



CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY

An Autonomous Institute | Affiliated to Osmania University
Kokapet Village, Gandipet Mandal, Hyderabad, Telangana-500075, www.cbit.ac.in



COMMITTED TO
RESEARCH,
INNOVATION AND
EDUCATION

47
years

Department of Chemistry Details of Project

S.No	Name of PI	Name of Co-PI	Title of the Project	Name of the Sponsoring Agency	Sanction Amount, Date & Duration	Status
Academic Year: 2023-2024						
1	Gubbala V. Ramesh	Ch Gupta Chandaluri, Indian Institute of Petroleum & Energy, Visakhapatnam	Alkali metal-doped g-C ₃ N ₄ decorated with plasmonic nanostructures: A SERS based flexible sensor to detect pesticides in ppb level	UGC DAE I	1.35 lakhs 3 years 2023-2026	on-going
Academic Year: 2024-2025						
1	Dr. T. Surendra	Dr G.V. Ramesh Dr.D. Saritha Dr. N. Mahender Reddy	Heterogeneous photocatalyst of rare earth-based material with conjugated polymer for the water remediation process. (CBIT/PROJ-IH/1015/Chemistry/D003/2024)	CBIT-Seed Grand	1,98,987/- On March, 2024 & One year	Completed
2	Dr.D. Saritha	Dr G.V. Ramesh Dr. N. Mahender Reddy Dr. T. Surendra	Fabrication of Na ₃ MM ₁ XO ₆ Electrodes for Na-ion battery applications (CBIT/PROJ-IH/1014/Chemistry/D002/2024)	CBIT-Seed Grant	1,76,711/- On March, 2024 & One year	Completed

3	Dr. N. Mahender Reddy	Dr. G. V. Ramesh, Dr. D. Saritha, Dr. T.V. Surendra,	Metal-doped Graphene-Based Nanocomposites as Photocatalysts for Wastewater Treatment CBIT/PROJ- IH/1016/Chemistry/D004/2024	CBIT-Seed Grant	184965/- On March, 2024 & One year	In Progress
4	Dr. Gubbala V. Ramesh	Dr. D. Saritha, Dr. T.V. Surendra, Dr. N. Mahender Reddy,	Engineering Nano-Catalysts: Copper-Based Alloys and Core-Shell Structures in CO ₂ Electroreduction	CBIT-Seed Grant	1,76,711/- On March, 2024 & One year	Completed

Academic Year: 2024-2025 **Student Projects**

1	Dr. Gubbala V. Ramesh and	Dr. M Mukunda Vani	Synthesis and Application of CuNWs@Ag Core-Shell Structures for Antimicrobial Use	CBIT-Seed Grant	40000	completed
2	Dr. Gubbala V. Ramesh and	Dr. M Mukunda Vani	Porous g-C ₃ N ₄ -Based Nanocomposites with Metal Oxide Nanoparticles for Antibacterial Applications	CBIT-Seed Grant	40000	completed

Academic Year: 2025-2026 **Faculty Projects**

1	Dr. T. V. Surendra	Dr G.V. Ramesh Dr.D. Saritha Dr. N. Mahender Reddy Dr. Md. Atif Qaiyum	Efficient solar light harvesting cobalt mediated conjugated polymer nanostructures for photocatalytic applications (CBIT/PROJ- IH/1100/Chemistry/D007/2025)	CBIT-Seed grant	3,18,552/- On April-2025 & One year	On-going
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2.	Dr. K. Ramesh	Dr. G. Saidulu	Design and Development of eco-friendly and sustainable mesoporous silica supported bimetallic nanocatalysts for the production of γ -valerolactone	CBIT-Seed Grant	365140/- April-2025 & One year	On-going
3	Dr. G. Saidulu	Dr. K. Ramesh	Design and Development of cost effective Cu based nanocatalysts for the conversion of cellulosic biomass into value added products	CBIT-Seed Grant	365140/- April-2025 & One year	On-going
4	Dr.D. Saritha	Dr. N. Mahender Reddy Dr.T.V.Surendra Dr. Md. Atif Qaiyum Dr.G.V.Ramesh	Development of Vanadium Based Electrodes for Lithium-ion Batteries (CBIT/PROJ-IH/1098/Chemistry/D005/2025)	CBIT-Seed grant	3,18,552/- On April-2025 & One year	On-going
5	Dr.D. Saritha	Nil	Nanoscopic Exploration of Honeycomb Layered Oxide Cathodes for Na-Ion Batteries: A Synergetic Approach via SEM, TEM, EDX, and In-Situ XRD' CRS/2023-24/01/1044."	UGC-DAE-CSR	1,35,000 On April-2025 & three years	On-going
6	Dr. Gubbala V. Ramesh	Dr. T.V. Surendra, Dr. N. Mahender Reddy, Dr. D. Saritha, Dr. Atif Qaiyum	Development of Nanophase-Separated Pt-Based Catalysts for Enhanced Fuel Cell Efficiency.	CBIT-Seed grant	3,18,552/- On April-2025 & One year	On-going

Academic Year: 2025-2026		Student Projects				
1	Dr Gubbala. V. Ramesh	Dr. Md. Atif Qaiyum	Optimization of Activated Carbon Production from Waste Materials for Textile Dye Treatment	CBIT-Seed grant	30000	On-going