

**RESEARCH ACTIVITIES**

**a) AICTE, UGC, DST etc. projects/seminar grants:**

Sl. No	Type of Project	Project Title	Chief Co-Ordinator & Department	Amount sanctioned (Rs. in Lakhs)	Year of Sanction	Status
1.	R&D	Study of Structural behavior of Fibre reinforced plastic laminated shells using an higher-order theory	Dr.K.S.Sai Ram Department of Civil Engg.	3.00	1996-97	Completed
2.	R&D	MOD of CAD/CAM Lab	Dr.K.V.J.Rao Dept. of Mech. Engg.	5.00	1997-98	Completed
3.	UGC SEMINAR	Modern Trends in Computer Communication	Dr.B.Ravindra Babu, Pro. & HOD, CSE	0.15	1997-98	Completed
4.	TAPTEC	Accelerated infiltration structures – Design & Study...	Dr.P.Ch.Sanjeeva Rao Dept. of Civil Engg.	4.00	1998-99	Completed
5.	R&D	Development of Analytical Methods with special ref..	Dr.L.Rama Devi Dept. of Chemistry	3.00	1998-99	Completed
6.	R&D	Phyto Chemistry and Biological Activity of Acanth..	Dr.N.J.Reddy Dept. of Chemistry	4.60	1998-99	Completed
7.	MODROB	CAD Laboratory ...	Dr.K.V.J.Rao Dept. of Mech. Engg.	11.00	1999-00	Completed
8.	R&D	Hygro Thermal Effects on Free Vibration and Buckling of Fibre Reinforced Laminated Composite Plates using Higher-Order Theories ..	Prof.K.Srinivasu Dept. of Civil Engg.	2.00	2000-01	Completed
9.	MODROB	Modernization of Microwave & Advanced Communication Engineering Lab .	Dr.A.Sudhakar Dept. of ECE	6.50	2002-03	Completed
10.	R&D	Industrial Consultancy, Technical Training and Research Promotion in Civil Engineering	Prof.K.Srinivasu Dept. of Civil Engg.	11.00	2003-04	Completed
11.	MODROB	Modernization of Material Testing Laboratory .	Prof.K.Srinivasu Dept. of Civil Engg.	7.50	2002-03	Completed
12.	MODROB	Mechatronics Lab	Dr.K.V.J.Rao Dept of Mech. Engg.	12.00	2002-03	Completed
13.	R&D	Integrated Reservoir Operation-Irrigation Scheduling by Dynamic Programming	Sri A.S.Prasad Dept. of CE	1.40	2002-03	Completed

14.	EMD	Entrepreneurship & Management Development	Dr.B.Raveendra Babu HOD, Dept. of CS & IT	2.80	2004-05	Completed
15.	MODROBS	Modernization of Microprocessor Lab	Dr.A.Sudhakar Dept. of ECE	6.50	2006-07	Completed
16.	MODROBS	Wireless Lab	Dr.B.Raveendra Babu HOD, Dept. of CS & IT	10.00	2007-08	Completed
17.	MODROBS	Modernization of Thermal Science Lab.	Dr.K.Ravindra Dept. of Mech. Engg.	4.00	2008-09	Completed
18.	UGC	Design of Array Antennas for the Generation of shaped beams	Dr.A.Sudhakar Dept. of ECE	11.67	2009-10	Completed
19.	UGC	Phytochemistry & Biological Activity of Cuscuta Cinensis	Dr.N.J.Reddy, Dept. of Chemistry	3.50	2002-03	Completed
20.	AICTE Seminar Grant	Challenges in VLSI Design	Dr.A.Sudhakar, Dept. of ECE	0.60	2006-07	Completed
21.	MODROBS	MOD CAM Laboratory	Prof.K.Pameswara Rao, HOD-IPE	9.00	2006-07	Completed
22.	AICTE Seminar Grant	Micro-machining	Dr.K.Ravindra Dept. of Mech.Engg.	0.40	2008-09	Completed
23.	AICTE-SDP	Web-Security	Dr.B.Raveendra Babu HOD, Dept. of CS & IT	1.00	2008-09	Completed
24.	MODROBS	Mod of Communication Engg. Lab.	Dr.A.Sudhakar, Dept. of ECE	13.00	2009-10	Completed
25.	MODROBS	Up gradation of Chemical Reaction Engineering Lab	Dr.M.Venkateswara Rao, Dept. of ChE	5.00	2009-10	Completed
26.	MODROBS	Voice-over Internet Protocol Lab	Dr.B.Raveendra Babu HOD, Dept. of CS & IT	6.00	2008-09	Completed
27.	AICTE Seminar Grant	Metal Matrix Composites	Dr.V.Chittaranjan Das Dept. of ME	0.60	2010	Completed
28.	AICTE Seminar Grant	3-D Structure Determination of Drug Molecular, Modeling and Drug Design	Dr.K.Sobha Dept. of Biotechnology	0.75	2010-11	Completed
29.	UGC Travel Grant	College Teachers for presenting papers for International Conference	Dr.A.Sudhakar Dept. of ECE	0.92	2009-10	Completed
30.	UGC	Right Jacobson radicals for right near-ring	Dr.R.Srinivasa Rao Dept. of M&H	6.88	2010	Completed
31.	AICTE Seminar grant	Modeling & Simulation for Rapid Progress in Chemical Engg.	Dr.C.V.Subrahmanyam Dept. of ChE	1.15	2010-11	Completed
32.	MODROBS	Modernization of CAM Laboratory	Dr.K.Ravindra Dept. of Mech.Engg.	11.00	2011-12	Completed

33.	UGC Travel Grant	College Teachers for presenting papers for International Conference	Dr.A.Sudhakar Dept. of ECE	1.40	-	Completed
34.	AICTE Seminar Grant	Nanotechnology – A fuel for Chemical Industry	Sri K.Ramesh Chandra, Dept. of Chemical Engg.	2.00	2013	Completed
35.	AICTE Seminar Grant	Advances – Bio Materials for Medical Applications	Dr.V.Chittaranjan Das, Dept. of Mech.Engg.	1.00	2013	Completed
36.	AICTE Seminar Grant	National Workshop on Signal and Image Processing using Lab view	Dr.T.Ranga Babu Dept. of ECE	2.00	2013	Completed
37.	MODROBS	Modernization of Chemical Technology Laboratory	Dr. M.Venkateswara Rao, Dept. of ChE	10.00	2013	Completed
38.	AICTE – RPS	Development and Characterization of high strength polymer matrix composites reinforcing with metallic glass particulates	Dr. K.Ravindra Dept. of Mech. Engg.	11.90	2012	Completed
39.	MODROBS	Modernization & Removal of Obsolescence in Power Systems Lab	Dr. K.Chandra Sekhar Dept. of EEE	18.85	2012	Completed
40.	SERB	National Seminar on Futuristic trends of Nano-composites and their fabrication	Dr.V.Chittaranjan Das Dept. of Mech.Engg.	0.40	2013	Completed
41.	DST	Segmentation of Medical images using Multi objective Evolutionary Optimization	Dr.K.Kartheeka Pavan Dept. of IT	11.34	2013	Completed
42.	UGC SEMINAR	Solar energy harvesting through Photovoltaic cells and storage	Dr.K.Surendranath Dept.of Physics	1.50	2013	Completed
43.	UGC	Analysis and Measurements of Ultra Wide Band Signal Attenuation Through Typical Building Materials	Dr.A.Sudhakar Principal and Professor-ECE	9.03	2013	Completed
44.	UGC	Tool Condition Monitoring in Hard Turning using Acoustic Emission and Vibration Signature	Dr.K.Srinivas Prof. in Mech.	8.07	2013	Completed
45.	UGC	Skeleton based Shape Representation Techniques for Object Recognition	Dr. A.Srikrishna Professor & HOD Dept. of IT	10.25	2015	Completed
46.	SERB	Development of Tools using Biomaterials for medical applications	Dr.V.C.Das Professor Dept. of ME	0.75	2015	Completed

47.	DST-FIST	Fund for Improvement of S&T infrastructure in Universities and Higher Educational Institutions (FIST) Program – 2015	Dr.K.Chandra Sekhar Professor & HOD Dept of EEE	19.50	2016	Completed
48.	SERB	Advances in Composite Materials (AMC-2017)	Dr.V.ChittaranjanDas Professor Dept.of ME	0.50	2017	Completed
49.	AICTE- MODROBS	Modernization and Removal of Obsolescence in Material Testing laboratory	Dr.Kota Srinivasu Professor Dept. of CE	18.00	2017-18	Completed
50.	AICTE- MODROBS	Modernization of CAM Laboratory	Dr. K. Ravindra Professor & HOD – ME	7.0	2017-18	Completed
51.	AICTE – FDP	Faculty Development Program on Innovations in Renewable Energy harvesting and Environment process technologies for sustainable development	Dr. C.V.Subrahmanyam Prof. & HOD Chemical Engg.	4.20	2017-18	Completed
52.	AICTE- Seminar Grant	Advances in Nanocomposite Materials and their Fabrication	Dr. V.Chittaranjan Das Professor in ME	1.00	2017-18	Completed
53.	UGC	Minor Research Project – Studies on the Removal of Trace Organics – Chlorides and Fluorides from Ground Water in Coastal Regions of A.P. using Continuous Fixed Bed Adsorption Column.	Dr. P.Rohini Kumar Assistant Professor in Chemical Engg.	2.05	2017-18	Completed
54.	UGC Travel Grant	Design of Slot Arrays for the Generation of stair-Step Patterns in the Conference – Progress in Electromagnetics Research Symposium at Russia	Dr. A.Sudhakar Professor-Director R&D	1.08	2017-18	Completed
55.	UGC	Minor Research Project – Purification and Proteomics of 4hermos-tolerant lipase isolated from Aspergillus sps. Infesting oil seeds	Dr.K.Sobha Assoc. Professor in M &H	1.85	2017-18	Completed
56.	UGC	Minor Research Project – Flow forming behavior of extra deep drawn Al6061 under warm deep drawing.	Mrs. D.Swapna Assistant Professor in ME	3.15	2017-18	Completed
57.	UGC	Minor Research Project – A Kinetic study of Photo catalytic degradation of organic	Mrs. M.Sudheera Assistant Professor in Chemical Engg.	1.71	2017-18	Completed

		contaminants by using various Nano Coated Catalysts				
58.	UGC Travel Grant	IEEE 1st International Conference on Multimedia Information Processing and Retrieval at USA	Mr.V.Sesha Srinivas Asst. Professor in IT	1.84	2017-18	Completed
59.	AICTE-STTP	Multi-Core Architectures & Programming	Dr.M.Sreelatha Professor & HOD-CSE	2.58	2017-18	Completed
60.	AICTE-MODROBS	Internet of Things Laboratory	Dr. A.Srikrishna Professor & HOD IT	5.16	2017-18	Completed
61.	AICTE – STTP	Energy Management of Smart Grids and Micro Grids with IOT	Dr. K.Swarnasri Professor in EEE	3.18	2017-18	Completed
62.	AICTE - STTP	Advances in Process Design by using Simulators	Dr. M.Venkateswara Rao, Prof. in ChE	3.73	2017-18	Completed
63.	AICTE – FDP	Emerging Technologies and Challenges in Mech. Engineering	Dr. C.Srinivas Assoc. Prof. in ME	5.28	2017-18	Completed
64.	AICTE Travel Grant	Progress in Electromagnetics Symposium (PIERS-2019 in Xiamen, China)	Dr. A.Sudhakar Professor – ECE	1.18	2019-20	Completed
65.	AICTE-PRERANA	PRERANA SCHEME	Dr. K.Praveen Kumar Assoc. Prof. - ME	8.0	2019-20	Ongoing
66.	AICTE-MODROBS	Modernization of Electronic Circuits & Communication Engineering Lab.	Dr.T.Ranga Babu Professor & HOD-ECE	9.82	2019-20	Ongoing
67.	AICTE-MODROBS	Campus Smart Grind for Energy Management	Dr.K.Chandra Sekhar, Professor & HOD – EEE	8.81	2019-20	Ongoing
68.	AICTE-STTP	Repair and Rehabilitation of Structures	Dr. K.S.Sairam Professor - CE	2.42	2019-20 Financial Year 2020-21	Completed
69.	AICTE-STTP	Graphical System Design Approach for Signal and Image Processing Applications	Dr. G.Sudhavani Professor – ECE	1.63	2019-20 Financial Year 2020-21	Completed
70.	AICTE-FDP	Research Methodology, Design of Experiments for Engineers and Researchers	Dr.G.Srinivasa Rao Professor - ME	5.68	2019-20 Financial Year 2020-21	Completed
71.	AICTE-MODROBS	Modernization of Machine Learning Laboratory	Dr. M.Sreelatha Professor & HOD – CSE	11.57	2019-20 Financial Year 2020-21	Ongoing
72.	DST	Wound Dressing material containing Copper coated cotton fabrics and piezoelectric and electrospun biopolymer nano-fibrous composites	Dr.K.Sobha Assoc.Prof.-ChE Dr.S.Radhika Assoc.Prof.-ME	61.76	2021-22	Ongoing

**b) Internal Research Projects:**

S.No.	Name of the Teacher / Principal Investigator	Title of the Project	Amount of Seed money sanctioned by the Institute	Year of Sanction	Duration of the Grant
1)	Sri B.Krishna Chaitanya Asst.Prof.-CE	Study on flow and strength properties of fiber reinforced self-compacting concrete	40,000	2019-20	3 yrs
2)	Sri M.Srikanth Kumar Asst.Prof.-CE	Removal of dyes from textile waste water by water hyacinth : batch and column studies	40,000	2019-20	3 yrs
3)	Dr. Ch.Aparna Prof.-CSE	A comprehensive study and design of human emotion recognition system from visual expressions using deep learning techniques	50,000	2019-20	3 yrs
4)	Dr. N.Venkateswara Rao Prof.-CSE	A deep convolution neural network model for recognition of handwritten digits using skeleton shape features	30,000	2019-20	3 yrs
5)	Dr. R.Lakshmi Tulasi Prof.-CSE	An automatic image description generation system : A Deep learning approach	30,000	2019-20	3 yrs
6)	Dr. M.Satya Sai Ram Prof.-ECE	Hybrid parameters for compression of speech signal	45,000	2019-20	3 yrs
7)	Sri S.Ramesh Babu Asst.Prof.-ECE	Synthesis of optimized shaped beam patterns using array antennas	30,000	2019-20	3 yrs
8)	Ms. K.Sravanthi Asst.Prof.-ECE	Designing of Audio Signals using CNN	30,000	2019-20	3 yrs
9)	Sri B.Lokeshwar Asst.Prof.-ECE	Design, simulation and analysis of broad band substrate integrated wave guide cavity backed slot antennas	45,000	2019-20	3 yrs
10)	Sri A.Ashok Kumar Asst.Prof.-ECE	Diagnosis of diabetic retinopathy using convolutional neural networks	30,000	2019-20	3 yrs
11)	Sri D.Jagadeesh Asst.Prof.-ECE	Design and analysis of dual band, miniaturized substrate integrated waveguide antennas	45,000	2019-20	3 yrs
12)	Sri N.Sudheer Kumar Asst.Prof.-ECE	Design and implementation of autonomous robot systems integrated with an UAV for precision agriculture	55,000	2019-20	3 yrs

13)	Sri P.Siva Krishna Asst.Prof.-EEE	Design and implementation of least power point control in single phase solar photovoltaic systems	40,000	2019-20	3 yrs
14)	Sri Y.Suri Babu Asst.Prof.-EEE	Common mode voltage elimination scheme for inverter fed five phase AC drives	30,000	2019-20	3 yrs
15)	Sri Y.Sumanth Asst.Prof.-EEE	performance enhancement of doubly fed induction generator for renewable energy source applications	70,000	2019-20	3 yrs
16)	Sri B.V.Vasantha Rao Asst.Prof.-EEE	Campus energy monitoring system using IOT	30,000	2019-20	3 yrs
17)	Dr. M.Ramesh Prof.-IT	An automated learning code summarization using anatomy and auto folding frameworks	40,000	2019-20	3 yrs
18)	Dr. C.Tara Sasanka Asst.Prof.-ME	Evolution and optimization of process parameters during heat transfer of coal water slurry used in coal gasification plant	40,000	2019-20	3 yrs
19)	Sri D.Kondala Rao Asst.Prof.,-ME	Experimental investigation of herbal based nano cutting fluids with MQL in optimization of turning	40,000	2019-20	3 yrs
20)	Sri Ch.Devaraj Asst.Prof.,-ME	Performance evaluation of nickel coated alumina reinforced AZ91E magnesium composites for alloy wheel applications	40,000	2019-20	3 yrs
21)	Dr. Ch.Suneetha Assoc.Prof.-MCA	Advanced learning and decision making system for analysis of breast tissues	30,000	2019-20	3 yrs
22)	Ms. T.Hymavathi Asst.Prof.-MCA	Novel algorithms for microarray gene clustering in association with breast cancer	30,000	2019-20	3 yrs

**c) Industrial Research Projects:**

S. No.	Name of the Teacher / Principal Investigator	Name of the Company / Industry that sanctioned the IRP	Title of the Project	Year of Sanction	Amount Sanctioned	Duration of the Grant
1	Dr. K.Sobha Assoc.Prof.-ChE	M/s. Bharathi Consumer Care Products Pvt. Ltd.,	Liquid Detergents	2019-20	2,50,000	3 yrs
2	Dr. K.Ramesh Chandra Assoc.Prof.-ChE	M/s. Sri Kali Industries	Waste Management in Flexible packing	2019-20	2,50,000	3 yrs
3	Dr.D.N.V.Satyanarayana Assoc.Prof.-ChE	M/s. Bharathi Consumer Care Products Pvt. Ltd.,	Liquid Disinfectant	2019-20	2,50,000	3 yrs
4	Dr. P.Rohini Kumar Assoc.Prof.-ChE	M/s. Sri Kali Industries	Risk assessment in pouch packing	2019-20	2,50,000	3 yrs
5	Mr. B.Krishna Chaitanya Asst.Prof.-CE	M/s. Design Tribe (India) Pvt. Ltd.,	Design and analysis of a high rise building with different plan configurations using ETABS software	2019-20	3,00,000	3 yrs
6	Dr. P.Samatha Chowdary Asst.Prof.-CE	M/s. Design Tribe (India) Pvt. Ltd.,	Condition assessment of existing road network in rural area of Amaravati region constructed on expansive soil	2019-20	3,00,000	3 yrs
7	Dr. N.V.Sairam Kumar Asst.Prof.-CE	M/s. Viranchi Infratech Pvt. Ltd.,	Experimental study on durability performance of a structure	2019-20	4,00,000	3 yrs
8	Dr. B.Kesava Rao Asst.Prof.-CE	M/s. Vriddhi Infratech India Private Limited	Experimental analysis of sub and super structure embedded in cohesive and cohesionless soils	2019-20	5,00,000	3 yrs
9	Dr. A.Srinagesh Prof.-CSE	M/s. Glocal Technolgy Solutions	An Integrated and Automated Vehicle Management System with the Internet of Things	2019-20	4,80,000	3 yrs
10	Dr. N.Venkateswara Rao Prof.-CSE	M/s. Thinkwright Learning Services Pvt. Ltd.,	Tree counting from remote sensing data using deep convolution neural network model	2019-20	4,00,000	3 yrs
11	Dr. Ch.Sudhasree Asst.Prof.-CSE	M/s. Thinkwright Learning Services Pvt. Ltd.,	Automatic model for disease identification of cotton plants using deep learning	2019-20	1,20,000	3 yrs
12	Dr. R.Lakshmi Tulasi Prof.-CSE	M/s. Stafz IT services Pvt. Ltd.,	An efficient video compression framework using deep learning techniques	2019-20	5,00,000	3 yrs
13	Dr.T.Ranga Babu Prof.-ECE	M/s. Lexys Technologies	Healthcare Analytics using Atmosphere IoT	2019-20	3,00,000	3 yrs
14	Dr. M.V.Siva Prasad Prof.-ECE	M/s. SVM Private Limited	Design, Simulation and Development of Micro Strip patch Antenna with defected ground structures	2019-20	2,50,000	3 yrs
15	Dr. M.Satya Sai Ram Prof.-ECE	M/s. Lexys Technologies	Design, Development of voice compression and recognition algorithms using Mel frequency Cepstral Coefficients	2019-20	2,00,000	3 yrs



16	Dr. J.Ravindranadh Prof.-ECE	M/s. SVM Private Limited	Design and development of various micro strip patch array antennas for the generation of ramp and stair step patterns	2019-20	2,50,000	3 yrs
17	Dr. D.Jagadeesh Asst.Prof.-ECE	M/s. Mokila Networks Private Limited	Design and development of SIW cavity backed antennas for Wi-Fi applications	2019-20	5,00,000	3 yrs
18	Dr. A.Rama Koteswara Rao Assoc.Prof.-EEE	M/s. Illios Power Pvt. Ltd.,	Application of Machine Learning for non- conventional energy sources (Solar PV- systems_	2019-20	5,00,000	3 yrs
19	Dr. K.Radha Rani Prof.-EEE	M/s. Incap Limited	Bidirectional DC - DC power converter circuit	2019-20	2,75,000	3 yrs
20	Dr. K.Swarnasree Prof.-EEE	M/s. Incap Limited	Real time energy monitoring system	2019-20	2,25,000	3 yrs
21	Dr. G.Sambasiva Rao, Prof.-EEE	M/s. Power Plant Engineering Works	Performance analysis of doubly fed induction generator based wind energy conversion system	2019-20	5,00,000	3 yrs
22	Dr. A.Srikrishna Prof.-IT	M/s. Design Tribe (India) Pvt. Ltd.,	Attendance monitoring system using machine learning	2019-20	5,00,000	3 yrs
23	Dr.N.Nagamalleswar a Rao Prof.-IT	M/s. Inventiz Enterprise Private Limited	Offline signature verification based on local patterns	2019-20	5,00,000	3 yrs
24	Dr. M.Pompapathi Assoc.Prof.-IT	M/s. Tech Star IT Services, The Venture Studios	An image tamper detection and recovery method using multiple watermarks	2019-20	5,00,000	3 yrs
25	Dr. K.Ravindra Prof.-ME	M/s. Sri Venkateswara Electricals Pvt. Ltd.,	Mechanical and Electrical Behaviour of Boron & AMP ; Vanadium doped Fe-6.5 (WT.%) Si soft magnetic alloy ribbons fabricated by direct powder rolling	2019-20	4,00,000	3 yrs
26	Dr. V.Rama Koteswara Rao, Assoc.Prof.-ME	M/s. Sri Venkateswara Electricals Pvt. Ltd.,	Development and characterization of boron & AMP ; Vanadium doped Fe-6.5 (Wt.%) Si soft magnetic alloy ribbons with TiO <sub>2</sub> coatings	2019-20	3,00,000	3 yrs
27	Dr. N.V.V.S.Sudheer Prof.-ME	M/s. Design Tribe (India) Pvt. Ltd.,	Improvement of COP of Air conditioning systems by using different types of insulations and nano compressor oil	2019-20	2,50,000	3 yrs
28	Dr. K.Bala Prasad Assoc.Prof.-ME	M/s. Sri Venkateswara Electricals Pvt. Ltd.,	Investigation on performance improvement methods of transformer using nano fluids in the perspective of cooling	2019-20	3,00,000	3 yrs
29	Dr. C.Tara Sasanka Asst.Prof.-ME	M/s. Design Tribe (India) Pvt. Ltd.,	Evaluation and optimization of process parameters for agitation in concrete mixing	2019-20	2,50,000	3 yrs