

Research Projects (Completed)

No	Principal Investigator	Project Title	Period	Funding Agency	Grant (Rs.lakhs)
1	Dr.V.G.Kulkarni		1991-1995	ICAR	7.09
2	Dr.V.G.Kulkarni		1993-1996	ICAR	8.88
3	Dr.B.Muralidharan		1994-1997	TNSCST	2.14
4	Dr.T.Vasudevan	Development of vapour phase corrosion inhibitors for ferrous and non-ferrous metals	1995-1998	CSIR	5.50
5	Dr.T.Vasudevan	Development of polymers for the treatment of boiler and cooling waters	1995-1998	TNSCST	2.50
6	Dr.H.Gurumallesh Prabu	Studies on non-conventional low cost adsorbents for industrial wastewater treatment.	1995 - 1997	UGC	0.10
7	Dr.A.Gopalan	A Novel route to prepare conducting polymers of good processibility	1996-1999	AICTE	5.50
8		PAN based gel electrolytes for battery applications	1996-1999	DST	5.10
9	Dr.P.Manisankar	Development of treatment process for Dye house effluent by electrochemical method	1996 - 1998	AICTE	7.30
10	Dr.G.Paruthimal Kalaigan	Development of zinc electrodes for the alkaline secondary battery systems	1996 - 1999	TNSCST	2.00
11	Dr.K.Balakrishnan	Emeritus Scheme	1996-1999	CSIR	5.10
12	Dr.T.Vasudevan	Development of electroless nickel composites	1997-1999	AICTE	3.00
13	Dr.A.Gopalan	Development of polymerization process for the preparation of commercially important polymers	1997-2000	AICTE	5.00
14	Dr.P.Manisankar	Development of electrochemical effluent treatment and recycling of water.	1997 - 1999	AICTE	5.60
15	Dr.P.Manisankar	Development of treatment process for distillery effluent by electrochemical route	1997 - 2000	AICTE	5.00
16	Dr.P.Manisankar	Development of a new method for the analysis and removal of pollutants	1997 - 2001	UGC	4.30
17	Dr.A.Gopalan	Development of new polymeric film coating on metal surfaces and its practical applications	1997-2000	UGC	3.00

Research Projects (Completed)

18	Dr.P.Manisankar	Development of stripping procedure using modified electrodes for trace determinations	1997 - 2001	DST	13.70
19	Dr.A.Gopalan	Analysis of conducting co-polymers by UV-Visible spectroscopy	1998-2001	DST	10.00
20	Dr.G.Paruthimal Kalaiganan	Development of Cadmium Electrode for Alkaline Secondary Battery Systems	1998 - 1999	UGC	0.10
21	Dr.H.Gurumallesh Prabu	Development of eco-friendly methods for textile industry wet-processing and recycling of water.	1999 - 2001	AICTE, New Delhi	8.00
22	Dr.H.Gurumallesh Prabu	Development of new procedures for the determination of explosives at trace levels by adsorptive SW stripping voltammetry.	2000 - 2003	DRDO	10.80
23	Dr.G.Paruthimal Kalaiganan	A study to develop lithium intercalated carbon electrodes and assess its properties for high voltage lithium cells.	2001 - 2003	DRDO	8.80
24	Dr.B.Muralidharan	Study on the development of some modified polyester fibers with improved properties	2001-2004	UGC	2.08
25	Dr.R.Gangadharan	Emeritus Scheme	2003-2005	AICTE	4.50
26	Dr.T.Vasudevan	Synthesis and preparation of nanoparticle secondary cell cathode materials of spinel structure and their compatibility of intercalation process	2004-2007	DST	22.30
27	Dr.A.Subramania		2004-2007	DST	15.40
28	Dr.A.Subramania		2004-2007	UGC	5.93
29	Dr.P.Manisankar	Development of nano sized cathode materials for lithium battery applications	2005 - 2010	DST	22.37
30	Dr.G.Paruthimal Kalaiganan	Development of micro- porous PVdF-HFP based blend polymer electrolyte membranes for advanced Li – battery applications	2005-2008	DST	9.35
31	Dr.G.Paruthimal Kalaiganan	Development of PVdF-HFP based nano-composite polymer electrolyte membranes for advanced Li – battery applications	2005-2008	UGC	5.93
32	Dr.P.Manisankar	Investigation on the synthesis and characterization of functional/ multi	2006 - 2010	DST	40.45

Research Projects (Completed)

		component nano structured (nanotube / nanorod / nanoribbon / nanocables) polyaniline based materials			
33	Dr.P.Manisankar	Carbon nanotube modified electrode for enhanced voltammetric sensing of organic pollutants	2006-2010	DST	32.43
34	Dr.G.Paruthimal Kalaigan	Preparation and characterization of Nano-crystalline Ni-Co composite coatings for the industrial applications.	2007 - 2010	UGC	6.03
35	Dr.H.Gurumallesh Prabu	Conducting Textiles (collaboration with Monah University, Australia)	2007	Australia Govt	8.0
36	Dr.P.Manisankar	Development and evaluation of alternatives chromate based primers on aluminium aerospace alloys.	2008-2009	DRDL	9.79
37	Dr.P.Manisankar	Development of electrospun nanofibrous polymer electrolyte membranes for high performance dye sensitized solar cells.	2009-2011	AURF	4.00
38	Dr.H.Gurumallesh Prabu	Study of silver nano particle for functionality in textile materials.	2009 - 2010	AURF	0.64
39	Dr.M.Sundrarajan	Studies on the effect of eco-friendly materials in textile.	2009-2010	AURF	0.64
40	Dr.T.Stalin	Fluorescence biosensor based on insoluble β -cyclodextrin polymer for direct determination of cholesterol and 2, 4- and 2, 6-dinitrophenols..	2009-2010	AURF	0.64
41	Dr.N.Sengottuvelan	Ferrocene grafted hydroxy terminated polybutadiene (Fc-HTPB): Burningrate evaluation studies as ballistic modifier in high energy rocket Propellant binder.	2009-2010	AURF	0.64
42	Dr.H.Gurumallesh Prabu	Sonophotochemical degradation of dyes catalyzed by different polyoxometalates immobilized on TiO ₂ nanoparticles.	2009-2012	UGC	6.59
43	Dr.P.Manisankar	Development of electrospun nanofibrous polymer electrolyte membranes for high performance dye sensitized solar cells.	2010 - 2013	AURF	4.00
44	Dr.G.Paruthimal Kalaigan	Development of Acidizing inhibitors for Petroleum Oil Wells.	2010 - 2013	UGC	8.13
45	Dr.S.Thambidurai	Synthesis of Zinc Oxide Blended	2010-	AURF	0.64

Research Projects (Completed)

		Chitosan Nanoparticles for Anti-bacterial and UV-Protection on Cotton Fabric.	2011		
46	Dr.S.Thambidurai	Optimization study of salt-free reactive dyeing and fixing of seaweed nano particles on cotton fabric for permanent antibacterial finishing.	2010-2013	UGC	7.71
47	Dr.N.Sengottuvelan	Metallonuclease activity and structural analysis of binuclear metal complexes of pendant functionalized Tetraazamacro cyclic ligand	2010-2013	DST	16.00
48	Dr.M.Sundrarajan	Physico-chemical studies on borewells water in Tirupur District.	2010-2011	AURF	0.20
49	Dr.M.Sundrarajan	Source reduction of pollutants from textile effluent by Greener route.	2010-2013	DST	19.33
50	Dr.M.Sundrarajan	Effective minimization of Pollution load in reactive dye bath using eco-friendly salt and ozonation.	2010-2013	UGC	4.33
51	Dr.P.Manisankar	One-step co-electro polymerized nano Conducting polymer–enzyme composite film biosensor for sensitive determination of polyphenol antioxidants	2011 - 2016	DST	20.09
52	Dr.T.Stalin	Development of newer modified electrodes using conducting polymer nano composites for dye Sensitized solar cells	2011-2014	UGC	7.24
53	Dr.N.Sengottuvelan	Development of High-Efficiency Phosphorescent Cationic Iridium (III) Complexes for Organic Light Emitting devices	2011-2014	UGC	12.15
54	Dr.P.Manisankar	One-step co-electropolymerized nano Conducting polymer–enzyme composite film biosensor for sensitive determination of polyphenol antioxidants	2012 - 2014	UGC- BSR	7.00
55	Dr.T.Stalin	Enhanced Host-guest electrochemical recognition of various organic pollutants using cyclodextrin in the presence of carbon nanotube	2012-2015	DST	21.20
56	Dr.S.Umadevi	Monolayers of liquid crystal – nanomaterial composites: preparation, characterization and applications in sensing and catalysis	2012-2015	DST	24.10
57	Dr.G.Paruthimal	Studies on Novel Polymer electrolyte	2013 -	UGC -	17.47

Research Projects (Completed)

	Kalaigan; Dr.P.Kandasamy (PDF)	membranes based on poly(arylene ether)s with benzimidazole group for high temperature fuel cell applications.	2016	Dr.D.S. Kothari PDF	
58	Dr.P.Manisankar	Metal Organic Redox Frameworks (MoFs) for Photochemical Textile Processed. (collaboration with University of Bath, UK) Funds 13.57 lakhs (UGC), £ 14600 (UK)	2014 - 2016	UGC-UKIERI	23.79
59	Dr.G.Paruthimal Kalaigan	Synthesis and electrochemical characterizations of substituted nano $\text{LiNi}_{1/3}\text{Mn}_{1/3}\text{Co}_{1/3-x}\text{M}_x\text{O}_2$ cathode materials for the rechargeable lithium-ion batteries.	2014 - 2016	UGC-BSR	7.00
60	Dr.P.Muthu Mareeswaran	Carbon dioxide capture and electro/photo electrochemical reduction using caliximadazole	2014-2019	DST – INSPIRE	35.00
61	Dr.P.Manisankar: Dr.S.Prakash (PDF)	Design of a Li and Na-ion full cell battery using high capacity anode material for portable electronic devices	2015 - 2020	UGC	31.16
62	Dr.S.Umadevi	Liquid crystal assisted synthesis of nanomaterials and their applications in SERS	2015-2017	UGC	6.00
63	Dr. G. Gopu	Studies on Function of Host-Guest Molecules in Pharmaceutical research	2016-2018	AURF	0.80
64	Dr.S.Umadevi	Liquid crystal functionalized platforms for optical and electro-optical applications	2016-2019	DST	45.00
65	Dr.P.Manisankar: Dr.Saravanakunmar (PDF)	Young Scientist scheme	2016-2019	DST	33.20
66	Dr.P.Manisankar	Interdigitated electrode array for Label-free detection of salmonella typhimurium	2017-2020	UGC–BSR	33.00
67	Dr.T.Stalin	Improvements of drug properties by Cyclodextrin complexation (collaboration with University of Miami, USA)	2017-2018	UGC-Raman Fellow	25.13
68	Dr.P.Manisankar	Senor Development (Joint Project with TNAU)	2017-2020		
69	Dr.T.Stalin	Preparation and Charaterizations of Solar cell materials for DSSC	2018-2019	RUSA	3.35
70	Dr.S.Umadevi		2018-2020	RUSA	2.27
71	Dr.S.Viswanathan	Molecularly imprinted polymer	2018-	DBT	36.4

Research Projects (Completed)

		sensor for Mycotoxin detection in plants	2022		
72	Dr.H.Gurumallesh Prabu	Development of Face-mask	2018-2020	UGC	10.00
73	Dr.H.Gurumallesh Prabu : Dr.P.Sivasakthi (PDF)		2019-2022	UGC	
74	Dr. G. Gopu	Synthesis of dual functional bimetallic nanocomposites for super capacitor and sensor application	2019-2021	RUSA	3.35
75	Dr. S. Viswanathan	Molecularly imprinted Polymer based biosensor for tuberculosis detection	2019-2022	DST	17.7
76	Dr.S.Viswanathan	Smart lab on a chip biosensor integrated with protein imprinted polymer electrodes for rapid detection of HIV infection	2019-2022	ICMR	28.4
78	Dr.M.Sundrarajan	Energy and biological Applications by greener route	2021-2022	RUSA	3.35
79	Dr. G. Gopu	Synthesis of dual functional bimetallic nanocomposites for super capacitor and sensor application	2022-2023	RUSA	4.0
80	Dr.S.Umadevi		2022-2023	RUSA	2.50
81	Dr.M.Sundrarajan	Energy and Sensor applications	2023-2024	RUSA	4.00
82	Dr.S.Viswanathan	Advanced Nanomaterials for Sustainable Energy and Sensor Applications	2023-2024	RUSA	7.35
TOTAL					801