



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/I065/EEE/D008/2024	Dr. M Balasubbareddy and Dr. T Sudhakar Babu	EEE	Development of Smart Greenhouse Management System Using IoT & ML	International Collaborative Research Fund – University Malaysia Perlis and CBIT	2 Years 2024-26
2.	CBIT/PROJ-S/I064/SMS/D002/2024	Dr.T.S.Poornachandrika, Dr.Sowmya Kethi Reddy, Dr.Ch.Ramesh Babu, Matrusri Engineering College, Dr.Venkata Sushma Chinta, Dr.Nagini Yerram Shetty, Divya Bharathi Akula, Deloitte	SMS	Transforming Education: Exploring the Impact of E-Learning Platforms in Bharat	Indian Council of Social Science Research (ICSSR)	1 Year 2024-25
3.	CBIT/PROJ-S/I063/SMS/D001/2024	Dr. S. Saraswathi, Poosarla Bayola Kiran, NALSAR University of Law, Dr. Subirthana M.S, M.O.P. Vaishnav College for Women, Dr.Raimol Ravi K, Sree Kerala Varma College	SMS	Financial Inclusion Policies and Strategies for Women Entrepreneurs: Roadmap for India's Economic Growth by 2047	Indian Council of Social Science Research (ICSSR)	1 Year 2024-25
4.	CBIT/PROJ-S/I062/ECE/D0012/2024	Guide: Dr. D Krishna Reddy UG Applicants: Sowmya Gurram, Venkata Sravan Reddy and Rashmi	ECE	Design and Development of IoT Based Auto-Techchef	The Institute of Engineers (India)	1 Year 2023-24
5.	CBIT/PROJ-S/I061/Civil/D003/2023	Dr. K Jagannadha Rao and Dr. Arshad Hussian Choudhury	Civil	Effectiveness of Crystalline Admixture in Healing Crack of Beams Subjected to Static Loading	APAAR Infratech Private Limited (Industry Sponsored)	2 Years 2023-25
6.	CBIT/PROJ-S/I060/EEE/D007/2023	PI (s): Dr M Balasubbareddy, and Dr. Md Omar Faruque, Electrical and Computer Engineering FLORIDA STATE UNIVERSITY, USA Co-PI(s): 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)	2 Years 2023-25
7.	CBIT/PROJ-S/I059/ECE/D011/2023	PI (s): Prof. P Chandra Sekhar (OU) Mohd Ziauddin Jahangir (CBIT)	ECE, OU and	The Design, Fabrication and Development of Silicon Proven IP Core for High Resolution	Ministry of Electronics & Information	5 Years 2023-2028

		Co-PI(s): Mohammad Misbahuddin (OU), Dr.D Krishna Reddy (CBIT)	ECE, CBIT	ADPLL	Technology (MeitY)-C2S Programme	
8.	CBIT/PROJ-S/I058/ECE/D010/2023	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	3 Years 2023-26
9.	CBIT/PROJ-S/I057/Physics/D005/2023	Dr. S. Shanmukharao Samatham (PI), Physics & Dr. M. Chandra Sekhar (Co-PI), 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 CRS/2022-23/01/712	3 Years 2023-26
10.	CBIT/PROJ-S/I056/Physics/D004/2023	Dr. Santhosh Kumar A (PI), Physics & Dr. S. Shanmukharao Samatham (Co-PI) Physics	Physics	Exploring doped-MnNiGe ribbons for magnetocaloric, magnetoresistance and EMI shielding applications	UGC-DAE CSR, Indore CRS/2022-23/01/717	3 Years 2023-26
11.	CBIT/PROJ-S/I055/Chemistry/D001/2023	Dr. Gubbala V. Ramesh (PI), & Ch Gupta Chandaluri, Assistant Professor, Chemistry, Indian Institute of Petroleum & Energy, Visakhapatnam-530003 Andhra Pradesh, India.	Chemistry	Alkali metal-doped g-C ₃ N ₄ decorated with plasmonic nanostructures: A SERS based flexible sensor to detect pesticides in ppb level	CRS/2022-2023/1010	3 Years 2023-26
12.	CBIT/PROJ-S/I054/Physics/D003/2023	Dr. S.Shanmukharao Samatham(PI), Physics & Dr. A. Santhosh Kumar Physics (Co-PI)	Physics	Exploring spin caloritronic materials for waste heat management, magnetic refrigeration and EMI shielding applications	SERB-CRG File Number: CRG/2022/007993	3 Years 2023-26
13.	CBIT/PROJ-S/I053/CSE/D004/2023	Dr. P Ravinder Reddy (Principal), Dr. Subramaniam and Dr. S.China Ramu	CSE	Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST) Program – 2022	DST SR/FST/COLLEGE /2022/1239, Dated: 19 December 2022	5 Years 2023-2028
14.	CBIT/PROJ-S/I052/Chemical/D004/2022	Dr. K. Prasad Babu and Dr. M. Mallaiah	Chemical	Production of biodiesel from waste cooking oil in presence of liquid and solid catalysts	Indian Institute of Chemical Engineers Ref. No.: AG/R&D/2022/557 Dated: 24 th November 2022	1 Year 2022-2023
15.	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	2 Years 2022-2024

16.	CBIT/PROJ-S/I050/ECE/D009/2022	Dr. D Krishna Reddy and Dr. A D Sarma, Dr. P Sathish	ECE	Analysis and Mitigation of Doppler Collision events using ML algorithms for NavIC System	AICTE-RPS	3 Years 2022-2025
17.	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	3 Years 2022-2025
18.	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 ₂ reduction	SERB-CRG	2.5 Years 2022-2024
19.	CBIT/PROJ-S/I047/Physics./D002/2021	Dr. S Shanmukharao Samatham	Physics	Exploring Magnetic, Magnetocaloric and Magnetoresistive properties of Ti (Fe-xCox) ₂ ($0 \leq x \leq 1$)	SERB-TARE	3 Years 2019-2022
20.	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	2 Years 2020-22
21.	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	3 Years 2020-23
22.	CBIT/PROJ-S/I044/Civil./D002/2019	Head of the Department and Dr.N.R.Dakshina Murthy	Civil	Non-destructive Testing Equipment for Structural health monitoring of Reinforced concrete structures.	AICTE-MODROB	2 Years 2019-21
23.	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
24.	CBIT/PROJ-S/I042/EEE/D004/2018	Head of the Department	EEE	Special Electrical Machines Lab	AICTE-MODROB	2 Years 2018-20
25.	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
26.	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	2018-2020
27.	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	2017-2020 3 Years
28.	CBIT/PROJ-S/I038/IT/D001/2017	Dr. K. Radhika	IT	Big-data Analytics Lab	AICTE-MODROB	2017-18 1 Year

29.	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 - 2019
30.	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	2017-2018 12 months
31.	CBIT/PROJ-S/I035/CSE/D002/2016	Dr. R. Ravinder Reddy	CSE	Detecting Anomaly Pattern Sequences in Real Time Network	UGC	2016-18 2 Years
32.	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	2016-2019 3 Years
33.	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)	2016-2017 1 Year
34.	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 1 Year
35.	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
36.	CBIT/PROJ-S/I030/Civil./D001/2015	Dr. K. Jagannadha Rao	Civil	Strength and durability studies on high strength recycled aggregate concrete	UGC	2015-2017
37.	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	2015-2018
38.	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 2 Years
39.	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 3 Years
40.	CBIT/PROJ-S/I026/EEE/D002/2013	Dr.P. V Prasad	EEE	MODROBS- Power Systems Lab	AICTE-MODROB	2013-2014 1 Year
41.	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

42.	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 (1 year)
43.	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	2 Years 2012-14
44.	CBIT/PROJ-S/I022/Mech./D019/2012	Dr. P. Ravinder Reddy	Mechanical	Mechanical & Fracture Properties of Bio Composite Reinforced with Chicken Feathers	AICTE (RPS)	2012-2015
45.	CBIT/PROJ-S/I021/Mech./D018/2012	Dr. P. Ravinder Reddy	Mechanical	Modernization of Thermal Engineering Lab AICTE (MODROBS)	AICTE (MODROBS)	2012-2013
46.	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	2011-2012
47.	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	2010-2012
48.	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	2010-2011
49.	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	2009-2011
50.	CBIT/PROJ-S/I016/EEE/D001/2008	Dr. K Krishnaveni	EEE	MODROBS- Power Electronics Lab	AICTE-MODROB	2008-09 (1 Year)
51.	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	2008-2010
52.	CBIT/PROJ-S/I014/Mech./D012/2007	Dr. P. Ravinder Reddy	Mechanical	Industry Institute Partnership Cell (IIPC)	AICTE	2007-2012
53.	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)	2006-2009
54.	CBIT/PROJ-S/I012/Mech./D010/2006	Dr. P. Jayapal Reddy	Mechanical	Entrepreneurship Development Cell (EDC)	AICTE	2006-2009

55.	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 1 Year
56.	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 3 Years
57.	CBIT/PROJ-S/I009/Mech./D008/2003	Dr. P. Ravinder Reddy	Mechanical	Modernization of CAD/CAM Lab	AICTE (MODROBS)	2003-2005
58.	CBIT/PROJ-S/I008/Mech./D007/2001	Dr. P. Ravinder Reddy	Mechanical	Tool Wear and Orthogonal Cutting of Carbon Composites	UGC (Minor Research)	2001-2004
59.	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)	2001-2003
60.	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)	1999-2001
61.	CBIT/PROJ-S/I005/Mech./D004/1999	Dr. B. Chennakesava Rao	Mechanical	Machinability of Cast and Powder Formed Al Silicon Carbide Particulates	AICTE (TAPTEC)	1999-2001
62.	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)	1998-2002
63.	CBIT/PROJ-S/I003/Mech./D002/1996	Dr . C. Srikanth Reddy	Library	Modernization and Networking Library & Information Centre	AICTE-MODROBS	1997-1999
64.	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- 1999
65.	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)	1995-1998