

Thiagarajar College of Engineering, Madurai-625015
Department of Electronics and Communication Engineering



Title	Objective(s)	Principal Investigator	Co-Investigators (as per the order in the proposal)	Funding agency / organization and scheme	Details of Sanction			Status	Outcomes of the project
					File no.	Amount	Period		
Synthesis & characterization of magneto dielectric substrate for microwave antenna applications	To Synthesis & characterize magneto dielectric substrate for microwave antenna applications	PI: Dr.V.Abhai-kumar	Dr.S.Raju and Dr.S.Balaji	DRDO	NIL, Dt. 28 sep 2011	20.86	3 Years	On-going	1.Infra: Coaxial Cavity and. Electromagnetic characterization Material S/W 2. Conf. -6 Journal-2 3. Ferrite Substrate Materials for Antenna
Design & development of RF MEMS shunt switches	To develop MEMS switches for satellite applications	PI: Dr.S.Kanthamani	-	DST Fast Track, SR/FTP/ETA-120/2010	SR/FTP/ETA-120/2010	20.0	3years	On-going	1.Infrastructure - Spectrum Analyzer 2.BE/ME/Ph.D Thesis 3. 2 Conference Publications
Development of miniaturized fractal antenna for multiband wireless applications	To investigate fractal antenna for wireless applications	PI: Dr. B Mani-megalai	-	DRDO	ERIP/ER/09 04508/M/01dt 12 oct 2010	11	3 years	Completed	1.Infrastructure - Spectrum Analyzer 2.BE/ME/Ph.D Thesis 3. 2 Conference Publications 4.Syllabus Revision
Intelligent surveillance system for Human action analysis	To develop an algorithm for human abnormal behaviour for an intelligent surveillance system	PI: Dr. B. Yogameena		University Grants Commission, New Delhi 41-601/2012(SR)	New Delhi 41-601/2012(SR)	10.308	3years	On-going	1.Infrastructure - Video acquisition – Camera mount, HAAP S/W 2.Ph.D Thesis-3 (ongoing) 3. Journals-2 Conferences-3 4.B.E/M.E Projects-6
Nano transmission line analysis for interconnect applications	To analyze nano transmission lines for interconnect applications	PI: Dr. S. Kanthamani		University Grants Commission, New Delhi 41-601/2012(SR)	New Delhi 41-601/2012(SR)	14.278	3years	On-going	1.Infrastructure - S/W purchased 2.BE/ME Thesis 3. Journal -1
Efficient channel navigation in	To develop effective channel	PI: Dr. MSK Manikandan		University Grants Commission, New Delhi	New Delhi 41-601/2012(SR)	10.308	3years	On-going	1.Infrastructure - IPTV Setup

internet protocol television (IPTV) using a novel frequency interleaved ordering scheme	navigation method			41-601/2012(SR))				Box, wireless router, IPTV 2.ME Thesis 3.Conferences-2
Synthesis of Dual band bandpass filter using particle swarm optimization techniques for wireless applications	To develop a novel synthesis procedure for dual band bandpass filter design using PSO for wireless applications	PI: Dr. A. Thenmozhi		University Grants Commission , New Delhi 41-605/2012(SR)	New Delhi 41-605/2012(SR)	9.068	3years	On-going	B.E Thess-1 Conferences-1
Vibration control of piezoelectric actuated smart structure with changing temperature	To demonstrate the behaviors of smart structure sensor and actuator with vibration control setup	PI: Dr. L.R.Karl-marx	NIL	University Grants Commission , New Delhi 41-589/2012(SR)	New Delhi 41-589/2012(SR)	12.1	3years	On-going	Data acquisition system setup, Journal-03, Conference-09 PhDs-04(On going)
Intelligent video surveillance system for crowd density estimation and human abnormal action analysis.	To develop an algorithm for crowd density estimation and crowd abnormal behaviour analysis for an intelligent surveillance system	PI: Dr. B. Yogameena		DST Fast Track, New Delhi, No. SR/FTP/ETA-49/2012	, No. SR/FTP/ETA-49/2012	10.70	3years	On-going	1.Infrastructure - PTZ Camera server HAPP S/W 2. Journals - 3.Conferences-3 4.PhD-2(ongoing)
Modeling and simulation of Multi-gate Nanowire transistors for low power CMOS applications.	To compile advances in different aspects of nanowire based devices, to identify the potential applications of nanowire transistors	PI: Dr. N.B. Bala-murugan		AICTE, (RPS), No.20/AICTE /RIFD/RPS(Policy-II)63/2012-2013	No.20/AICTE /RIFD/RPS (Policy-II)63/2012-2013	8.96667	3years	On-going	1.Infrastructure -TCAD S/W, 3 systems, 1 printer 2.ME thesis-6 3.PhD thesis-2(completed) 4.Journals-5
Performance analysis of mobile AD-Hoc Network security	To develop key management algorithm	PI: Dr. MSK Manikandan		AICTE, (RPS), No.20/AICTE /RIFD/RPS(Policy-II)63/2012-	No.20/AICTE /RIFD/RPS (Policy-II)63/2012-2013	10.66667	3years	On-going	1.Infrastructure -VPN devices, Routers 2..PhD thesis-

				2013					3(ongoing) 4.Publications-
Victims identification in forensic odontology using dental images	To automate the human identification process using dental x-rays with image processing technique	PI: Dr. A.Banu-mathi		UGC	No.:42-116/2013(SR)	5.42800	3years	On-going	1.Infrastructure - Dental imaging system with workstation 2. Journal-3 3.PhD-1(Completed) 4(ongoing)
Design and development of 1GHz-6Ghz ultra wide band Vivaldi antenna for airborne applications	To develop Vivaldi antenna for airborne application	PI: Dr.S.Raju		DARE, Defence R&D lab Bangaore	No:5303/DARE/CARS/BUILD UP-01/2013-2014	17.5912	3years	On-going	Research consultancy
Design and development of a conformal wrap Around antenna for Navigation application	To develop a conformal antenna for navigation application	PI: Dr.S.Raju		Research centre IMARAT , Hyderabad	RCI/DCCM/LPD/CARS-0319	9.8384	3years	On-going	Research consultancy
Design and development of conformal antenna array for avionics applications	To develop conformal antenna array for Ku band airborne application	PI: Dr.B. Mani-megalai		DRDO	ERIP/ER/11204707/M/01/1478	17.5272	2 years	On-going	1.Infrastructure - Workstation/CS T microwave studio 2.BE/ME project – 3 3.Conference-2
Development of nano composite for suppression of excess EMF radiation	To develop nano composite for suppression of excess EMF radiation	PI: Dr.V.Abhai kumar	Co.In: Dr.Balaji	DST	SB/CT/075/2013	49.90,000	3years	On-going	Infra: 1. 6 GHz Network Analyzer 2. RF Power Source-300W Thin film COATING Will be Manufactured
Development and implementation of Signal processing algorithms for real time RADAR pulse parameters measurements	Design, analyze and implement a novel Signal processing algorithm measuring parameters in Surveillance system	PI: Dr. S.J. Thiruvengadam		DRDL	Ref: No: DLRL/SJT/01(R)/2014 D0348 dt: 21-01-2015	9.77500	3 years	On-going	BE Thesi-1 ME Thesis-1 Publication-1