



Academic year 2021-2022

**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**

**SPONSORED R & D PROJECTS TAKEN UP BY THE FACULTY**

2019-2022								
Sl · No	Project Title	Year	Duratio n (in years)	Amount (In Lakhs)	Funding Agency	Status	Principal Investigator	Co-Investigator
1	Design and Fabrication of Flexible Artificial Basilar Epithelium	2021	3	30	SERB	In progress	Dr. M Uttarakumari	Shireesha G.
2	Modelling, Simulation, Comparative Performance Evaluation and Firmware implementation of Adaptive Digital Beam Forming Techniques for optimized irregular sub array based active phased Array radar	2021	1.5	10.325	DRDO	In Progress	Dr.Nethravathi K A	Dr.Geetha K S Dr.Shilpa D.R
	Design and Development of Autonomous Vehicle	2021	2	80	WIPRO	In Progress	Dr.M Uttarakumari	Dr. M Govinda raju Dr. Sujata Badiger
4	Development of classifier based on deep/machine learning algorithms for land based munitions	2020	2	37.50865	ARMRE B-DRDO	In Progress	Dr. M Uttarakumari	Dr.Usha Rani K Dr. Sujatha D Badiger Dr. M Govinda raju



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5	Preparation and characterization of chalcogenide materials for phase change memory applications	2020	1	3	VGST-RGS/F	In progress	Dr.Shylashree N	Deepika P
6	Electrostatic Energy Harvesting for Self Powered Medical wearable devices	2019	1	5	VGST-RGS/F	In progress	Dr.Shilpa D R	-
7	Design and development of flexible thin film sensors for wearable electronics	2018	1	5	VGST-RGS/F	Completed	Dr.Roopa J	
8	Release of grants under share & mentor institutions (Marghadharshan)	2018	2	17	AICTE	In Progress	Dr.Uma B V	-
9	Development of Compact C-band dual shaped graded index lens array antenna	2018	3	25	AICTE-RPS	In Progress	Dr. Ravishankar S	
<b>Total</b>							<b>212.83365 Lakhs</b>	

**2016-2019**

Sl. No	Project Title	Year	Duration in year	Amount (In Lakhs)	Funding Agency	Status	Principal Investigator	Co-Investigator
1.	Development of Compact C-	2018	3	25	AICTE-RPS	In Progress	Dr.Ravishankar S	-



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	band dual shaped graded index lens array antenna							
2.	Release of grants under share&mentor institutions(Mar ghadharshan Scheme)	2018	2	17	AICTE	In Progress	Dr.Uma B.V	-
3.	Design and development of flexible thin film sensors for wearable electronics	2018	1	5	VGST-RGS/F	In Progress	Prof.Roopa J	-
4.	Design, development and implementation of an adaptable ground vehicle classification system for battle field surveillance	2016/5-7-2016	2	12.9573	DRDO	Completed	Dr. Uttarakumari M	K.S Geetha, SujathaBadigar, RohiniHallikar
5.	Design, Development And Fabrication	2014/19-12-2014	2	100	KCTU-Karnataka government	Completed	Dr.B.S.Satyanarayana (Principal)	Dr. S.Mahendra Kumar, Prof. Krupashankar, Dr. H.Narashima Murthy, Dr.



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	Of An Indigenous 3d Printing Facility For Metals And Metal Composites Based 3d Manufacturing							K.Badrinarayana, Prof. A. Bhattacharyya, Prof. K.N. Raja Rao, Dr. K.N. Subramanya
<b>TOTAL: 159.9573Lakhs</b>								
<b>2012-2016</b>								
6.	Discrete Multitone cable communication modem for SNR data acquisition & Telemetry applications	2014/1 8-3- 2014	3	52.4	ER&IPR DRDO	Completed	Dr.S.Ravishankar	K R Usha Rani
7.	Multi layered thin film sensor for gas turbine engine health monitoring	2012/2 8-9- 2012	3	58	ER&IPR DRDO	Completed	Dr.M.Krishna(M E dept)	Dr.B.S.Satyanarayana Dr.H.Narasimha Murthy (ME dept) Dr.S.A.Hariprasad
<b>TOTAL: 110.4 Lakhs</b>								



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**2010-2012**

8.	Development of multi layered coating for enhanced solar thermal absorption at high temperature	2012/2 -3- 2012	3	481.8	DST	Completed	Prof.Krupashnkar (ME dept)	Dr.B.S.Satyanarayana
9.	Performance simulations using discrete multitone algorithms for acoustic wireless underwater communications and for wired communication in underwater vehicles.	2012/1 4-3- 2012	3	46.6	ERIPR-LRDE	Completed	Dr.S.Ravishankar	Dr.MBharathi, K R Usha Rani, K.Saraswathi, K.V.Padmaja (IT)
10.	Development of an efficient underwater video compression for underwater acoustic channel	2012/2 7-02- 12	2	11.75	NRB	Completed	Dr.B.V.Uma	Dr.K.S.Geetha, Dr.Prasanna Kumar, Dr.Krishna



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11.	Development of nano material and optically enabled front surface and back contact tailored enhanced efficiency amorphous silicon solar cells	2011/2 9-12- 2011	3	402.5	DST-SERI	Completed	Dr.B.S.Satyanarayana	Dr.VHS Murthy (MIT), Dr.ChandanBanarjee (HHV)
12.	Design of Predictive Controller for Ship navigation	2011/2 6-5-11	2	20.5	NRB	Completed	Dr.S.A.Hariprasad	Satish
13.	Growth and characterization of novel room temperature grown nano cluster carbon based thin film transistors	2011/1 3-1-11	3	5.788	UGC	Completed	Dr.L.Sreelakshmi	Dr.B.S.Satyanarayana, Dr.T.C.Thanuja
14.	Development of carbon Nanotube based vacuum Nano electronic X-ray sources for	2010/2 4-8-10	2	13.47	VTU	Completed	Dr.B.S.Satyanarayana	Dr.S.Jaganathan



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	making compact lowpower hand held X-ray							
<b>TOTAL: 982.408 Lakhs</b>								
<b>2002-2009</b>								
15.	Development of algorithms for improved accuracy in DGPS measurements using DSP tools	2009/1-5-09	2	5.88	ARMREB	Completed	Dr.K.A.Sumitra Devi	Dr.S.A.Hariprasad
16.	Design and development of compact universal controller for Rudder actuation system of autonomous vehicle using DSP & FPGA tools	2008/16-10-08	3	35	NRB	Completed	Dr.S.A.Hariprasad	Dr.Krishna
17.	Design and development and integration of co-processors with DSP TI6X	2008/6-10-08	2	36.3	NRB	Completed	Dr.G.Padmavathi (AVU)	Dr.S.A.Hariprasad



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	family using FPGA for naval application							
18.	A Study of defining maneuring parameters of ship model by analyzing wakes using image processing techniques	2007/1 9-3-07	2	18.45	NRB	Completed	Dr.Subashini (AVU)	Prof.B.S.Kariyappa
19.	A study and analysis of active array antennas embedded in hemispherical and hemispheroidal shaped dielectric lenses for airboarne mobile communication	2007/2 1-3-07	2	13.45	IPR CABS	Completed	Dr.S.Ravishankar	Dr.T.S.Rukmini, Dr.H.V.Kumaraswamy
20.	Design and development of dielectric lenses based active smart array	2006/2 8-9-06	3	39.85	NRB	Completed	Dr.S.Ravishankar	Dr.T.S.Rukmini, Dr.Krishna





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	antenna for surface communication of underwater vehicles							
21.	Design and development of controller working on 1553 digital bus on various modes of military applications	2006	2	13.74	IPR DRDO	Completed	Dr.R. Nagaraj	-
22.	ASIC control for AC servomotor drive for military applications	2005/14-10-05	2	9.98	ARB	Completed	Dr.R. Nagaraj	-
23.	A cost effective smart antenna for mobile broadband application	2005/4/8/05	3	6.47	ISRO	Completed	Dr.S.Ravishankar	Dr.S.Jagannathan
24.	Implementation of self turning controller	2002/22-10-05	1.5	13.04	CPRI	Completed	Dr.J.K.Mendiratta	-
<b>TOTAL:192.21 Lakhs</b>								



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Technological  
University, Belagavi

Approved by AICTE,  
New Delhi

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*Go, change the world*

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