



# Chaitanya Bharathi Institute of Technology

## Research and Development Centre

### Research and Entrepreneurship Hub

### List of Sponsored Projects

S. No	Code	Name of the Principal Investigator (PI) / Co Investigator	Department	Name of the Project	Name of Funding Agency	Term of the Project
1.	CBIT/PROJ-S/I060/EEE/D0007/2023	Dr M Balasubbareddy, and Dr. Md Omar Faruque, Electrical and Computer Engineering FLORIDA STATE UNIVERSITY, USA & Dr P V Prasad and Prof. Sastry Pamidi, Electrical and Computer Engineering FLORIDA STATE UNIVERSITY, USA	EEE	Design and Development of IoT based Cooperative Isolated Renewable Energy Systems (IRES) using multi objective optimization for enhancing Reliability of power in Rural India	Scheme for Promotion of Academic and Research Collaboration (SPARC)	2023-25
2.	CBIT/PROJ-S/I059/ECE/D0011/2023	Prof. P Chandra Sekhar (OU) Mohd Ziauddin Jahangir (CBIT) & Mohammad Misbahuddim (OU), Dr.D Krishna Reddy (CBIT)	ECE, OU and ECE, CBIT	The Design, Fabrication and Development of Silicon Proven IP Core for High Resolution ADPLL	Ministry of Electronics & Information Technology (MeitY)-C2S Programme	2023-28
3.	CBIT/PROJ-S/I058/ECE/D0010/2023	Dr.Vinodh Kumar Minchula and Dr.A Supraja Reddy	ECE	Machine Learning based Intelligent Indian vehicle network with Relay assisted mmWave BS system for 5G NR-V2X communications	SERB-SURE	2023-26
4.	CBIT/PROJ-S/I057/Physics/D005/2023	Dr. S. Shanmukharao Samatham, Physics & Dr. M. Chandra Sekhar, Physics	Physics	Tailoring magneto-transport phenomena in magnetic skyrmion materials: $Mn_{1-x}Cr_xSi$ and $MnSi_{1-x}Sn_x$	UGC-DAE CSR, Indore	2023-26
5.	CBIT/PROJ-S/I056/Physics/D004/2023	Dr. Santhosh Kumar A, Physics & Dr. S. Shanmukharao Samatham, Physics	Physics	Exploring doped-MnNiGe ribbons for magnetocaloric, magnetoresistance and EMI shielding applications	UGC-DAE CSR, Indore	2023-26
6.	CBIT/PROJ-S/I055/Chemistry/D001/2023	Dr. Gubbala V. Ramesh, & Ch Gupta Chandaluri, Assistant Professor, Chemistry, Indian Institute of Petroleum & Energy, Visakhapatnam-530003 Andhra Pradesh, India.	Chemistry	Alkali metal-doped $g-C_3N_4$ decorated with plasmonic nanostructures: A SERS based flexible sensor to detect pesticides in ppb level	UGC-DAE CSR, Indore	2023-26
7.	CBIT/PROJ-S/I054/Physics/D003/2023	Dr. S.Shanmukharao Samatham, Physics & Dr. A. Santhosh Kumar, Physics	Physics	Exploring spin caloritronic materials for waste heat management, magnetic refrigeration and EMI shielding applications	SERB-CRG	2023-26
8.	CBIT/PROJ-S/I053/CSE/D004/2023	Dr. Subramaniam and Dr. S.China Ramu	CSE	Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions	DST-FIST	2023-26

				(FIST) Program – 2022		
9.	CBIT/PROJ-S/I052/Chemical/D004/2022	Dr. K. Prasad Babu and Dr. M. Mallaiiah	Chemical	Production of biodiesel from waste cooking oil in presence of liquid and solid catalysts	Indian Institute of Chemical Engineers	2022-23
10.	CBIT/PROJ-S/I051/EEE/D0006/2022	Dr. M Balasubbareddy and Dr. T Sudhakar Babu	EEE	IoT-based Smart Power Quality Analyzer	International Collaborative Research Fund – University Malaysia Perlis and CBIT	2022-24
11.	CBIT/PROJ-S/I050/ECE/D009/2022	Dr. D Krishna Reddy and Dr. A D Sarma	ECE	Analysis and Mitigation of Doppler Collision events using ML algorithms for NavIC System	AICTE-RPS	2022-25
12.	CBIT/PROJ-S/I049/ECE/D008/2022	Dr. A D Sarma, Dr. D L Sreenivasa Reddy and Dr. D Krishana Reddy	ECE	A New Model for Short Term Forecasting of Scintillations using Machine Learning Approach and Generation of Regional Scintillation Maps	SERB-CRG	2022-25
13.	CBIT/PROJ-S/I048/ECE/D007/2022	Dr. M Bhanu Chandra	ECE	Development of Nanofoam based Plasmonic structures towards Photo-Electro Chemical Water-Splitting and CO <sub>2</sub> reduction	SERB-CRG	2022-24
14.	CBIT/PROJ-S/I047/Physics./D002/2021	Dr. S Shanmukharao Samatham	Physics	Exploring Magnetic, Magnetocaloric and Magnetoresistive properties of Ti (Fe <sub>1-x</sub> Cox) <sub>2</sub> (0 ≤ x ≤ 1)	SERB-TARE	2019-22
15.	CBIT/PROJ-S/I046/Mech./D022/2020	Head of the Department and Dr. S. Narasimha Kumar	Mechanical	Development of Ceramic Coated Diesel Engine Fuelled with CNG and Biodiesel Blended	AICTE-MODROB	2020-22
16.	CBIT/PROJ-S/I045/CSE/D003/2020	Dr. Y Rama Devi	CSE	Development of a Wireless Peer-to-peer Network base for Managing IoT Edge Devices off Gateway Range	AICTE-RPS	2020-23
17.	CBIT/PROJ-S/I044/Civil./D002/2019	Head of the Department and Dr.N.R.Dakshina Murthy	Civil	Non-destructive Testing Equipment for Strucural health monitoring of Reinforced concrete structures.	AICTE-MODROB	2019-21
18.	CBIT/PROJ-S/I043/EEE/D005/2019	Dr. M Balasubba Reddy	EEE	An Efficient Low Cost Flexible Quality Conditioner to Mitigate Power Quality Issues	AICTE-RPS	2019-22
19.	CBIT/PROJ-S/I042/EEE/D004/2018	Head of the Department	EEE	Special Electrical Machines Lab	AICTE-MODROB	2018-20 2018-20
20.	CBIT/PROJ-S/I041/Biotech/D001/2018	Dr G. Vijaya Laxmi	Bio-Tech	Studies on enhancement of the secondary metabolites in invitro through hairy roots and immobilized cell suspensions in medicinally important plant <i>Achyranthes aspera</i>	UGC	2018-20
21.	CBIT/PROJ-S/I040/Mech./D021/2018	Dr. P. Ravinder Reddy	Mechanical	Experimental and Numerical Investigations Friction Stir Welding of Aluminium and Magnesium Alloys	UGC	2018-20
22.	CBIT/PROJ-S/I039/ECE/D006/2017	Dr. A Supraja Reddy, Dr. N. V. Koteswara Rao and Dr. K. Suman	ECE	Investigation of the Effects of Ionospheric Spatial decorrelation on Indian GBAS	SAC, ISRO, Ahmedabad	2017-20

23.	CBIT/PROJ-S/I038/IT/D001/2017	Dr. K. Radhika	IT	Big-data Analytics Lab	AICTE-MODROB	2017-18
24.	CBIT/PROJ-S/I037/MCA/D001/2017	Dr.B Indira	MCA	A Study on the effective use of ICT for education and learning purpose in various schools and colleges of Hyderabad and Secunderabad	MRP, UGC	2017 - 19
25.	CBIT/PROJ-S/I036/Physics/D001/2017	Dr. B. Linga Reddy, Dr. B. Sreenivasa Reddy and Dr. K. Vinay Kumar Reddy	Physics	Studies on the environmental radiation levels in the dwellings constructed under the double bed room housing schme at Erravalli and Narsannapet model villages of Telangana	TSCOST	2017-18
26.	CBIT/PROJ-S/I035/CSE/D002/2016	Dr. R. Ravinder Reddy	CSE	Detecting Anomaly Pattern Sequences in Real Time Network	UGC	2016-18
27.	CBIT/PROJ-S/I034/ECE/D005/2016	Dr. A. D. Sarma, Dr. N. V. Koteswara Rao and Dr. N. Aivelu Manga	ECE	A Local Short Term Model for Forecasting Ionospheric Scintillations for GNSS Applications over Indian Region	ISRO-RESPOND, Bangalore	2016-19
28.	CBIT/PROJ-S/I033/EEE/D003/2016	Dr. G. Suresh Babu and Dr. T. Murali Krishna	EEE	Design and Development of Grid Tied Inverter for Renewable Source Applications	The Institution of Engineers ((India)	2016-17
29.	CBIT/PROJ-S/I032/ECE/D004/2015	Dr. N. V. Koteswara Rao and Dr. A D Sarma	ECE	Multifunction Frequency and Time-Domain Signal Analyzer for Testing and Performance Evaluation of Cellular and Navigation Components and Systems	AICTE-MODROB, New Delhi	2015-16
30.	CBIT/PROJ-S/I031/Chemical/D003/2015	Dr. R. Sreedhar Rao and Dr. P. V. Naga Prapurna	Chemical	MODROBS of Computer Application in Process Industries Lab	AICTE-MODROB	2015-16
31.	CBIT/PROJ-S/I030/Civil./D001/2015	Dr. K. Jagannadha Rao	Civil	Strength and durability studies on high strength recycled aggregate concrete	UGC	2015-17
32.	CBIT/PROJ-S/I029/Mech./D020/2015	Mrs. L. Ramayee Dr. P. Ravinder Reddy	Mechanical	Implementation of Composite Materials Wind Blades in Wind Mill	DST	2015-18
33.	CBIT/PROJ-S/I028/CSE/D001/2014	N.Rama Devi and B.Sateesh	CSE	Information & Cyber Security Education - A Cloud Based Approach	UGC	2014-16
34.	CBIT/PROJ-S/I027/ECE/D003/2013	Dr. P N Sastry and Dr. N. V. Koteswara Rao	ECE	Design and Development of Palm Leaf Character Recognition System	AICTE-RPS, New Delhi	2013-16
35.	CBIT/PROJ-S/I026/EEE/D002/2013	Dr.P. V Prasad	EEE	MODROBS- Power Systems Lab	AICTE-MODROB	2013-14
36.	CBIT/PROJ-S/I025/Chemical/D002/2013	Dr. R Sreedhar Rao and I Bala Krishna	Chemical	MODROBS of Chemical Reaction Engineering Laboratory	AICTE-MODROB	2013-14
37.	CBIT/PROJ-S/I024/Chemical/D001/2012	Dr. R Sreedhar Rao and Dr. M Kalyani	Chemical	MODROBS of Process Dynamics and Control Laboratory	AICTE-MODROB	2012-13
38.	CBIT/PROJ-S/I023/ECE/D002/2012	Dr. D. Krishna Reddy and Dr. A D Sarma	ECE	Data Processing Techniques to Improve Real-time Performance of GNSS Systems	DST-SERB, New Delhi	2012-14

39.	CBIT/PROJ-S/I022/Mech./D019/2012	Dr. P. Ravinder Reddy	Mechanical	Mechanical & Fracture Properties of Bio Composite Reinforced with Chicken Feathers	AICTE (RPS)	2012-15
40.	CBIT/PROJ-S/I021/Mech./D018/2012	Dr. P. Ravinder Reddy	Mechanical	Modernization of Thermal Engineering Lab AICTE (MODROBS)	AICTE (MODROBS)	2012-13
41.	CBIT/PROJ-S/I020/Mech./D017/2011	Dr. P. Ravinder Reddy	Mechanical	Analysis of Two Versions of Composite NDE and DE Flanges	Naval Science & Technological Laboratory, Visakhapatnam	2011-12
42.	CBIT/PROJ-S/I019/Mech./D016/2010	Dr. P. Ravinder Reddy	Mechanical	FEA Based Modelling of Magneto Geological Damper to Control Vibrations During Machining	IEI R & D Cell, Kolkata, West Bengal	2010-12
43.	CBIT/PROJ-S/I018/Mech./D015/2010	Dr. P. Ravinder Reddy	Mechanical	Design of Composite Propeller For Estimating Cavitation Performance and Strength Using CFD&FEM Analysis	Naval Science & Technological, Laboratory, Visakhapatnam	2010-11
44.	CBIT/PROJ-S/I017/Mech./D014/2009	Dr. P. Ravinder Reddy	Mechanical	Design and Development of Composite (FRP) Blower For Low Noise By using FEM & CFD Analysis	Naval Science & Technological, Laboratory, Visakhapatnam	2009-11
45.	CBIT/PROJ-S/I016/EEE/D001/2008	Dr. K Krishnaveni	EEE	MODROBS- Power Electronics Lab	AICTE-MODROB	2008-09
46.	CBIT/PROJ-S/I015/Mech./D013/2008	Dr. P. Ravinder Reddy	Mechanical	Design of Composite Propeller For Estimating Cavitation Performance and Strength Using CFD&FEM Analysis	Naval Science & Technological Laboratory Visakhapatnam	2008-10
47.	CBIT/PROJ-S/I014/Mech./D012/2007	Dr. P. Ravinder Reddy	Mechanical	Industry Institute Partnership Cell (IIPC)	AICTE	2007-12
48.	CBIT/PROJ-S/I013/Mech./D011/2006	Dr. CRK Reddy Dr. P. Ravinder Reddy	Mechanical	Integration of Textured Segments and Optical Character Recognition for Multimedia Data Bases	AICTE (TAPTEC)	2006-09
49.	CBIT/PROJ-S/I012/Mech./D010/2006	Dr. P. Jayapal Reddy	Mechanical	Entrepreneurship Development Cell (EDC)	AICTE	2006-09
50.	CBIT/PROJ-S/I011/Mech./D009/2004	Dr.T.Raghunatha Reddy and Sri P.Sreenivas Sarma	Mechanical	Design and Development of Composite (FRP) Blower For Low Noise By using FEM & CFD Analysis	Robo sand pvt.LLtd. & Janapriya engineers syndicate	2004-05
51.	CBIT/PROJ-S/I010/ECE/D001/2004	Dr. N. V. Koteswara Rao	ECE	Analysis of Printed slots and slot Coupled Radiators using MOM	AICTE-RPS, New Delhi	2004-07
52.	CBIT/PROJ-S/I009/Mech./D008/2003	Dr. P. Ravinder Reddy	Mechanical	Modernization of CAD/CAM Lab	AICTE (MODROBS)	2003-05
53.	CBIT/PROJ-S/I008/Mech./D007/2001	Dr. P. Ravinder Reddy	Mechanical	Tool Wear and Orthogonal Cutting of Carbon Composites	UGC (Minor Research)	2001-04
54.	CBIT/PROJ-S/I007/Mech./D006/2001	Dr P. Ravinder Reddy	Mechanical	Development of Test Rig for Calibration of Over speed Governor for Air Turbine.	BHEL (Ramachandrapuram)	2001-03

55.	CBIT/PROJ-S/I006/Mech./D005/1999	Dr. G. Chandra Mohan Reddy	Mechanical	Study of Formability and Process Parameters of New Materials in Metal Forming Operations	AICTE (TAPTEC)	1999-01
56.	CBIT/PROJ-S/I005/Mech./D004/1999	Dr. B. Chennakesava Rao	Mechanical	Machinability of Cast and Powder Formed Al Silicon Carbide Particulates	AICTE (TAPTEC)	1999-01
57.	CBIT/PROJ-S/I004/Mech./D003/1998	Dr. P. Ravinder Reddy	Mechanical	Fracture Based Design of Ceramic Composites and Fibre Geometric Modeling	AICTE (R & D)	1998-02
58.	CBIT/PROJ-S/I003/Mech./D002/1996	Dr . C. Srikanth Reddy	Library	Modernization and Networking Library & Information Centre	AICTE-MODROBS	1997-99
59.	CBIT/PROJ-S/I002/Mech./D002/1996	Dr. C.M Vara Prasad	Mechanical	Studies on Fuel Distribution in Concentric Swirling Flows for Low Grade Fuel application of Gas Turbine Combustion	UGC (Major Research)	1996- 99
60.	CBIT/PROJ-S/I001/Mech./D001/1995	Dr. M.V.S. Murali Krishna Dr. C.M. Varaprasad	Mechanical	Studies on Methanol in Air Gap Insulated Piston Engine	AICTE (TAPTEC)	1995-98