014 | -- | In Progress | 4.7   | State Planning Commission, Tamil Nadu | 4.7   |
| <b>10.</b> | Research on MGNREGA in Kerala: An Assessment  | Dr. G. Palanithurai | Political Science and Development Administration | 10.02.2013 | -- | In progress | 10.8  | SIRD, Kerala                          | 10.8  |
| <b>11.</b> | Impact of MGNREGA at Household Decision Making  | Dr. G. Palanithurai | Political Science and Development Administration | 19.05.2014 | -- | In progress | 12.0  | IRMA, Gujarat                         | 12.0  |
| <b>12.</b> | Special Assistance Programme of UGC, DRS level II   | Dr. G. Palanithurai | Political Science and Development Administration | 2014       | -- | In Progress | 32 .0 | UGC                                   | 32.0  |
| <b>13.</b> | Inclusion of the Excluded: Empowering the Powerless through Panchayati Raj in Manipur   | Dr.Sonkhogin Haokip | Political Science and Development Administration | 15.03.2013 | 2  | 2013-2014   | 6.0   | ICSSR                                 | 2.40  |
| <b>14.</b> | MGNREGs on Sustainable Livelihood and Ecological Security   | Dr.L. Rathakrishnan | Rural Industries and Management                  | 12.6.2012  | 2  | 2012 - 2014 | 7.28  | ICSSR                                 | 5.78  |
| <b>15.</b> | Access to Finance and Inclusive Growth of SC and ST Women Entrepreneurs: The Role of Micro Finance Institutions in Tamil Nadu | Dr.L. Rathakrishnan | Rural Industries and Management                  | 3.8.2012   | 2  | 2012 - 2014 | 6.54  | UGC                                   | 4.54  |

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|------------|---|------------------------|---|------------|-----|---------------------------------------|-------|-------|-------|
| <b>16.</b> | Employment Conditions and Employment Risks among Street Vendors in the Cities of Tamil Nadu                         | Dr.WellHaorei          | Rural Industries and Management                           | 11-12-2013 | 2   | 2014 - 2015                           | 15.52 | ICSSR | 12.00 |
| <b>17.</b> | Role of Emotional Intelligence In Eradicating Industrial Sickness Among Small Scale Industries In Dindigul District | Dr. H. Samuel Thavaraj | Rural Industries and Management                           | 28.03.2013 | 1.5 | 1 ½ Years (18 months w,e,f, 1.4.2013) | 1.05  | UGC   | 0.75  |
| <b>18.</b> | Manufacturing of Textile reinforced Thermoplastic composites for High performance application                       | Dr.B.Senthilkumar      | Rural Industries and Management                           | 31.3.2013  | 2   | 2013 - 2014                           | 1.05  | UGC   | 1.05  |
| <b>19.</b> | Social Exclusion of Transgender in Dindigul District: A Diagnostic Study  | Dr. A. Mani            | Centre for Study of Social Exclusion and Inclusive Policy | 03.08.2012 | 2   | 2012 -2014                            | 6.39  | UGC   | 3.91  |
| <b>20.</b> | Livelihoods of Coastal Fisherfolk: An Excluded Group in Tamil nadu.   | Dr. C. Ramanujam       | Centre for Study of Social Exclusion and Inclusive Policy | 11.03.2013 | 2   | 2013 - 2015                           | 7.32  | UGC   | 4.24  |
| <b>21.</b> | An Analytical Study of Health Status among the Arunthatiyars in Tamil Nadu: A Vulnerable Case of Social Exclusion   | Dr. Anjuli Chandra     | Centre for Study of Social Exclusion and Inclusive Policy | 25.03.2013 | 3   | 2013 - 2016                           | 6.75  | UGC   | 4.25  |
| <b>22.</b> | Network Analysis of Social Technological and Biological Networks  | Dr. P. Balasubramaniam | Interational Collaboration with University of Malaysia    | 21.02.2011 | 5   | 2011-2016                             | 20.82 | HIR   | -     |
| <b>23.</b> | Existence, Controllability and Stability Analysis of Fractional Semi-linear Differential Inclusions                 | Dr. P. Balasubramaniam | Mathematics   | 05.09.2013 | 3   | 2013-2016                             | 18.14 | CSIR  | 5.89  |
| <b>24.</b> | Mathematical Modeling of Multi-Item, Multi- Echelon Supply Chain System in Stochastic Environment                   | Dr.R. Uthayakumar      | Mathematics   | 24.04.2014 | 3   | 2014-2017                             | 12.00 | DST   | 4.50  |

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|------------|---|-------------------|---|------------|---|-----------|----------------------------------|---|-------|
| <b>25.</b> | Mathematical Modelling for Optimizing the Inventory Costs in a Stochastic Environment with Trade Credit and Service Level Constraint        | Dr.R. Uthayakumar | Mathematics   | 16.01.2014 | 3 | 2014-2017 | 9.84                             | NBHM  | 6.19  |
| <b>26.</b> | Fractal Analysis of Brain Tumour Detection and Growth Estimation  | Dr.R. Uthayakumar | Mathematics   | 12.03.2013 | 3 | 2013-2016 | 9.26                             | UGC   | 5.74  |
| <b>27.</b> | Optimal Decision Making Through Inventory and Supply Chain Modeling in Healthcare Industries  | Dr.R. Uthayakumar | Mathematics   | 05.09.5013 | 3 | 2013-2016 | 9.04                             | CSIR  | 4.42  |
| <b>28.</b> | Mathematical aspects of Approximate Dynamic Programming (ADP) in Optimal Control  | Dr.P. Muthukumar  | Interational Collaboration with University of Texas at Arlington, USA | 19-03-2012 | 1 | 2012-2013 | 20.96                            | Indo-US Science & Technology Forum sponsored by DST | 21.16 |
| <b>29.</b> | A Theoretical Study on Existence and Controllability Properties of Abstract Mathematical Model of Stochastic Partial Differential Equations | Dr.P. Muthukumar  | Mathematics   | 16.01.2014 | 3 | 2014-2017 | 9.37                             | NBHM  | 5.95  |
| <b>30.</b> | Theoretical and Numerical Solutions for Fractional Order Optimal Control Problems   | Dr.P. Muthukumar  | Mathematics   | 20.11.2015 | 3 | 2015-2018 | 15.06                            | DST   |       |
| <b>31.</b> | Funds for Improvement of S & T Infrastructure in Universities and Higher Educational Institutions   | The Head          | Mathematics   | 2014       | 5 | 2014-2019 | 45.00                            | DST- FIST (Level-2)                                 | 25.00 |
| <b>32.</b> | Qualitative Behaviors of Dynamical Systems and Mathematical Modeling  | The Head          | Mathematics   | 2015       | 5 | 2015-2020 | 60.35 + (Two Project fellow) SRF | UGC-SAP (DSA-I)                                     |       |

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|------------|--|-------------------|---------|-------------|---|------------|--------|----------|--------|
| <b>33.</b> | Preparation Characterization and Optimization of Super Acid Fillers based PVDF-HFP/PVC blend Polymer Nanocomposite electrolyte by phase inversion technique for Li ion batteries   | Dr.P. Vickraman   | Physics | 01.02. 2011 | 3 | 2011-2014  | 10.568 | UGC      | 10.568 |
| <b>34.</b> | Preparation, Characterization and Optimization for PVDF-HFP based nanocomposite electrolyte for lithium-ion batteries by phase inversion techniques  | Dr.P. Vickraman   | Physics | 30.09.2011  | 3 | 2011 –2014 | 25.1   | DST      | 25.1   |
| <b>35.</b> | Structural, Optical and Energy transfer studies of RE <sup>3+</sup> ions oxyfluoride Glasses for the development of Luminescence devices   | Dr.K. Marimuthu   | Physics | 27.11.2012  | 3 | 2012-2015  | 22.1   | BRNS     | 22.1   |
| <b>36.</b> | Study on the Coulomb interaction of Double Acceptors in Magnetic Semiconductor Nanostructured Systems.   | Dr.K.Jayakumar    | Physics | 22.03.2013  | 3 | 2013-2016  | 10.96  | UGC      | 10.96  |
| <b>37.</b> | Synthesis and Characterization of Nano piezoelectric material for vibration sensor applications.   | Dr.K.Jayakumar    | Physics | 24.10.2013  | 3 | 2013- 2016 | 15.41  | ISRO     | 15.41  |
| <b>38.</b> | Some Investigations on the Exciton states in Semiconductor Nanostructured Systems  | Dr.P.Nithiananthi | Physics | 07.10.2013  | 3 | 2013-2016  | 13.44  | DST SERB | 13.44  |
| <b>39.</b> | Microwave assisted hydrothermal synthesis and characterization of binary and ternary metal oxide / carbon material nano composites and fabrication of asymmetric supercapacitor devices for energy storage applications. | Dr.G.Muralidharan | Physics | 22.09. 2014 | 3 | 2014-2017  | 24.50  | BRNS     | 24.50  |
| <b>40.</b> | FIST   | The Head          | Physics | 18.11.2015  | 5 | 2015-2020  | 122.00 | DST      | -      |

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|------------|--|------------------------|-----------|------------|---|-----------|-------|----------|-------|
| <b>41.</b> | Synthesis of Single-chain Polymer Nanoparticles from Cyclic Polymers via Non-covalent Interactions   | Dr. M. Arunachalam     | Chemistry | 09.11.2015 | 3 | 2016-2019 | 22.98 | DST-SERB | 14.3  |
| <b>42.</b> | Synthesis and stereochemical studies of 6-hydroxy-4,8,9,10-tetraphenyl-1,3-diazadamantanes and 6-amino-4,8,9,10-tetraphenyl 1,3-diazaadamantanes                               | Dr. M. Sundaravadivelu | Chemistry | 25.03.2013 | 3 | 2013-2016 | 9.36  | UGC      | 5.09  |
| <b>43.</b> | Development of new biopolymer based functional nanocomposites, resins and hybrid material for the recovery of oil from oil-in-water emulsion                                   | Dr. S. Meenakshi       | Chemistry | 27.11.2014 | 3 | 2014-2017 | 12.67 | CSIR     | -     |
| <b>44.</b> | Rational Design of Metal Complex Based Selective Fluoride Ion Sensors Possessing Novel Signaling Unit with Augmented H-bonding Abilities to work in Organic and Aqueous Media. | Dr. K.P.Elango         | Chemistry | 28.05.2013 | 3 | 2013-2016 | 22.61 | CSIR     | 22.61 |
| <b>45.</b> | Functionalized gold, silver and semiconductor nanoparticles as fluorescent sensors for the determination of toxic chemicals  | Dr. S. Abraham John    | Chemistry | 12.03.2013 | 3 | 2013-2016 | 7.75  | UGC      | 4.22  |
| <b>46.</b> | Development of Cost Effective Diagnostic Tools for the Determination of Food Adulterants and Contaminants Using Metal Nanoparticles  | Dr. S. Abraham John    | Chemistry | 12.06.2014 | 3 | 2014-2017 | 37.61 | DBT      | 29.10 |
| <b>47.</b> | Design, Synthesis and Aggregation Studies of Cyanoacrylic Acid – Thiophene Linked Porphyrin Sensitizers for Dye Sensitized Solar Cells   | Dr. P. Kalimuthu       | Chemistry | 28.05.2012 | 3 | 2012-2015 | 25.88 | DST-SERB | 25.88 |

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|------------|--|-------------------------|--------------|---|---|-----------|--------|----------|-------|
| <b>48.</b> | Molecular Design and Synthesis of Push-Pull Type Perylene Dyes for Dye Sensitized Solar Cells  | Dr. P. Kalimuthu        | Chemistry    | 13.07.2012  | 3 | 2012-2015 | 11.82  | UGC      | 10.52 |
| <b>49.</b> | Synthesis of 1,3-dihydro benzoxazines and 1,2,3,4-tetrahydrobenzo quinazoline derivatives and its applications in asymmetric organic synthesis | Dr. M. Seenivasaperumal | Chemistry    | 24.05.2013  | 3 | 2013-2016 | 25.9   | DST-SERB | 23.0  |
| <b>50.</b> | FIST   | The Head                | Chemistry    | SR/FST/CSI-255/2013 dated November 2013                     | 5 | 2015-2020 | 165.00 | DST      | 150   |
| <b>51.</b> | SAP - DRS - II   | The Head                | Chemistry    | F.540/4/DRS-2/2015(SAP-I) dated 23 <sup>rd</sup> April 2015 | 5 | 2014-2019 | 150.00 | UGC      | -     |
| <b>52.</b> | Prevalence Of Respiratory Disorders Among Spinning Mill Workers and Developing Protective Measures   | Dr.R.I.Sathya           | Home Science | 23.07.2012  | 3 | 2012-15   | 7.125  | UGC      | 5.00  |
| <b>53.</b> | Prevalence of Obesity and Metabolic Syndrome in the Rural Adult Population: A Diagnostic Study for Intervention and Prevention”                | Dr.S.S.Vijayanchali     | Home Science | 23.07.2012  | 3 | 2012-15   | 11.680 | UGC      | 7.76  |
| <b>54.</b> | Development and Validation of a Scale to assess the extent of Inclusion of Physically Challenged Children in Upper Primary Schools”            | Dr.S.Kavitha Maithily   | Home Science | 30.07.2012  | 2 | 2013-15   | 1.35   | UGC      | 1.0   |

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|------------|--|--|-----------------------------------|------------|---|-------------|-------------------|----------|-------|
| <b>55.</b> | Addressing the Educational Needs of Children with Special Needs in Rural Primary Schools – Issues and Challenges faced by the Teachers   | Dr.K.S.Pushpa<br>Dr.S.Kavitha Maithily | Home Science                      | 01.07.2014 | 2 | 2014-16     | 4.0               | ICSSR    | 1.6   |
| <b>56.</b> | Reproductive Biology and Conservation of <i>Garciniaimbertii</i> Bourd and <i>G.travancorica</i> Bedd.: an Endemic and Endangered tree species from Agasthyamalai Biosphere Reserve  | Dr.R.Ramasubbu                         | Biology                           | 22.03.2013 | 3 | 2013-2016   | 8.66              | UGC-MRP  | 5.143 |
| <b>57.</b> | Studies on population dynamics, in vitro propagation and Conservation of three endemic and Endangered trees of Western Ghats   | Dr.R.Ramasubbu                         | Biology                           | 30.10.2013 | 3 | 2013-2016   | 22.60             | DST-SERB | 8.00  |
| <b>58.</b> | Trust based Authentication Mechanism for Mobile Ad Hoc Networks  | Dr.S.Sivagurunathan                    | Computer Science and Applications | 11.04.13   | 3 | 2013-2016   | 5.77              | UGC      | 4.17  |
| <b>59.</b> | Granular Computing approach for MRI brain image Segmentation   | Dr.N.Senthilkumaran                    | Computer Science and Applications | 12.03.13   | 3 | 2013 - 2016 | 6.205             | UGC-MRP  | 4.855 |
| <b>60.</b> | Computer Assistant Diagnosis for the Detection and Classification of Microcalcifications in Digital Mammograms using Fractal Techniques  | Dr.P.Shanmugavadiu                     | Computer Science and Applications | 10.11.2015 | 3 | 2015-2018   | 12,55,100         | ICMR     | 4.57  |
| <b>61.</b> | Indo-US 21 <sup>st</sup> Century Knowledge Initiative, Augmenting the Curriculum of Higher Educational Institutions with an On-Line Integrated Cognitive-Based Employability Skills Assessment System using Signal and Video Analytics | Dr. P. Shanmugavadiu                   | Computer Science and Applications | July 2015  | 3 | 2015-2018   | 125.00            | UGC      | -     |
| <b>62.</b> | SAP- DRS: Level-1  | The Head                               | Computer Science and Applications | 21.05.2015 | 3 | 2015-2018   | 41.00 + 1 Project | UGC      | -     |

|            |  |                  |                                   |            |            |            | Fellow |           |       |
|------------|--|------------------|-----------------------------------|------------|------------|------------|--------|-----------|-------|
| <b>63.</b> | DST-FIST:Level-1 (i) Advanced Digital Image Processing Lab (ii) Network Security Lab (FIST: Level-I)   | The Head         | Computer Science and Applications | 18.11.2015 | 5          | 2015-2020  | 45.00  | DST       | -     |
| <b>64.</b> | Malady Remedy Analysis of Stabilized Mud Blocks based Structures with a focus on Development of Affordable hazard-Resistant Housing Strategies   | Dr.K.Mahendran   | Rural Technology Centre           | 22-03-13   | 3          | Since 2013 | 11.21  | UGC       | 6.56  |
| <b>65.</b> | Computational Fluid Dynamics Studies on Cost Effective and Energy Efficient Building Design  | Dr.V.Kirubakaran | Rural Energy Centre               | 25.03.2013 | 3          | 2013-2016  | 5.54   | UGC       | 5.33  |
| <b>66.</b> | Energy Conservation Awareness Programme  | Dr.V.Kirubakaran | Rural Energy Centre               | 2010       | Every year | 2015       | 1.25   | PCRA      | 8.50  |
| <b>67.</b> | Sensitization on Environmental Concerns and ECO-Futures among Rural Youths through Eco-Club of Gandhigram Rural Institute  | Dr.V.Kirubakaran | Rural Energy Centre               | 16.06.2014 | 3          | 2014-2017  | 4.05   | DST       | 2.00  |
| <b>68.</b> | Project “NilaGIS” “Landslide inventory and generation of morphological database using geospatial technologies for Nilgiri area”  | Dr.B.Gurugnanam  | Centre for Applied Geology        | 06.05.13   | 3          | 2013-2016  | 17.24  | DST-NRDMS | 9.56  |
| <b>69.</b> | Project “HILL_GIS” “High Resolution Digital Satellite Data based Resource Information System, Geohazards and Mitigation studies based on GIS Technologies at Kolli Hills, Tamilnadu, India | Dr.B.Gurugnanam  | Centre for Applied Geology        | 13.05.13   | 3          | 2013-2016  | 26.23  | CSIR      | 12.61 |

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| <b>70.</b> | Rainfall Induced Landslide Fore Warning System for Lingaslide, Nilgiris, South India – LINGASLIDE Project Phase II | Dr.M.Muthukumar     | Rural Development          | 10.12.2014   | 3         | 2015-2018   | 29.476 | DST, New Delhi                                | 29.476 |
| <b>71.</b> | Base Line Survey and Micro Level Plan for 23 villages in Ariyalur district   | Dr.N.Lalitha        | Rural Development          | 30.10.2013   | 1         | 2014        | 3.00   | Ultra Tech Cement Company- Aditya Birla group | 3.00   |
| <b>72.</b> | An Assessment of Village Development in Tamil Nadu – A Statistical Approach  | Dr.C.Sivapragasam   | Applied Research           | 01.05.2013   | 2         | 2012-2015   | 7.72   | UGC, New Delhi                                | 4.62   |
| <b>73.</b> | Determinants of Women Empowerment and its impact on standard of living   | Dr.S.Gunasekaran    | Applied Research           | 13.07.2012   | 2         | 2013-2015   | 13.85  | MOSPI, New Delhi                              | 3.46   |
| <b>74.</b> | Efforts and Results of NIOS programmes on Kochi Region   | Dr.V.Seeninatarajan | LL&E                       | 01.07.2014   | 1         | 2014        | 3.38   | NIOS Noida                                    | 1.6    |
| <b>75.</b> | ASMAE – India Child Rights Projects  | Head, Dept. of LL&E | LL&E                       | 01.04.2004   | Year Wise | Ongoing     | 12.5   | Asmae, France                                 | 12.5   |
| <b>76.</b> | Knowledge Assessment of Breast and Cervical Cancer among Rural Women (KACRW)                                       | Dr.K.Velumani       | Centre for Women's Studies | 11.12.2013   | 2         | 2014 – 2016 | 8.00   | ICSSR- Research Project                       | 6.80   |
| <b>77.</b> | Development of functional dairy products and their impacts on human health   | Dr.M.SeethaLakshmi  | Agriculture and A.H        | 04. 01. 2012 | 3         | 2012 – 2015 | 9.88   | UGC, New Delhi                                | 8.10   |