



**CHAITANYA BHARATHI  
INSTITUTE OF TECHNOLOGY**  
An Autonomous Institute | Affiliated to Osmania University  
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COMMITTED TO  
RESEARCH,  
INNOVATION AND  
EDUCATION

**45**  
years

**Name of the Department: Electronics and Communication Engineering**  
**Brief Details of Sponsored and Consultancy Research Projects**  
(Since Inception of the Department in Chronological Order)

**A) Sponsored R&D Projects**

S. no.	Title of the Project	Funding Agency	Scheme of the Consultancy project	Amount Sanctioned	Sanction Order	Period and Duration of Project	Name of the PI	Name of the Co-PIs	Status
1.	Analysis of Printed slots and slot Coupled Radiators using MOM	AICTE, New Delhi	RPS	3.5 Lakhs	2004 8020/RID/NPROJ/R&D Dt. 10.03.2003	(2003-06) 3 Years	Dr.N.V.Koteswara Rao	-----	Completed
2.	Data Processing Techniques to Improve Real-time Performance of GNSS Systems	DST, New Delhi	SERB	9.404 Lakhs	2012 SR/S4/AS:89/2012 (dated 25.09.2012)	(2012-14) 2 Years	Dr. D. Krishna Reddy	Dr.A.D.Sarma	Completed
3.	Design and Development of Palm Leaf Character Recognition System	AICTE, New Delhi	RPS	7.31 Lakhs	2013 (AICTE Order No. 20/AICTE/RIFD/RPS(Policy- 1)25/2013-14)	(2013-16) 3 Years	P N Sastry	Dr.N.V.KoteswaraRao	Completed
4.	Multifunction Frequency and Time-Domain Signal Analyzer for Testing and Performance Evaluation of Cellular and Navigation Components and Systems	AICTE, New Delhi	MODROBS	20 Lakhs	2015 (9-89/RIFD/MODROB/Policy- 1/2014-15 dated 03 March 2015)	(2015-18) 3Years It was extended up to 2018	Dr.N.V.KoteswaraRao	Dr.A.D.Sarma	Completed
5.	A Local Short Term Model for Forecasting Ionospheric Scintillations for GNSS Applications over Indian Region	ISRO, Bangalore	RESPOND Programme	17.66 Lakhs	2015 ISRO/RES/2/399/15-16, dated 13 <sup>th</sup> July 2015	(2015-18) 3 Years	Dr.A.D. Sarma	Dr. N. V. KoteswaraRao Dr.N. Alivelu Manga	Completed

6.	Investigation of the Effects of Ionospheric Spatial decorrelation on Indian GBAS	SAC, ISRO, Ahmedabad	NavIC GAGAN Utilization Programme	19.37 Lakhs	2017 Project ID:NGP-11 dated 23 Jan 2017	(2017-20) 3 Years	Dr. A. Supraja Reddy	Dr. N. V. KoteswaraRao Dr. K. Suman	Completed
7.	Development of Nanofoam based Plasmonic structures towards Photo-Electro-Chemical Water-Splitting and CO2 Reduction	SERB, DST New Delhi	Core Research Grant	56.22 Lakhs	SERB/F/9452/2019-2020 dated 01 Feb 2020 SERB/F/1793/2021-2022 dated 29 July 2021	(2020-23) 3 Years Extended up to Feb2024	Dr. M. Bhanu Chandra	Dr. Abhishek Kumar Shrivastava	Ongoing (Transferred from KLH to CBIT)
8.	A New Model for Short Term Forecasting of Scintillations using Machine Learning Approach and Generation of Regional Scintillation Maps	SERB, DST New Delhi	Core Research Grant	37, 04, 360	CRG/2021/001660	(2022-25) 3 Years	Dr. Dattatreya Sarma Achanta	Dr. D. L. S. Redd and, Dr. D. Krishna Reddy	Ongoing
9.	Analysis and Mitigation of Doppler Collision events using ML algorithms for NavIC System	AICTE, New Delhi	RPS	19, 61, 333	8-34/ FDC/RPS/POLICY-1/2021-22	(2022-25) 3 Years	Dr. D. Krishna Reddy	Dr.A.D.Sarma Dr. P. Sathish	Ongoing
10.	Machine Learning Based Intelligent Indian Vehicle Network with Relay Assisted mmWave BS System for 5G NR-V2X Communications	SERB, DST New Delhi	SURE	16, 17, 990/-	SUR/2022/004990	(2023-26) 3 Years	Dr. Vinodh Kumar Minchula	Dr. A. Supraja Reddy	Ongoing
11.	The Design, Fabrication and Development of Silicon Proven IP Core for High Resolution ADPLL	MeitY	C2S Program	1,91,50,000	EE-9/2/2021-R&D-E Dated 19.05.2023	(2023-28) 5 Years	Md Ziauddin Jahangir	Dr. D. Krishna Reddy	Ongoing
12.	Mycelium Fungi Spores based conversion of Cellulose waste to Graphene Nanomaterial for Hydrogen Fuel generation.	MSME	Innovative Idea Hackathon 2.0	15, 00, 000	IDEATS008537	(2023-24) 1 year	Dr. M. Bhanu Chandra	---	Ongoing

## B) Sponsored Consultancy Projects

S. no.	Title of the Project	Funding Agency	Scheme of the Consultancy project	Amount Sanctioned	Sanction Order	Period and Duration of Project	Name of the PI	Name of the Co-PIs	Status
1.	IE 3D software Usage for Microstrip Antenna Simulation	GE India Business Center, Hyderabad	--	0.25 Lakhs	2003	2003 0.5 Years	Dr. N. V. Koteswara Rao	---	Completed

2.	Design and Development of DSP Processor Based Signal Processing Unit for Ring Laser Gyro	RCI, DRDO, Hyderabad	CARS	7.85 Lakhs	2013 RCI/DCMM/LP/LPD-1/CARS/0313 (dated 03 Sep 2013)	(2013-15) 2 Years	Dr. K. SubbaRao	Dr. N. V. KoteswaraRao Sri E. Chandrasekhar	Completed
3.	Performance Evaluation of IRNSS in the Context of user Position and Velocity	RCI, DRDO, Hyderabad	CARS	15 Lakhs	2015 ITS:CARS-336 dated 02 Feb 2015	(2015-17) 2 Years 9 Months It was extended up to December 2017	Dr.A.D. Sarma	Dr. D. Krishna Reddy Sri .P. Sathish	Completed
4.	Improvement of Performance of RLG with Wavelet and S-Transform Algorithms	RCI, DRDO, Hyderabad	CARS	9.75 Lakhs	2016 RCI/DCMM/LPD/CARS-0368 dated 29 April 2016	(2016-18) 2 Years	Dr.K.Subba Rao	Dr. N. V. Koteswara Rao	Completed
5.	Design & Development of Multi input and Multi Frequency Antenna for Missile Applications	DRDL, DRDO , Hyderabad	CARS	9.79999 Lakhs	2022 DRDL/23CR0004/APS/APS/DOMR/76097	30.12.2022-05.01.2024 (one year)	Dr. N. V. Koteswara Rao	Dr. Jeet Ghosh	Ongoing
6.	Study of Static Flow Measurement Technology	Skylark Smart Meters Pvt Ltd, Hyderabad	--	2. 58656 Lakhs	SKYLARK/PO/2022-23/2327 dated 27 March 2023	March 2023 to Aug 2023	Mohd Ziauddin Jahangir	G. Mallikharjuna Rao	Ongoing