

**SSN COLLEG OF ENGINEERING
KALAVAKKAM - 603 110**

LIST OF EXTERNALLY FUNDED PROJECTS

Sl. No.	Project Title	Principal Investigator	Amount in Rs. Lakh	Funding Agency	Duration
1	Investigations on the Crystal Growth and Non-Linear Optical properties of Organic and Semi-Organic crystals.	Dr. N.P. Rajesh, Physics	5.88	DST	2006- 2008 (Three Years)
2	Voice enabled documentation and mailing system in Indian languages for hand- held devices.	Dr. C. Aravindan, CSE	2.3	AICTE	2006-2008 (Three years)
3	Friction stir welding of scandium added Al-Mg alloys	Dr. S. Vijayan, Mechanical	23.94	NRB, DRDO	2007-2009 (Three years)
4	Investigation of materials in sonic band structures for possible use in stealth Applications	Dr. Prita Nair, Physics	13.61	NRB, DRDO	2007-2008 (Two years)
5	Growth of large size KDP and ADP crystals by Sankaranarayanan-Ramasamy Method	Dr. P. Ramasamy, Dean (Research)	18.74	DST	2007-2009 (Three years)
6	Modernization of Power Electronics and Drives Lab	Dr. B.L. Mathur, EEE	10.00	AICTE	2007-2008 (Two Years)
7	Hybrid capacitor with nano-materials for zero emission vehicles	Dr. M. Siluvai Michael, Chemistry	14.09	DST	2007-2009 (Three years)
8	Reconfigurable wavelength selective filter based on one dimensional photonic bandgap structures in silicon for ROADM applications	Dr.Prita Nair, Physics Dr.V.Nagarajan, ECE	15.00	AICTE	2007-2008 (Two years)
9	Design of silicon carbide based hard-switched DC-AC power converter	Dr. B.L. Mathur, EEE	5.00	AICTE	2007-2008 (Two years)
10	Investigations on the bulk growth of unidirectional single crystals of benzophenone derivatives	Dr. P. Ramasamy, Dean (Research)	10.00	AICTE	2007-2008 (Two years)

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11	Design and development of wireless sensor node	Dr. S. Radha, ECE	28.58	IGCAR	2008 -2010 (Three years)
12	Gas Tungsten arc assisted Friction Stir Welding of Steels	Dr. S.R. Koteswara Rao, Mechanical	24.45	DST	2008-2010 (Three years)
13	FPGA Design for Pulsed Signal Processing	Ms. V.S. Kanchana Bhaskaran, ECE	5.00	IGCAR	Ten months from April 2008
14	Growth of I-III-VI ₂ single crystals for IR applications and radiation detectors	Dr. P. Ramasamy, Dean (Research)	22.06	BRNS	2008 -2010 (Three years)
15	Process variational study and performance analysis of nano-scale MOSFETS and FINFETS: TCAD simulation and process aware SPICE models	Dr. R. Srinivasan, Dr. J. Raja, IT	21.8	DST	2008 -2010 (Three years)
16	Growth and Characterization of LiInS ₂ and LiInSe ₂ crystals for IR applications	Dr. P. Ramasamy, Dean – Research	32.68	NRB	2009-2011 (Three years)
17	Development and characterization of mixed alkali halide single crystals for radiation dosimetry applications in IGCAR	Dr. P. Ramasamy Dean (Research)	11.00	IGCAR	2009-2012 (Four years)
18	Design and Hardware implementation of a programmable filter to improve the signal to noise ratio due to wind driven ambient noise in shallow water	Dr. S. Radha, Mr. S. Sakthivel Murugan, ECE	20.64	NIOT	2009 -2011 (Three years)
19	Predicting Subcellular Localization of Yeast Genome using Coactive Neuro-Fuzzy Inference System	Dr. Latha Parthiban	0.15	CSI	1 year (2010–2011)
20	Service Based Data Analysis through Cloud Computing	Dr. Chitra Babu	0.20	CSI	1 year (2010–2011)
21	Investigations on crystal growth and characterization of pure and rare earth doped KTP single crystals for electro-optic applications	Dr. N.P. Rajesh, Physics Dr. P. Ramasamy, Dean (Research)	19.78	DST	2010 to 2013 (Four years)
22	An assessment and intelligibility modifications system for Dysarthric Speakers	Dr. P. Vijayalakshmi, ECE Dr. T. Nagarjan, IT	9.00	AICTE	2011 to 2013 (Three years)

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23	Improved growth of lead-free piezoelectric single crystal $(\text{Na}_x\text{Bi}_{1-x})\text{TiO}_3\text{-BaTiO}_3$ and characterization towards piezoelectric device applications	Dr. P. Ramasamy, Dean (Research) Dr. G. Anandha Babu	29.40	DST	2011 to 2013 (Three years)
24	Crystal Growth of Ce based alkali halides scintillator crystals and their characterization	Dr. G. Anandha Babu	22.08	BRNS	2011 to 2013 (Three years)
25	Visible light active metal and non-metal doped mesoporous TiO_2 nanoparticles for photocatalytic applications	Dr.M.Mahalakshmi, Chemistry	26.00	DST	2011 to 2013 (Three years)
26	Crystal Growth of lead free piezoelectric crystal $[\text{Bi}_{0.5}(\text{Na}_{1-x}\text{K}_x)_{0.5}]\text{TiO}_3$ by flux technique and its Characterization	Dr. G. Anandha Babu	14.16	DST	2011 to 2013 (Three years)
27	Study and Control of Weak Grid Connected Matrix Converter based DFIG System	Dr. Rangnath Muthu, Mr. M. Senthil Kumaran, EEE	7.75	MNRE	2011 to 2013 (Three years)
28	Development of Text to Speech System in Indian Languages Phase II (Consortium of 12 institutions)	Dr. T. Nagarajan, Dr. A. Shanina, IT Dr. P. Vijaya lakshmi, ECE	76.6	DIT	2011-2013 (Three Years)
29	Study of soft errors in 65nm gate length CMOS SRAM and 30nm gate length fin FET tunnel FET and junction less FET based SRAMS using TCAD simulations	Dr. R. Srinivasan, IT	30.47	DRDO	2011-2013 (Three Years)
30	Amorphous Silicon Thin Films for Microbolometers	Dr. Shekhar Bhattacharya,	9.5	SSPL	2011 (one year)
31	Research Investigations on amorphous silicon thin film photo-voltaics	Dr. Shekhar Bhattacharya	87.74	DRDO	Jan 2011 to Dec 2013 (Three Years)
32	Investigations on various doped ZnO films as front contact TCO in flexible amorphous silicon solar cells	Dr. Balaji Bhargav Mr Nafis Ahmed	6.50	UGC-DAE:CSR	2012-2014 (Three years)
33	“Investigation on Crystal growth and Characterization of Multiferroic single crystals”	Dr. G. Ananda Babu Prof.P.Ramasamy, Dean (Research)	8.00	UGC-DAE CSR	2012 – 13 Three Years

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34	Crystal growth of alkaline earth halide and cesium based alkaline earth halide scintillation crystals for gamma ray spectroscopy	Dr. G. Anandha Babu, Physics Dr. P. Ramasamy, Dean (Research)	24.82	BRNS	2013 - 2016 (Three years)
35	Development of High Quality Direction Controlled Lithium Iodate and Lithium Sulphate Single Crystals for Nonlinear Optical applications	Dr.P.Rajesh, Physics, Dr. P. Ramasamy, Dean (Research)	23.04	BRNS	2013 - 2016 (Three years)
36	Development of cascaded Z-source multilevel inverter for photovoltaic applications	Dr.R.Seyezhai, EEE	23.83	AICTE	2013 - 2016 (Three years)
37	Experimental and finite element investigations of the machining process with composite materials	Dr.K.S.Vijay Sekar, Mechanical	18.65	AICTE	2013 - 2016 (Three years)
38	FIST Programme – To strengthen Research Facilities	Dr.S.Salivahanan, ECE Dr.S.Radha, ECE	50	MST – DST	2014 - 2019
39	Modernization of High Voltage Lab as a Unified Power Engg. Lab with Eelectromechanical energy conversion, power electronics and power systems experiments	Dr. V. Rajini, EEE	19.51	AICTE	2013 (One Year)
40	Unidirectional and bulk growth of high quality nonlinear optical (NLO) 2-amino-5-nitropyridinium (2A5NP) derivative single crystals for second harmonic generation (SHG) device applications.	Dr.M.Senthil Pandian, SSN RC	16.61	DST-SERB	2013 – 2017 (Four Years)
41	Magnetic Moulding of Al/SiCp metal Matrix Composites – Start-up Research Grant (Young Scientists)	Dr. B. Anand Ronald, Mechanical	9.26	DST	2013 – 2016 (Four Years)
42	Industry Institution Interaction Partnership Programme	Dr. Ve. Annamalai, Mechanical	11	AICTE	2013 – 2016 (Three Years)
43	Hardware implementation of SPWM control for Standalone Hybrid Renewable Energy using DSP processor	Dr.B.S.Sreeja, Dr.S.Radha, ECE	4.38	LUC, Malaysia	2014 - 2015 1 Year
44	Development and characterization of PMN-PT single crystals for under water applications	Dr. N.P. Rajesh, Dr. Prita Nair, Physics	35.55	DST-SERB	2014 – 2017 (Three Years)

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45	Reliability of Fuzzy Hidden Markov Model & Intuitionistic Fuzzy Markov Model	Dr.R.Sujatha, Dr.S.Narasimman, Mathematics	10.14	DST – SERB	2014 – 2017 Three years
46	Markov approach for reliability assessment of safety critical software	Dr.R.Sujatha, Dr.Narasimhan, Mathematics	5.81	AERB	2013 – 2015 Two years
47	Novel fused converter for hybrid wind solar systems for powering rural telephony	Dr. V. Rajini, EEE	34.00	MNRE	2014 – 2016 Two Years
48	Fabrication of solid state dye sensitized solar cell for stability enhancement and improvement performance.	Prof.P.Ramasamy, Dean (Research) Dr.M. Senthil Pandian	73.0	DST-SERB	2014-2017 (Three years)
49	Development of improved DS process for mc-Si wafers and their application to Solar Cells	Dr.P.Ramasamy, Dean (Research) Dr.G.Anandha Babu	468.42	MNRE	2014 – 2018 4 years
50	Investigation on thermally stable polyanion electrodes for Li-ion batteries	Dr.Siluvai Michael, Chemistry	24.9	NRB	2014 – 2017 Three years
51	Synthesis of mesoporous one dimensional TiO ₂ and ZnO ₂ nanostructures and their characterization for Dye synthesized solar cell	Prof.P.Ramasamy, Dean(Research) Dr.M. Senthil Pandian	10.76	UGC-DAE CSR	2014-2017 (Three years)
52	Nano catalyst embedded hierarchically porous carbon air cathode for Li/Air rechargeable batteries	Dr.Siluvai Michael, Chemistry	39.02	DST	2014 – 2017 Three years
53	Development of Lead free piezoelectric 0.94 Na _{0.5} Bi _{0.5} TiO ₃ -0.06 BaTiO ₃ single crystals for transducer applications	Dr.G.Anandha Babu, Dr. P. Ramasamy, Dean (Research)	50.25	DRDO	2015-2018 (Three years)
54	Design and development of hybrid switched reluctance motor drive	Dr.M.Balaji, EEE	22.90	DST	2015 – 2018 Three years
55	Design and development of flywheel based power conditioning system for a renewable energy fed microgrid	Ms.M.Vijayalakshmi, Dr.R.Ramaprabha, EEE	20.00	DST	2015 – 2018 Three years

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56	Study of mechanical properties and surface features of steels quenched in CNT nanofluids.	Dr.K.Babu, Mechanical	9.41	AICTE	2015-2018 (Three years)
57	Design and development of novel handle shapes to overcome vibration discomfort.	Dr.M.S.Alphin, Mechanical	18.86	DST-SERB	2015-2018 (Three years)
58	Solvent screening, Synthesis, Characterization and Application of potential solvent for removal of endocrine disrupts chemicals from water matrices	Dr.R.Anantharaj, Chemical	19.47	DST-SERB	2015-2018 (Three years)
59	Investigation on the effect of gene and protein mutants in the onset of neuro-degenerative brain disorders (alzheimers' disease and parkinson's disease): a computational study	Dr. Shomona Gracia Jacob, CSE	16.10	DST-SERB	2015-2018 (Three years)
60	Preliminary studies and control algorithms for Axial Flux Switched Reluctance Motor	Dr. P. Saravanan, EEE	5.5	DST-SERB	2016-2017 1 Year
61	Reclamation Of Abrasives From Bonded Coated And Sanitary Ware Rejects	Dr.V.E.Annamalai, Mechanical	74.16	DST	2016-2019 3 Years
62	High Quality Unidirectional 4-Nitrophenol Derivative Single Crystals for SHG Device Applications	Dr.M.Senthil Pandian, Dr.P.Ramasamy, Dean (Research)	29.65	BRNS	2016-2018 3 Years
63	Design and development of Axial Flux Switched Reluctance Motor based Battery Operated Vehicle	Dr.P.Saravanan, EEE	36.26	DST-SERB	2016-2018 3 Years
64	Growth of direction controlled homogenous mixed crystals for optical applications	Dr.P.Rajesh, Physics Dr.P.Ramasamy, Dearn (Research)	18.63	CSIR	2016-2018 3 Years
65	Friction surfacing for repair of alloy 718 components	Dr. R. Damodaram, Mechanical	27.90	DST-SERB	2016-2018 3 Years
66	Speech Enable Interactive Enquire System In Tamil	Dr.T.Nagarajan, IT Dr.P.Vijayalakshmi, ECE Dr.B.Bharathi, CSE Ms.Sasirekha, IT	9.52	TVA	2016 6 Months

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67	Growth and characterization of defect controlled topological insulator Bi ₂ Te ₂ Se and Bi _{2-x} SbxTe _{3-y} Se _y single crystals	Dr.G.Anandha Babu Dr.P.Ramasamy, Dean (Research)	18.80	DST-SERB	2016-2018 3 Years
68	Creation of design and fabrication lab for experimental learning	Dr.V.E.Annamalai, Mechanical	5.94	AICTE-MODROBS	2014-2015 1 Year
69	A study on fuzzy hidden markov chain with states depending on observation	Dr.V.Sharmila, Dr.R.Sujatha, Mathematics	13.91	DST-WOS	2015-2018 3 Years
70	Design of 3D Prosthetic limbs	Dr. A. Kavitha, BME Ms. R. Nithya, BME Ms. D. Kanchana, BME	5.0	Horizon Engineering Solutions, Waterloo, Canada	2016 – 17 (2 Years)
71	Smart Street Lighting System	Mr. V.Thiyagarajan	1.0	Horizon Solutions Ltd	2016-2017 1 Year
72	Smart Street Lighting Solutions	Dr. G. Sateesh Kumar, Mechanical	1.13	Horizon Engineering Solutions, Waterloo, Canada.	2016 - 2019 (Three years)
73	Speech-input speech-output communication aid for speakers with cerebral palsy	Dr.P.Vijayalakshmi, ECE Dr. T. Nagarajan, IT	13.72	DST- SEED - TIDE	2017-2019
74	The feasibility of band width enhancement of reflect array antenna at Ku band for conventional and shaped beams	Dr.K.T.Selvan, ECE Dr.A.Patnaik (IIT Roorke) Dr.R.Kalidoss, ECE	12.81	ISRO	2017-2019
75	Fabrication of nanobiosensor for rapid, low cost and point care detection of alpha fetoprotein	Ms. Gayathri Gangadharan, Dr. Prita Nair, Physics	26.0	DST-WOS-A	2017-2020 3 Years
76	Fabrication of stable Perovskite solar cells using inorganic hole transport materials	Dr.M.Senthil Pandian Dr.P.Ramasamy, Dean (Research)	77.74	DST-SERI	2017-2020

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77	Investigation on rare earth doped CsI single crystals for scintillation applications	Dr.N.P.Rajesh, Dr.P.Ramasamy, Dean (Research)	24.35	SERB	2017-2019
78	Design and development of a computer controlled system for the production of textile antennas and sensor	Dr.S.Esther Florence, ECE Mr.Vimal Sam Singh, Mechanical	30.96	SERB	2017-2019
79	Design, development and implementation of networked reconfigurable in-pipe robots for inspection and scavenging applications	Dr.G.Satheesh Kumar, Mechanical	40.27	SERB	2017-2019 3 Years
80	HMM-based Text-to-Speech Synthesis System for Malaysian Tamil	Dr. T. Nagarajan, IT Dr. P. Vijayalakshmi ECE	4	Murasu Sys SdnBhd, Malaysia	Nov. 2016 – Jul. 2017 9 Months
81	Impact of climate change and chloride induced corrosion damage risks of concrete infrastructure deterioration along coastal regions of India	Dr. S. Muthulingam, Civil	33.32	SERB - DST	2017-2020 (3 years)
82	Potential Applications of Mega - Sonics (High frequency ultrasound) in CO ₂ capture solvents regenerations: An initial approach	Dr. B. Ambedkar, Chemical	21.36	DST-SERB (EEQ)	2016-2019 (3 Years)
83	Potential applications of ionic liquids in CO ₂ capture process for sustainable energy and environment	Dr. J. Dhanalakshmi Dr.B.Ambedkar, Chemical	26.52	DST-SERB (ECR)	2017-2020 (Three Years)
84	Omni-Directional to Directional Pattern Switching Patch Antenna for Wireless Sensor Nodes at Reactor Containment Building	Dr. B. Sreeja, Dr. S. Radha, ECE	24.96	BRNS	2017-2020 (Three Years)
85	Development of ultra low thermal conductivity high performance thermoelectric TlBiSe ₂ and TlBiS ₂ Single crystals	Dr. K. Aravinth, Physics	24.3	DST-SERB	2017-2020 (Three Years)
86	Production and commercialisation of 3D printed exoskeleton for rehabilitative and assistive purposes	Dr. A. Kavitha, Ms. R. Nithya, BME	5.0	Recycl3D Canada	2017-2018 (18 Months)

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87	Near UV excitable, rare earth / transition metal ions activated Ba ₂ CaZn ₂ Si ₆ O ₁₇ Phosphor for White Light Emitting Diode Applications	Dr. S. Masilla Moses Kennedy, Physics	17.94	DST-SERB	2017-2020 (Three Years)
88	Design and Development of Energy Efficient Permanent Magnet Assisted Reluctance Motor Drives for Pump Application	Dr. V. Kamaraj, EEE	21.19	DST-SERB	2017-2020 (Three Years)
89	Implementation of magnetic induction (MI) based wireless underground sensor network (WUSN) system for smart irrigation	Dr.S.Sakthivel Murugan, ECE Dr.K.Muthumeenakshi, ECE	7.35	TNSCST	2017 – 2019 (Two Years)
90	A low cost minimal footprint single phase solid waste transformer for low/medium voltage applications	Dr. V. Rajini, EEE	19.82	AICTE- RPS	2017-2019 (Three Years)
91	Establishment of Microwave and Antenna Testing Laboratory under MODROBS	Dr.S.Radha, ECE Dr.M.Gulam Nabi Alsath, ECE Dr.S.Ramprabhu, ECE	8.75	AICTE MODROBS	2017-2019 (Two Years)
92	Growth of optical quality stilbene and triphenyl derivatives for high energy neutron detection	Dr. P. Rajesh, Physics	19.51	SERB-EMR	2017 - 2020 (Three Years)
93	Development of analytical & mass spectrometric methods to ascertain U-isotopic ratios along Tamilnadu Coast	Dr. A. Rajalakshmi, Physics	21.92	BRNS (DAE)	2017-2019 (Two Years)
94	NIMAT –DST project for conducting EAC	Dr.R.Seyezhai	0.8	DST & EDII, Ahmedabad	2017-2019
95	Speech Assistive Aids for Visually-Challenged People	Dr. T. Nagarajan, IT Dr. P. Vijayalakshmi, ECE	25	TVA	2018- 2019 1 Year
96	Functionalization of graphene for their application as transparent conducting electrode	Dr. P. Balaji Bhargav C. Balaji, SSN RC	6.5	UGC DAE-CSR	2018-2021 Three Years
97	Optimizing the Ballistic Performance of AA7075 Thick Plate Friction Stir Welds	Dr. S. R. Koteswara Rao, Dr. R. Damodaram, Mechanical	18.79	DRDO-ARB	2018-2021 Three years

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98	Development of high performance ternary piezoelectric ceramics for transducers applications	Dr. G. Anandha Babu, Physics Prof. P. Ramasamy, Dean (Research)	20	CSIR	2018-2021 3 Years
99	Offshore excavation of heritage rich submerged sites of Poompuhar & Mahabalipuram by empirical mode decomposition using machine learning	Dr.S.Sakthivel Murugan, ECE Dr.N.Padmapriya, Mathematics	50.00	DST	2018 – 2021 (Three Years)
100	Micro grant for implementation of projects under the foldscope scheme	Ms. P. Kaythry, ECE & NSS PO	8.00	Dept. of Biotechnology	2018-2019 (One Year)
101	Insulin Delivery and Glucose Evaluation Micro-Systems (InDeGEMS)	Dr.B.S.Sreeja, ECE Dr.S.Radha, ECE	13.75	Corpn and Devp. Center, EPFL (CODEV), Switzerland	2018-2019 (One Year)
102	Understanding the structure function relationship of the natural anticoagulant ZPI, a member of serpin superfamily	Dr. Tanusree Sengupta, Chemistry	34.63	SERB	2018-2021 (Three Years)
103	Theoretical and experimental analysis on the design of compound reconfigurable reflect array antenna with an integrated electronic control system	Dr.N.Gulam Nabi Alsath, ECE Dr.S.Ramprabhu, ECE Dr.S.Kirubaveni, ECE	36.74	SERB	2018-2019 (Three Year)
104	Design and development of biosignal controlled hand exoskeleton	Dr. A. Kavitha, BME Dr. S. Bagyaraj, BME Ms. R. Nithya, BME	23.70	LSRB	2018-2019 (Two Years)
105	Production and commercialisation of 3D printed exoskeleton for rehabilitative and assistive purposes	Dr. A. Kavitha, Ms. R. Nithya, BME	2.2	Recycl3D Canada	2018 - 2019 (18 Months)
106	Production & Commercialization of 3D-Printing Filaments	Dr. S Arun karthick Dr. A. Murugesan	7.5	Recycl3D Canada	2018-2019 (10 months)
107	Hearing aid and cochlear implant	Dr. A. Kavitha Ms. M. Dhanalakshmi Ms. B. Divya	7.08	HCL Technologies Ltd., Chennai, India	2018-2019 (1 Year)

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108	Design and Development of Disc-Shaped Donors and Inorganic Acceptors for Hybrid Organic/ Inorganic Solar Cells	Dr. P. Ramasamy Dean (Research)(PI) DR.P.Balaji Bhargav (Co-PI) Dr.M.Senthilpandian (Co-PI) Dr.R.Govindaraj(Co-PI) Dr. S. Arun Karthick , BME (Co-PI)	27.61	Recycl3D	2018-2019 (Two Years)
109	Augmented Reality Based Surgical Support System	Dr. A. Kavitha (PI) Dr. S. Pravin Kumar (Co-PI)	25.94	SERB-POWER	2018-2019 (3 Years)
110	A Robustly Optimal Energy Management System for High PV-Penetrated Smart Cities with A Case Study: Implementation of PVs for Smart Street Light Poles	Dr Mrunal Deshpande Co - Investigator	5.25	UNSW Australia	2018- 2019 1 Year
111	Automation of high speed extrusion and rewinding lines	Dr.R.Rengaraj (PI)	4.0	Siechem Technologies Private Limited	2018-2020 2 Years
112	Design and implementation of sensor based monitoring system under Asian Elephant Degradation and its mitigation measures in Tamilnadu	Dr.R.Jayaparvathy, ECE Dr.M.Gulam Nabi Alsath, ECE	5.5	Tamil Nadu Forest Department	2018 – 2019 (6 months)
113	Development of Bismuth-based complex perovskites piezoelectric single crystals for strategic applications	Dr. G. Anandha Babu, Physics	28.79	SERB	2019-2021
114	Hybrid casting approach for manufacturing magnesium nanocomposites	Dr. L. Poovalazhan, Dr. S. Rajkumar, Mech.	24.94	SERB	2019-2021
115	MODROBS	Dr. V. Kamaraj, EEE	11	AICTE	2019-2021
116	Development of Ultrasonic sensors for monitoring heavy mineral accumulation in the littoral zone of Mahabalipuram Coast	Dr.S.Radha, ECE Dr.B.S.Sreeja, ECE	4.8	TNSCST	2019-2020 2 Years

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117	"Bench-Scale Design and Development: Investigation of High-Frequency, High-Intensity Ultrasonics for Carbon-Rich Solvent Regeneration in Solvent-Based Post-Combustion CO2 Capture Process (PCCC) for Reducing CO2 Capture Energy Demand"	Dr. B. Ambedkar, Chemical	208	DST	2019-2020
118	Assistive Technology for Parkinson and Alzheimer Disease (PAD) affected People	Dr. S. Chitra, IT	4.1	TNSCST	2019-2020 2 Years
119	3D Printing	Ms. Nithya Dr. S Pravin Kumar	0.15	Deccan Medical Systems	2019-20
120	Development of Sustainable Magnetic Carbon Based Nano-composite Films from Agro Waste and Evaluate its Application in Removal of Antibiotics from Water	Dr.P.Senthil Kumar	0.70	The Institution of Engineers (India)	2019-2020 (One Year)
121	Development of low cost wearable semi automatic insulin delivery smart system	Dr.B.S.Sreeja, ECE Dr.S.Radha, ECE	35.04	DBDT	2019 – 2022
122	Fusion algorithms for Multispectral and PAN images in cartographic applications	Dr.N.Venkateswaran, ECE Dr.K.Madheswari, CSE	14.29	ISRO	2019 – 2021
123	Development of an efficient IoT enabled plant disease pest detection system	Dr.S.Radha, ECE Dr.R.Hemalatha, ECE	62.26	DST SSTP	2019 - 2022
124	Design of game based communication platform for children with cerebral palsy	Dr.R.Amutha, ECE Dr.R.Rajavel, ECE	17.01	DST SSTP	2019 - 2022
125	Development of anti-spoofing method for Automatic Speaker Verification System	Dr. B. Bharathi (CSE, SSNCE) Hema A Murthy (IIT, Madras)	18.30 IITM- 8,25,000/- SSN- 8,25,000/- Research grant for PI- 1,80,000/-	DST TARE Scheme	3 Years (Feb 2019- Feb 2022)

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126	Nagarik Rog Pratirakshak: Unified Smart Immunization Coverage Monitoring and Analysis (UniSICMA)	Dr. R. Kanchana (PI: CSE, SSNCE) Dr. S. Selvakumar (PI: IIIT, Una, HP)	106 lakhs IIITU - 55,99,000/ SSNCE- 50,01,000/	BIRAC GCI-IDIA scheme	25 months (Feb 2019 – Feb 2022)
127	Fabrication of Super Hydrophobic, Antimicrobial, Anti-tear, Anti Shear Hand Gloves from Phyto - Constituents.	Dr.K.Sathish Kumar	2.5	Entrepreneurship Development and Innovation Institute	2020-21 (One Year)
128	Design and Development of 800 kg multicrystalline silicon (mc-Si) directional solidification furnace and slicing machine for making commercial size mc-Si wafers	Dr. P. Ramasamy, Dean Research	1205	DST	2021-2024 3 Years
129	Development of health monitoring system for distribution Transformers	Dr.R.Rengaraj (PI)	5.0	Predictive energy instruments Private limited	2021-2024 3 Years
130	Radiation Resilient RF Receiver Front End Components Through SiGe BiCMOS: Design and Validation	Dr.R.Srinivasan, IT Dr.Premanand V. Chandramani, ECE Dr.K.K.Nagarajan, ECE	32.5	BRNS	2020 – 2023
131	Growth of CdMnTe single crystals by Bridgman Technique for application in Gamma ray Detectors	Dr. P. Rajesh, Physics	34	BRNS	2020-2023 (3 years)
132	High Performance Integrated Two-stage Electrochemical Technology for Recovery of Water from Electroplating Effluent with Realtime Monitoring and Control System	Dr.S.Radha, ECE Dr.B.S.Sreeja, ECE Dr.K.Muthumeenakshi, ECE	34.46	DST	2020 – 2023
133	Electrochemical sensing of sulfamethoxazole antibiotic in water at GO/ZnO Nanocomposites-modified electrodes: Optimization and Real time measurement	Dr.P.Senthil Kumar. Chemical Dr.B.S.Sreeja, ECE	63.29	DST	2020-2023 (Three Years)
134	Fabrication of Homogeneous plastic Scintillators by thermal polymerization reaction for fast neutron detection applications	Dr. P. Rajesh, Physics	43.08	SERB	2020 – 2023 (36 mths)

Sl. No.	Project Title	Principal Investigator	Amount in Rs. Lakh	Funding Agency	Duration
135	Development of Multi-spectral (Thermal/Visible) Imaging system for Fever screening in crowded places for detection of infectious diseases	Dr. J. Vijay, BME	11.61	SERB	2020-21 (2 Years)
136	Assessment and Monitoring of Invasive Alien Plant Species in India and formulation of strategies for management of key Invasive Alien Plant Species in different regions of the country	Dr.R.Jayaparvathy, ECE Dr.M.Gulam Nabi Alsath, ECE	31.15	All India Coordinated Research Project (AICRP-7) Scheme under MOEFCC	2020 - 2024
137	Development of high - Curie temperature piezoceramics for aviation applications	Dr.G.Anandha babu (PI) Dr. S. M. M. Kennedy (Co-PI)	12.30	DRDO	2020-23
138	Silver nanowires and MoS ₂ microsphere based filtration system for efficient bacterial removal from potable water	Dr. P. Balji Bhargav Mr. C. Balaji Mr. Nafis Achmed	24.0	SERB	2020-2023 (Three Years)
139	Synthesis of lead free silver bismuth iodide light absorbers for mesoscopic solar cells	Dr. R. Govindaraj Dr. P. Balaji Bhargav Dr. P. Ramasamy	44.60	BRNS	2020-2023 Three Years
140	Understanding the influence of corrosion on the shock response of DMR 249A steel plates and welded joints	Dr. S. Suresh Kumar, Mech	42.05	DRDO	2021-22 3 Years
141	Investigation on Wire Electrical Discharge Machining (WEDM) of low conductive materials	Dr. G. Selvakumar, Mech.	31.93	SERB	2021-22 3 Years
142	Characterization of Novel Mutants of Human Protein Z-dependent Protease Inhibitor (ZPI): Potential Therapeutics for Hemophilia”	Dr. Tanusree Sengupta, Chemistry	60.46	SERB	2021-22 3 Years
143	Upgradation of Municipal Solid wastes into commercial grade fuel using Co-Liquefaction and study of its effects on performance and emission characteristics of dual fuel compression ignition engine	Dr. Rajkumar, Mech.	14.55	AICTE RPS	2021-22 3 Years
144	Designing a light weight consensus mechanism in block-chain for IoT based asset management	Dr. J. Suresh, CSE	9.59	AICTE RPS	2021-22 3 Years

Sl. No.	Project Title	Principal Investigator	Amount in Rs. Lakh	Funding Agency	Duration
145	Dose Assessment of Partial Body Exposure using Premature Chromosome Condensation Assay for Mass Casualty Accidents	Dr. R. Subashini (PI) Dr. N.P. Rajesh (PI)	24.34	IGCAR	2021-22 (2 years)
146	Design and development of 16 channel functional Near Infrared Spectroscopy system for measuring hemodynamics in Brain Prefrontal Cortex	Dr. S. Arun Karthick (PI) Dr. Sachin G Sarate (Co-PI) Dr. S. Pravin Kumar (Co-PI)	25.34	DST-BDTD	2021-22 (2 years)
147	Enhancing Brain Cognition through Neuro Feedback model in Indian Children with Learning Disability	Dr. B. Geethanjali (PI) Dr. V. Mahesh (Co-PI) Dr. Bikesh Kumar Singh NIT,Raipur (Co-PI)	44.03	SERB- CRG	2021-22 (3 years)
148	An Integrated Framework to aid Non-Contact Measurement of vital parameters for mass infection Screening.	Dr. J Vijay (PI) Dr. K. Nirmala (Co-PI).	4.13	AICTE – RPS	2021-22 (3 years)
149	Optimum Design of C and X Band Reflectarray Antennas	Dr.M.Gulam Nabi Alsath, ECE Dr.S.Radha, ECE	200.00	BigCat Wireless Pvt Ltd	2021 – 2022 (6 months)
150	Design, Development and Experimental Evaluation of Highly Integrated Multi-Standard Antennas for Mimo Implementation in Automobiles as a Part of Intelligent Transport System	Dr. Malathi Kanagasabai (CEG, Guindy) Dr.Gulam Nabi Alsath, ECE Dr. Y.Ramana Rao (CEG, Guindy)	20.88	DST (Indo-Srilankan Joint Project Scheme)	2021 - 2023
151	Design of metasurface based shared aperture phased array antenna operating in S and X bands	Dr.K.T.Selvan, ECE	9.71376	LRDE, Ministry of Defence, DRDO	2021 – 2022
152	Artificial Intelligence (AI) based ‘Screening Tool’ to predict future Osteoporotic Hip Fracture Risk in Post-menopausal women and Elderly population using X-ray Image	Dr. V,S.Felix Enigo (CSE) – PI & Dr.B.Prabavathy (CSE) - Co PI & Dr. K. Nirmala (Bio Medical) - Co PI & Dr. Sachin Gaurishankar Sarate (Bio Medical) – Co PI	50.00	BIRAC-BIG Scheme	1.5 years (2021-2023)

Sl. No.	Project Title	Principal Investigator	Amount in Rs. Lakh	Funding Agency	Duration
153	Vulnerability Parameters of Graphs and its applications in Biomedical Engineering	Dr. B.Vijayalakshmi, Mount Carmel College, Bangalore & Dr. R. Sundareswaran, Mathematics	1.2	Centre for Scientific Research and Advanced Learning, Mount Carmel College, Bangalore	2021- 2024 (Three years)
154	Non Invasive blood sugar measurement methods	Dr. M.Senthil Kumaran	10.0	Student Idea in SIH Funding by AICTE	2019-2020 (extended for another 1 year due to covid)
155	Experimental analysis of an Energy Recovery Ventilator (ERV) combined with UVGI and air filtration system for enhancing IAQ (Indoor Air Quality) in non-ventilated spaces	Dr. A. S. Ramana, Mechanical	0.5	Indian Society of Heating Refrigerating and Air-Conditioning Engineers	2020-2021 (One year)
156	Design and development of replicable and scalable cyber physical micro grid system	Dr.R.Deepalaxmi Co-PI	15.3	DST India-Serbia bilateral project	2022-2025 3 years
157	Speech Assistive technologies	Dr.P.Vijayalakshmi, ECE Dr.T.Nagarajan, SNU, Chennai	85.26	MeiTY	2022 – 2025
158	Prosody Modelling	Dr.T.Nagarajan, SNU, Chennai Dr.P.Vijayalakshmi, ECE	98.41	MeiTY	2022 - 2025
159	A project on identify social entrepreneurial opportunities for Women in New area of urbanisation.	Dr.Srinivas Gumparthi	4.0	ICSSR	2022-2023 (1 Year)
160	EXPERIMENTAL ANALYSIS AND OPTIMIZATION OF ELECTRIC FIELD DISTRIBUTION AROUND POLYMERIC INSULATORS IN EXTRA HIGH VOLTAGE TRANSMISSION LINES	Dr.K.Usha	29.74 laksh	DST-SERB	2022-2025 (3 yrs)
161	Speech-to-speech translation	Dr.T.Nagarajan, SNU Chennai Dr.P.Vijayalakshmi	50.00	DST IMPRINT II C	2022 - 2025 (3 years)

Sl. No.	Project Title	Principal Investigator	Amount in Rs. Lakh	Funding Agency	Duration
162	BARF - Blind Abled Reading Frame	DR. D. Thenmozhi	24	DST – TDP scheme	2023 - 2026 (3 years)
163	Characterization of Novel Mutants of Human Protein Z-dependent Protease Inhibitor (ZPI):PotentialTherapeutics for Hemophilia	PI: Dr. Tanusree Sengupta	7.5 Lakhs	SERB	2023 - 2026 (3 years)
164	"Artificial Intelligence and IoT based Smart Vet Ecosystem for Animal Health, Patient Care and Precision Livestock Farming"	Dr.A.Kavitha	~ 215.38632	NASF	2023 - 2026 (3 years)
165	Growth of salt-inclusion chalcogenides and different-composition chalcogenides single crystals and Raman spectroscopic studies on these crystals	Dr. K. Aravinth	33.18	SERB	2023 - 2026 (3 years)
166	Development of large size and high quality Piperazine derivative single crystal: Unidirectional RSR and ISR methods"	Dr. SenthilPandian M	20.00	SERB	2023 - 2026 (3 years)
167	In-situ observations of Si based crystalline materials with various dopants for PV Applications	Dr. M. Srinivasan	5.00	GIMRT	2023 - 2025 (11/2 years)
168	Development of Graphene VA membraned for water treatment process	Dr.K.Sathishkumar	5.30	Prism	2023 - 2025 (11/2 years)
169	Human Reliability Assessment and in-situ health monitoring for manned submersible crew.	Dr.R.Jayaparvathy and Dr.Pravin BME	46 .36	MOES	2023 - 2026 (3 years)

Sl. No.	Project Title	Principal Investigator	Amount in Rs. Lakh	Funding Agency	Duration
170	Synthesis and Characterizations of Novel Heusler Alloys for Thermoelectric Applications	Dr.M.Srinivasan	5.00	GIMRT	2023 - 2025 (11/2 years)
171	A powered EMG-based embedded system controlled transfemoral prosthesis"	Dr.G.Satheeshkumar	35.00	PASCM	2023 - 2025 (11/2 years)
172	Development of black phase Formamidinium lead triiodide-based hybrid perovskite light absorber with improved thermal stability for solar cell applications"	Dr. Mrunal Deshpande and Dr. Govindaraj	1.50	UGC DAE.	2023 – 2024
173	Wire arc additive manufacturing of Inconel 718 to Stainless steel functionally graded material using dual filler TIG welding	Koteswara Rao S. R. Dr Lakshminarayanan	24.20	Directorate of ER&IPR, DRDO	3 yrs
174	Pedagogy of Mathemaics and science through low cost experimental methods and activities	Dr.N.P.Rajesh	17.70	DST	3 Years
175	Growth of High-Quality Alkali Metal Halide Perovskite single Crystals for High Energy Radiation Detector Applications	Dr. P. Karuppasamy Dr. Muthu Senthil Pandian Prof. P. Ramasamy	1.50	UGC-DAE CSR	2023-2026 Three Years