



KALASALINGAM

ACADEMY OF RESEARCH AND EDUCATION

(DEEMED TO BE UNIVERSITY)



Under sec. 3 of UGC Act 1956. Accredited by NAAC with "A" Grade
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Office of Research and Development

Total No. of Completed Research Projects

: 93

Total Amount

: Rs. 17,56,59,180

List of Funded Projects – Completed

Sl. No:	Title of the Project	Principal Investigator(s)	Funding Agency	Amount Sanctioned	Approval letter Number and Date
1.	Study of Interface problems associated with coupled ordinary differential equations	Dr. M. Venkatesulu Dean (SHIP)	DST	974400	SR/S4/MS:629/09 dt 4/08/10
2.	Domination in Graphs – Theory, Algorithms and Applications	Dr. S. Arumugam n-CARDMATH	NBHM	835150	48/5/2008-R&D II/561 dt 07/0709
3.	Investigation on mechanical properties of naturally woven coir/non-clay reinforced hybrid composites	Dr. J.T. Winowlin Jappes Dept. of MECH	DST	1470000	SR/FTP/ETA-092/2009 dt 10/06/10
4.	Rare earth doped nano crystalline olivine phosphate cathodes for high voltage high energy lithium battery	Dr. G. Hirankumar Dept. of Physics	BRNS	1760000	2010/20/37P/3/B RNS/1062 dt 20/07/10
5.	Decomposition Graphs into Paths and Cycles	Dr. S. Arumugam n-CARDMATH	NBHM	698000	48/2/2004/R&D-II/7372 dt 25/10/04
6.	Domination	Dr. S. Arumugam	DST	1660400	SR/S4/MS/282/0

	Related Functions in Graphs	n-CARDMATH			5 dt 14/07/06
7.	Multilevel Multicriteria Optimization of Water Supply Facility Expansion Planning	Dr. C. Thangaraj Dept. of CIVIL	DST	990720	SR/S4/MS:364/06 dt 06/06/07
8.	Combinatorial optimization in packing problems specific to VLSI design	Dr. P. Subbaraj & Dr. S. Saravanasankar Dept. of ECE	DST	1260000	SR/S4/MS:326/06 dt 30/05/07
9.	Development of Hybrid Metaheuristic Algorithms for Solving Power System Operation Planning Under Deregulated Environment	Dr. S. Kannan Dept. of EEE	DST	990720	SR/S4/MS:350/06 dt 30/05/07
10.	Solutions of Boundary value problems for coupled non-linear ordinary differential equations	Dr. M. Venkatesulu Dean (SHIP)	DST	794300	SR/S4/MS:279/05 dt 22/03/06
11.	Development A pilot Scale Sensor Network for Monitoring Water Quality Variations	Dr. C. Thangaraj Dept. of CIVIL	AICTE	600000	8023/BOR/RPS-45/2006-7 dt 26/02/07
12.	Remote Patient Monitoring System Using Wireless Sensor Network	Dr. M. Pallikonda Rajasekaran Dept. of ICE	AICTE	350000	8023/BOR/RPS-102/2006-07
13.	Molecular Mechanisms of Vascular Permeability in Diabetic	Dr. G. Sangliyandi Dept. of Bio-Tech	DBT	526000	BT/PT7704/ME D/14/1065/2006 dt 10/01/08

	Retinopathy :PEDF is an anti Permeability agent				
14.	Studies of Molecular mechanism of PEDF and VEGF in Diabetic retinopathy	Dr. G. Sangliyandi Dept. of Bio-Tech	ICMR	1416923	53/5/2006-BMS dt 22/01/07
15.	Studies on Molecular Mechanism of Erythropoietin in diabetic retinopathy	Dr. G. Sangliyandi Dept. of Bio-Tech	DST	1236000	SR/FT/L- 118/2006 dt 22/01/08
16.	Saturation Of Graph Parameters	Dr. M. Subramanian & Dr. A. Thuraiswamy Dept. of Mathematics	DST	1007400	SR/S4/MS/515/0 7 dt 22/04/08
17.	Investigation of Mechanical Properties of Basalt Fiber Reinforced Polymer Composites	Dr. V. Manikandan & Dr. J.T. Winowlin Jappes Dept. of MECH	DST	2032000	SR/SE/ME/0038 /2007 dt 07/07/08
18.	Quality of work life among women employees in various government and private sector in Tamil Nadu	Dr. S. Sakthivel Rani Dept. of MBA	ICSSR	295000	RP02/0031/2008 /RP dt 13/02/09
19.	Rain Guage Network Design to Improve Rainfall Estimation for Sustainable Planning of water Resources in River Basin	Dr. C. Sivapragasam Dept. of CIVIL	CSIR	506314	24(0305)/09/EM R-II dt 02/03/09
20.	A structural Model	Dr. S. Rajaram	ICSSR	280685	RP02/0044/2008

	for Customer Behaviour & Service Quality in Insurance Sector – A Servqual Approach	Dept. of MBA			/RP dt 03/06/09
21.	Cell Formation Using Graph Theory in Cellular Manufacturing System	Dr. P. Venkumar Dept. of MECH	DST	959400	SR/S4/MS/562/09 dt 04/08/09
22.	<i>Scale up of polyhydroxyalkanoates production from indigenous isolates and its applications</i>	Dr. G. Sangliyandi Dept. of Bio-Tech	DBT	1613000	BT/PR-10211/BCE/08/615/2007 dt 09/01/09
23.	Biosynthesis and Characterization of Silver Nanoparticles, A Potential New Therapeutic Approach	Dr. G. Sangliyandi Dept. of Bio-Tech	CSIR	896167	37(1384)/09/EMR-II dt 07/10/09
24.	Designing a Structural Service quality model for telecommunication industry-a TELEQEL Approach	Dr. S. Rajaram Dept. of MBA	IIMA	190000	IIMA dt 08/10/09
25.	Designing a Structural Model for measurement of Service Quality in Railways and Hospitals with special reference to Tamilnadu and Kerala State	Dr. S. Rajaram Dept. of MBA	IIPA	382000	CPCPCW-2009/IIPA/01-5/2010-11/5 dt 27/09/10
26.	Gold nanoparticles: Burgeoning Therapeutic molecules for	Dr. G. Sangliyandi Dept. of Bio-Tech	DST	4004800	SR/NM/NS-31/2010 dt 04/10/10

	proliferative diabetic retinopathy				
27.	High throughput Crystallography	Dr. S. Selvanayagam Dept. of Physics	DST	732000	SR/FT-LS-082/2008 dt 23/07/09
28.	Sequestration of Co2 Emission through critical analysis of end use energy efficiency in heterogeneous mixture of process industries	Dr. S. Rajakarunakaran Dept. of MECH	DST	1800000	DST/IS-STAC/CO2-SR-92/11(G) dt 11/10/11
29.	n-CARDMATH (Core Group Research Facility)	Dr. S. Arumugam n-CARDMATH	DST	21121600	SR/S4/MS:427/07 dt 26 th March 2007
30.	Classical Tamil Literature and Ancient Chinese Literature: A comparative study	Dr. A. Benita Dept. of English	Central Institute of Classical Tamil (MHRD)	250000	11-264/cict/2012-13/Research Project -28 dt 20/11/12
31.	Technology propagation and development of micro enterprise by SHG women	Dr. S. Rajaram Dept. of MBA	DSIR	1280000	DSIR/TDUPW/TW 157/2010 dt 9/12/11
32.	Experimental Investigations on the characteristic of supersonic flow past axisymmetric cavities	Dr. S. Jeyakumar Dept. of MECH	DST	1650000	SR/FTP/ETA-0055/2009 DT 15/05/12
33.	Fabrication and machining studies of Al(6351)-SiC-B4C hybrid metal matrix composites	Dr. M. Uthayakumar Dept. of MECH	BRNS	2056500	2012/34/39/BRNS/1037 dt 06/07/12
34.	An empirical study on the Intension to visit cultural	Mrs. S. Yavana Rani Dept. of MBA	ICSSR	392375	2-037/2010-RP dt 16/03/11

	heritage site- Rameshwarm south India				
35.	Towards development of novel metal free organic dyes for highly efficient dye-sensitized solar cells	Dr. C. Ramalingam Dept. of Chemistry	DST	2125800	SR/FT/CS- 149/2011 dt 13/08/12
36.	Design and synthesis of phenothiazine based novel organic dyes for highly efficient dye-sensitized solar cells	Dr. C. Ramalingam Dept. of Chemistry	CSIR	2850000	02(0099)/12/EM R-II dt 31/10/12
37.	Problems and its Impact of Women Migrants Households in Slums with Special Reference to Tamil Nadu State	Dr. S. Rajaram Dept. of MBA	ICSSR	500000	02/228/2012/RP dt 30/05/13
38.	Impact of TV media on Children's Health in Major Cities of Tamilnadu and Kerala A comparative Study	Dr. M. Jeyakumaran Dept. of MBA	IIPA	374000	CPCPCW- 2009/IIPA/3 rd Yr/04/2013-14 dt 14/03/14
39.	FIST	Dept. of Mechanical Engg.	DST	12500000	SR/FST/ETI- 052/2010 dt 05/08/11
40.	FIST	Dept. of ICE	DST	6500000	SR/FST/ETI- 249/2009/1 dt 30/04/2010
41.	Molecular functional characterization of mitochondrial BK channel in mouse	Dr. T. Kathiresan Dept. of Bio-Tech	DST	2500000	SB/FT/LS- 204/2012 dt 26/04/13

	cochlear hair cell				
42.	Genome-wide Mapping of Murine Specific Dengue T-cell epitopes: Computational Prediction Identification and Use as candidate vaccines	Dr. K. Sundar Dept. of Bio-Tech	DST SERB	2484000	SR/SO/HS-0248/2012 dt 30/09/13
43.	A search for the new NLO crystals for Industrial applications from anisidine and guanidine compounds	Dr. Asath Bhadur	CSIR	1227000	03(1276)/13/EM R-II dt 12/04/13
44.	Development and Implementation of MPPT Algorithm for Solar Photovoltaics System under Uniform and Non-Uniform Irradiation Conditions	Dr. D. Devaraj	DST	895500	DST/TMC/SERI/2K12/26(G) dt 09/06/2014
45.	Intelligent phase failure control of distribution transform for Rural Areas/Remote Areas	Mr. M. Karuppasamyandian	IEEE AIYEHUM	33190	Minor Project
46.	Developing and Designing of Special Purpose Sampling Plans under the Weibull Life time model	Dr. S. Balamurali	DST	1140000	SR/S4/MS:790/12 dt 11/09/2014
47.	IoT Based Power Management and Condition Monitoring in	Mrs. V. Agnes Idhaya Selvi and Mr. M. Karuppasamyand	IEI	60000	R.5./2/PG/17-18/PG2018001 dt 07/07/17 (Minor Project)

	Micro Grid	ian			
48.	Machining and Erosion studies of Red mud an Industrial waste based Polymer matrix Composite	Dr. M. Uthayakumar/ Automobile	MEFCC	2700000	19-20/2012-RE dt 10/03/2016
49.	Supramolecular Underwater Adhesives using Cucurbiturils and Cyclodextrins	Dr. N. Selvapalam/ Chemistry	SERB	2824000	ECR/2015/0003 18 dt 11/03/2016
50.	Computational Studies on Binary Oxide Nanoclusters and their Applications in Catalysis	Dr. P. Selvarengan/ Physics	SERB	1907400	YSS/2015/00131 1 dt 11/05/2016
51.	Performance Investigation of Green Composite- A Formulated Microbial Organism Based Novel Bio-Resin	Dr. N. Rajini/ Mechanical Engineering	SERB	2314070	YSS/2015/00135 3 dt 12/07/2016
52.	Innovation and Entrepreneurship Development Centre (IEDC)	Dr. M.Jeyakumaran/ Business Administration	DST	4530000	11/04/2014- NEB(C) dt 01/08/14
53.	Social Capital and Sustainable Livelihood Interventions among Irula Tribal Community in Tamil Nadu	Dr. K.M. Ashifa/ Social Work	NRDMS DST	733700	NRDMS/SC/ST/ 44/016(G) dt 17/10/2016
54.	Impact of Indian Soap Opera on Women Behavior: A Comparative Study in Tamil	Dr. M.Jeyakumaran/M BA Dr. K.M. Ashifa/MSW	NCW	903000	16(66)/2015- 16/NCW(RS) dt 31/07/17

	Nadu and Kerala				
55.	FIST	Dept. of ECE	DST	4200000	SR/FST/ETI-336/2013(c) dt. /10/2014
56.	Design of Phenothiazenylpyrimidin decorated novel heterocycles as antitubercular agents	Dr. C. Ramalingan/ Chemistry	ICMR	2100000	58/16/2013-BMS dt 03/03/15
57.	Elucidation of Mechanism of adriamycin mediated male reproductive toxicity and recovery by restoration of epididymal adipose tissue	Dr. S. Arunachalam/ Biotechnology	SERB	379845	YS/LS-99/2013 dt 27/07/2016
58.	Experimental Investigation on the effect of pylon based injection in Modified Dual Combustion Ramjet Engine	Dr. S. Jeyakumar/ Aeronautical Engineering	DRDO	931750	ARDB/01/10411 833/M/I dt 19/01/17
59.	Experimental Investigations on Mixing and Combustion in a Modified Dual Combustion Ramjet Engine	Dr. S. Jeyakumar/ Aeronautical Engineering	SERB	2482970	EMR/2016/0041 60 dt 25/03/17
60.	Energy Saving through IoT Based Building Automation and non linear predictive controller	Dr. D. Devaraj/EEE Dr. Seshadhri Srinivasan, /ICE Dr. B, Subathra/ICE Mr. M. Karuppasamyandian/EEE	DST	2010360	TMD/CERI/BEE /2016/088(G) dt 09/03/17

61.	Fabrication and Systematic Investigation on Novel Nano Crystalline Quaternary Cu_2ZnSnX_4 (X=S, Se, Te) Thin Films as Absorber Layer for Solar Cell Application by SILAR method".	Dr. Asath Bhadur/ Physics	SERB	1863911	EMR/2016/0068 74 dt 04/08/2017
62.	Constructing the Hindi Spoken Language Database	Dr. Kyung Tae Kim	Human Media Tech. Co, Korea	1327600	International Minor Project (US\$ 20000) 28/03/16
63.	Bio-Epoxy, Hemp Fiber Mat, Glass Fiber Mat, Characterization, Mechanical and Thermo Mechanical Properties	Dr. N. Rajini/Mechanical Engineering	ISRF	161667	10.07.2019
64.	Study on the effect of heat treatment on 3D printed Su-718 Material	Dr. J.T. Winowlin Jappes/ Mechanical Dr. M. Adam Khan/ Mechanical	DRDO	987900	GTRE/MMG/B MRI/1035/18/C ARS/A/18 dt 29/05/18
65.	Elucidating the role of PPAR alpha in the development of doxorubicin-induced cardiomyopathy	Dr. Sankarganesh Arunachalam/ Biotechnology	SERB	1000000	EMR/2016/0035 48 dt 05/06/18
66.	Use of recombinant bacteriophage as a novel delivery vehicle for viral CTL epitopes	Dr. K. Sundar/ Biotechnology	SERB	4429600	EMR/2016/0030 35 dt 16/07/2018
67.	Investigation on the performance of	Dr. M. Uthayakumar/	DRDO	1135000	CVRDE/MMG/ SPC/127/17-18

	Abrasive Water Jet Machining on Armor Steel	Automobile Engineering Dr. S. Thirumalai Kumaran/ Automobile Engineering			dt 27/07/18
68.	Resilient and optimal micro-Energy-grid (ROME)	Dr. Seshadhri Srinivasan/ICE Dr. V. Vasudevan/CSE Dr. B. Subathra/ICE	International Bilateral Cooperation Division	1989000	INT/NOR/RCN/ICT/P-05/2018 dt 06/08/18
69.	Unraveling the physiological mechanism of heartfulness meditation, Pranahuti-mediated benefits on cardiovascular risk	Dr. Sankarganesh Arunachalam/ Biotechnology	DST	4613968	DST/SATYAM/2017/119(G) dt 20.09.18
70.	A study on Hazard and Risk Assessment of firework industries in Sivakasi, Virudhunagar District, Tamilnadu	Dr. R. Ramalakshmi/ CSE A. Robert Singh/CSE	DST-NSTMIS	2790000	DST/NSTMIS/05/312/2017-18 dt 29.10.2018
71.	An IoT based Smart Artificial Pancreas and an ICT Platform for Treating Diabetes in Elderly	Dr. S. Seshadhri/Biomedical Dr. B. Subthara/ICE, Dr. Kim/ECE	DST-SEED	5640886	SEED/TIDE/2018/59/G dt 13.11.2018
72.	Biological Treatment of Hazardous Sludge from Petroleum Refinery Industry	Dr. Naresh Kumar Sharma/ Biotechnology Dr. S. Vanitha/ Civil Engineering Dr. C. Sivapragasam/ Civil Engineering Dr.	Universiti Teknologi Petronas, Malaysia	177994	170_20181219_KARE_MAMY dt 19.12.2018 (US\$2600)

		M.Swaminathan/ Chemistry			
73.	Investigations on rare earth metal doped metal molybdate nanocomposites prepared by microwave assisted combustion method for catalytic and energy storage applications	Dr. S. Asath Bahadur/ Physics	UGC-DAE	679320	CSR-KN/CRS-103/2018-19/1042 dated 26-12-18
74.	Corrosion studies on 316 SSB4C composite prepared by powder metallurgical route	Dr. S. Thirumalai Kumaran/Automobile Engineering Dr. M. Uthayakumar/ Automobile Engineering	UGC-DAE	679320	CSR-KN/CRS-115/2018-19/1053 dated 26-12-18
75.	Investigation of Lithium Based Metal Oxides and CNT Based Nanocomposites for Lithium Ion Capacitor Applications	Dr. N. Nallamuthu/ Physics	SERB-TARE	1830000	TAR/2018/0013 23 dt 22-02-19
76.	Self-Sustaining Photo Bio-Catalytic Reactors with Concomitant Biofuel Harvesting from Crepe Cotton Wastewater	Dr. Naresh Kumar Sharma/ Biotechnology	SERB-TARE	1830000	Tar/2018/000818 dt 27-02-19
77.	Evaluation of Solar PV System Performance under Partial Shading Conditions	Dr. A. Ramkumar/EEE	IEI	149000	R.6/2/DR/2019-20/DR2020002 dt 20.05.2019
78.	Micromachining of Biomedical	Dr. S. Rajesh/ Mechanical	SERB	2572400	DST/TDT/AMT/2017/160(G) dt

	Materials (Shape Memory Alloys) using Acidithiobacillus Ferrooxidans and Thiooxidans Microorganism	Engineering Dr. M. Uthayakumar/ Automobile Engineering			03.06.2019
79.	3D printed flexible optical fibers using biodegradable PHBV/Graphene Nanocomposites for Biophotonics applications	Dr. N. Rajini/ Mechanical Engineering	International Bilateral Cooperation Division	780000	DST/INT/Thai/P-08/2019 dt 15-06-19
80.	Development of Hybrid Imidazole-Metal Halide (IMZ-MX) and Guanidine-Metal Halide (Gund-Mx) Derivative Perovskite Materials for Solar Cell and Tunable Solid State Light Emitting Applications	Dr. M. Krishna Kumar/ Physics	CSIR	1008572	03(1468)/19/EMR-II dt 05.08.19
81.	DST-NIMAT	Dr. J. Deny/Electronics and Communication Engineering	NIMAT	380000	EDII/DST-NIMAT/19-20/324 dt 12.08.2019
82.	AICTE Margdarshan	Dr. J.T. Winowlin Jappes/Mechanical	AICTE	3000000	58/14/RIFD/Margdarshan/2019-20 dt 06.09.2019
83.	Scientometric Assessment of Research Trends in Precision Agriculture: Global and Indian Perspectives	Dr. G. Rajaraman/Agriculture Dr. D. Gnanasekaran/ Library	NSTMIS	2004000	DST/NSTMIS/05/12/2018-19 dt 23.09.2019
84.	Bibliometric study	Dr. S. Ramkumar/	NSTMIS	3031603	NSTMIS/2019/3

	of soft computing techniques and its applications	Computer Applications			42 dt 06.11.2019
85.	Food Safety and Quality Analysis on Flexible Nanostructured Substrates by Surface Enhanced Raman Spectroscopy	Dr. Naidu Dhanpaul Jayaram/Physics	SERB	3201000	SRG/2019/0015 76 dt 17/11/2019
86.	S&T Tinkering Workshop and Demonstration for School Children in districts of Madurai, Tirunelveli & Rameshwaram (aspirational districts) and Chennai	Dr. S. Seshadhri/Biomedical Dr. B. Subathra/ICE	DST-NCSTC	3720000	CO/B/FB/G09/2019 dt 10.12.2019
87.	Sustainable Materials	Dr. M. Uthayakumar/Automobile Engineering Dr. P. Balamurugan/Mechanical Engineering	Poland National Science Academy	3000000	PPI/APM/2018/1/00027 Dt 12.02.19
88.	Analysis of the Quality Usefulness of Higher Education Institutions with Special Reference to Southern Tamilnadu	Dr. B. Shanmuga Priya/Business Administration	AICTE	500000	8-155/RIFD/RPS(Mgmt.)/policy-1/2018-19 dt 13.02.2020
89.	Use of Software tools in Finite Element Analysis (FEA)	Dr. I. Siva/Mechanical Engineering	AICTE	300000	34-65/397/RIFD/ST TP/Policy-1/2018-19 dt

					21.02.2020
90.	Cyber Physical Systems (CPS): Design Techniques and Applications	Dr. P. Sivakumar/Electronics and Communication Engineering	AICTE	400000	34-65/396/RIFD/ST TP/Policy-1/2018-19 dt 21.02.2020
91.	Organization of STEM Exhibition & Activity Corners for Rural Students of Virudhunagar District, Tamil Nadu	Dr. P. Sivakumar/Electronics and Communication Engineering	DST-NCSTC	1161000	CO/A/FP/E71/2019 dt 02.03.2020
92.	INSA Visiting Scientist Fellowship	Dr. P. Devendran/Phy	INSA	30000	INSA/SP/VSP-27/2022-23 dt 12.05.2022
93.	Smart India Hackathon 2022 Hardware Edition	Dr. J. Deny	MHRD Innovation Cell	1067000	1-1/IC/SIH-22/2021-22/11 dt 17.08.2022
	Total			175659180	