

P.V.P. Siddhartha Institute of Technology

Department of Mechanical Engineering

Research Projects Sanctioned from 19-20 to 2024-25

Name of the Project	Name of the Principal Investigators/ co investigators	Name of the funding agency	Granting agent (Government/ Non Government)	Year of the Award	Funding Amount In Rs.	Duration
2024-25						
Automated Coconut Tree Climber and Coconut Cutter for Safe and Efficient Harvesting	Dr.Phani Prasanthi	Unnatha Bharath Abiyan	GOVT	2025	1,00,000	1 Year
Design and fabrication of Nano filler mixed natural composites	Dr. P.Phani Prasanthi	SAGTE	Non Government	2025	30,000/-	1 Year
Metal Matrix Composites and Nano Material cherecterization	Dr. M.Naga Swapna Sri	SAGTE	Non Government	2025	23,000/-	1 Year
Working model of Elastocaloric Refrigerator	Dr.P.Anusha	SAGTE	Non Government	2025	23,000/-	1 Year
Graphene based hydroxyapatite composites for	Dr. K.I.Vishnu Vandana	SAGTE	Non Government	2025	25,000/-	1 Year

orthopedic applications						
Experimental Analysis of polymer composites prepared using additive manufacturing	Dr. M.Rajya Lakshmi	SAGTE	Non Government	2025	30,000/-	1 Year
Additive Manufacturing of Aluminium Alloys	G. Bala Krishna	SAGTE	Non Government	2025	30,000/-	1 Year
Fabrication of Solar Assisted Drying system with Latent heat storage	T.J.Prasanna Kumar	SAGTE	Non Government	2025	20,000/-	1 Year
Polymer Composites	Mohan Sumanth Ch	SAGTE	Non Government	2025	30,000/-	
					1,00,000/- (Gov)	
					2,11,000/- (Non-Gov)	
Total Amount					3,11,000/- Lakhs	
2023-24						
Umbrella shaped cooler	Dr.M.Naga Swapna Sree	MSME	GOVT	2023	15,00,000	2 Years
SRPG PG Project	Dr.P.Anusha	ISHARAE	Non GOVT	2023	1,00,000	1 Year
Projectile Impact	Dr. Sd.Abdul	SAGTE	Non Government	2024	25,000/-	1 Year

Analysis of Structures	Kalam					
Metal Matrix Composite and Nano Material Characterization	Dr.M.Naga Swapna Sri	SAGTE	Non Government	2024	24,500/-	1Year
Ionocaloric Refrigerator Fabrication	Dr.P.Anusha	SAGTE	Non Government	2024	24,500/-	1Year
Characterization of metal metal composite	Dr.Ch. Kishore Reddy	SAGTE	Non Government	2024	20,000/-	1Year
Machining Performance of Textured ceramic composite tool inserts.	Dr. K.I.Vishnu Vandana	SAGTE	Non Government	2024	25,000/-	1Year
Experimental Analysis of Machining parameters in Milling using machine learning algorithms	Dr. M.Rajya Lakshmi	SAGTE	Non Government	2024	25,000/-	1Year
Experimental and analysis of composites	E.Kavitha	SAGTE	Non Government	2024	25,000/-	1Year
Electrolytic polishing of additive manufactured_ AISi10Mg parts	G. Bala Krishna	SAGTE	Non Government	2024	25,000/-	1Year
Stability analysis of nano coolants	Ch.Vidya	SAGTE	Non Government	2024	21,000/-	1Year
Optimization of metal forming in asymmetrical rolling	P. Gopala Krishnaiah	SAGTE	Non Government	2024	20,000/-	1Year

					15,00,000/- (Gov)	
					3,55,000/- (Non-Gov)	
Total Amount					18,55,000/-	
2022-23						
AI Enabled Bio sensor to control AC Under empowerment and equity opportunities for excellence in Science.	Dr.P.Anusha	SERB	GOVT	2023	16,55,817/-	2 Years
SRPG PG Project	Dr.P.Anusha	ISHARAE	Non GOVT	2022	50,000	6 Months
Airfoil Testing in Subsonic Wind Tunnel	Dr.T.Rama Krishna	SAGTE	Non Government	2023	19000/-	1 Year
Metal Matrix Composites	Dr.Ch.Kishre Reddy	SAGTE	Non Government	2023	25000/-	1 Year
Experimental Analysis on Wire cut EDM	Dr.M.Rajya Lakshmi	SAGTE	Non Government	2023	20000/-	1 Year
Characterization of Ceramic Composites	Dr.K.I.V. Vandana	SAGTE	Non Government	2023	20000/-	1 Year
Dynamic Mechanical Behaviour of Polymer Composites	Ms.E.Kavitha	SAGTE	Non Government	2023	20000/-	1 Year
Analysis of Machining parameters on EDM	Mr.N.Raghu Ram	SAGTE	Non Government	2023	15000/-	1 Year

Laser Processing of Additively manufactured AlSi10Mg Components	Mr.G.Bala Krishna	SAGTE	Non Government	2023	30000/-	1 Year
3D printing of Aluminium Alloys	Ms.M.Radha Devi	SAGTE	Non Government	2023	22,000/-	1 Year
Effectiveness enhancement of Heat exchanges	Ms.Ch.Vidya	SAGTE	Non Government	2023	21,000/-	1 Year
Metal Forming	Mr.P.Gopala Krishnaiah	SAGTE	Non Government	2023	24,000/-	1 Year
Airfoil Testing in Subsonic Wind Tunnel	Mr.T.J. Prasanna Kumar	SAGTE	Non Government	2023	19,100/-	1 Year
					16,55,817/- (Gov)	
					2,85,100/- (Non-Gov)	
					Total amount	19,40,917/-
2021-22						
Gadolinium metal for electromagnetic refrigeration effect	Dr.P.Anusha	SAGTE	Non Government	2022	18,357	1 Year
Experiments on fluid flow and heat transfer in plate/porous medium	Dr. T.Rama Krishna	SAGTE	Non Government	2022	18,357	1 Year
Green Composites	Mr. T. Srinag	SAGTE	Non Government	2022	18,357	1 Year

2020-21						
AICTE YUVAK	Dr.Phani Prasanthi. Dept of Me	AICTE	GOV	2021	2,00,000/-	6 Months
Vibration analysis on materials	Dr. K. Srividya	SAGTE	Non Government	2021	22,328	1 Year
Additive Manufacturing of a Aluminium Alloys	Mr.G. Bala Krishna	SAGTE	Non Government	2021	22,328	1 Year
Ceramic Composites	Ms. K I V Vandana	SAGTE	Non Government	2021	22,328	1 Year
Optimization of milling parameters of aluminium alloys and stainless steel	Ms. M. Rajya Lakshmi	SAGTE	Non Government	2021	22,328	1 Year
Optimization of process parameters on Electrical Discharge Machining	N.Raghu Ram	SAGTE	Non Government	2021	22,328	1 Year
Characterization of Aluminum based particulate high entropy alloy composite	Ch. Kishore Reddy	SAGTE	Non Government	2021	22,328	1 Year
Stress corrosion cracking of an aluminium alloy	Sri Ram Vikas	SAGTE	Non Government	2021	22,328	1 Year
Green Composites	Mr. T. Srinag	SAGTE	Non Government	2021	22,328	1 Year
Optimization of process parameters in wire cut	M. Radha Devi	SAGTE	Non Government	2021	22,327	1 Year

EDM						
Lathe Tool Dynamometer	G Vijay Kumar (Digital Turning Tool Dynamo meter)	SAGTE	Non Government	2021	50,150	-----
Digital Visco Meter Maharashtra	Ch.Vidya (Visco Meter for measuring viscosity of Fluids)	SAGTE	Non Government	2021	48,899	-----
					2,00,000/- (Gov)	
					3,00,000/- (Non-Gov)	
					Total amount	5,00,000/-
2019-20						
Rps - Fabrication And Charecterization Of Bio Hybrid Natural Fiber Reinforced Composite Using Experimental And Numerical Methods	Dr PHANI PRASHANTHI	AICTE RPS	GOV	2020	11.57	3 Years
Characterization of Nano composites	Dr. G. Phani Prasanthi	SAGTE	Non Government	2020	22,490/-	
Free Vibration analysis of	Dr. K. Srividya	SAGTE	Non Government	2020	22,500/-	

bonded and debonded materials by impact analysis						
High Temperature behavior of A356 alloy with Cu particulate reinforced composites	Dr. M. Naga Swapna Sri	SAGTE	Non Government	2020	22,500/	
Performance Evaluation of VCR systems	Ms. P. Anusha	SAGTE	Non Government	2020	22,500/	
Characterization of Aluminium composites	Mr.Ch. Kishore Reddy	SAGTE	Non Government	2020	22,500/	
Design and development of electrodes in EDM	Mr. N. Raghu Ram	SAGTE	Non Government	2020	22,500/	
Microstructure and mechanical properties of Laser beam welded AM components	Mr. G. Bala Krishna	SAGTE	Non Government	2020	22,500/	
Corrosion behavior of Aluminuim and titanium alloys	Mr. K. Sri Ram Vikas	SAGTE	Non Government	2020	22,500/	
Effectiveness enhancement of Heat exchangers with nano fluids	Ms.Ch. Vidya	SAGTE	Non Government	2020	22,500/	
solar energy conversions	Mr. T. J.	SAGTE	Non Government	2020	22,500/	

	Prasanna Kumar					
Nano composites	Mr. M. Somaiah Chowdary	SAGTE	Non Government	2020	22,500/	
Dynamo meter for milling	Dr.G.Vijay Kumar (Digital Dynamometer)	SAGTE	Non Government	2020	52,510	
					11,56,810/- (Gov)	
					3,00,000/- (Non-Gov)	
					Total Amount	14,56,810/-