

Research and Development

The faculty members of Mechanical Engineering Department are actively involved in research and development activities. 16 faculty members are pursuing their research and their research work is funded by agencies like UGC, AICTE and DST.

The department encourages joint publications and patenting with students. During the year 2016-2017, 4 patents were filed and over hundred papers were published over the last four years.

The state of the art research equipments like VCR engines, Stir casting set-up, micro hardness tester, Ultrasonic flow detector, Pin on Disc hardness tester, MIG/TIG welding, etc. are used for consultancy purposes.

Funded Projects Applied

S.No	Project Title	Funded Agency	Duration	Cost	Investigator and Co-Investigator Details
1.	Experimental Investigation on Performance of copper coated SI Engines	Tamilnadu State Council for Science and Technology	2014	5,00,000	Dr.P.AshokaVarthanan Principal Invt. M.SureshBabu Co - Investigator
2.	Property analysis of aluminium alloy(Al-alloy/flyash/SiCp/Al2O3) hybrid matrix composite produced by squeeze casting route	Tamilnadu State Council for Science and Technology	2014	5,00,000	Dr.A.Ramesh Principal Invt. R.Soundararajan Co - Investigator
3.	Modernization of Internal Combustion Engines Laboratory with Computerized Research Engine and Emission Measuring Equipments	All India Council for Technical Education (AICTE)- MODROBS	2014	14,85,545/-	Dr.P.Balamurugan Principal Invt.
4.	Preparation and experimental investigation of various alternate fuels in computerized variable compression ratio diesel engine	All India Council for Technical Education (AICTE)- RPS	2014	16,75,545/-	Dr.P.Balamurugan Principal Invt.
5.	Experimental Investigation of Performance and Emission Characteristics of Alternate Fuel in Single Cylinder Four Stroke Diesel Engine	University Grants Commission (UGC)- Minor Research Project	2014	5,00,000/-	Dr.P.Balamurugan Principal Invt.
6.	Investigation on Preparation and Trialing	Science and Engineering	2014	23,19,581/-	Dr.P.Balamurugan Principal Invt.

	on Various Alternate Fuels in Computerized Variable Compression Ratio Diesel Engine	Research Board (SERB)- Scheme for Young Scientists			
7.	Experimental study on reduction of air pollution from diesel engine using green alternate fuel	Science for Equity, Empowerment & Development Division (SEED)- Submission of Concept Note- Under the Scheme for Young Scientists and Technologists	2014	16,84,100/-	Dr.P.Balamurugan Principal Invt. Dr.P.AshokaVarthanan Co- Principal Invt. V.Karthickeyan Co- Principal Invt.
8.	Studies on Variable Compression Ratio Diesel engine in HCCI Mode to Reduce Exhaust Emission	Scheme for CSIR Research Grants	2014	28,92,797	Dr.P.Balamurugan Principal Invt. Dr.A.Ramesh Co- Principal Invt. V.Karthickeyan Co- Principal Invt.
9.	Studies on Improving the Performance of Solar Collectors using Green House Gases	SERI, DST, New Delhi	2015	34,11,410	Dr.P.Balamurugan Principal Invt. V.Karthickeyan Co- Principal Invt.
10.	Student Project Scheme- 2014- 2015	Tamil Nadu Council for Sceince and Technology	2015	35,000/-	V.Karthickeyan
11.	Development of Production Plant to Produce 300 Litre Per Day of Bio-Diesel from AzadirachtaIndica (Neem) and HeveaBrasiliensis (Rubber Seed) for I.C. Engines	MNRE	2015	Rs. 9,81,888/-	Dr.P.Balamurugan Principal Invt. V.Karthickeyan Co-Principal Invt.
12.	FDP on Thermal Engineering	Anna University, Chennai	2015	Rs. 60,000/-	Dr.P.Balamurugan V.Karthickeyan Co- Ordinators
13.	FDP on Engineering Mechanics	Anna University, Chennai	2015	Rs. 60,000/-	Dr.P.AshokaVarthanan V.Karthickeyan Co- Ordinators
14.	Emission Reduction on Diesel Engine using Cashew Nut Shell Liquid as Biodiesel with SCR & Catalytic Converter	Tamilnadu Council for Science & Technology- STP 2014- 2015	2015	Rs. 3,35,800/-	Dr.P.Balamurugan Principal Invt. V.Karthickeyan Co-Principal Invt.
15.	Development and	Tamilnadu	2015	Rs.	Dr.P.AshokaVarthanan

	Performance Analysis of Local Grid Interaction System using a Wind Turbine and a Solar Photovoltaic Panel with Battery Bank	Council for Science & Technology-STP 2014-2015		4,94,800/-	Principal Invt. V.Karthickeyan Co-Principal Invt.
16.	An Experimental Investigation on Direct Injection C.I Engine in Multi Fuel Mode (Diesel-Hydrogen, Diesel- LPG, Diesel- DEE) in Enriched Air Induction Mode with EGR	Tamilnadu Council for Science & Technology-STP 2014-2015	2015	Rs. 4,11,800/-	Dr.P.Balamurugan Principal Invt. V.Karthickeyan Co-Principal Invt.
17.	Development of a simulator for hole drilling EDM to analyze the stochastic and deterministic parameters.	UGC Major Research	2015	20,00,000	Dr.P.AshokaVarthanan Principal Invt. R.ArunBharathi Co - Investigator

Ongoing Funded Projects

S.No	Project Title	Funded Agency	Duration	Cost	Investigator and Co-Investigator Details
1.	Under MODROBS scheme to modernize the Metallurgy Lab.	AICTE - MODROBS	2013 (2 Years)	Rs.9,50,000	Dr.A.Ramesh
2.	Experimental Investigation and Characterization of Squeeze Casting of Composite Materials”.	AICTE - RPS	2013 (3 Years)	Rs.12,00,000	Dr.A.Ramesh
3.	Investigation and optimization of shot peening process parameters on 2024 Aluminium alloy using Nickel Shots”	DST Young Scientist Scheme	2015 (2 Years)	Rs.17,10,000	Dr.P.AshokaVarthanan
4.	Experimental Investigation on back pressure analysis and emission characteristics of catalytic converter using different coat materials.	UGC – Minor Projects		Rs.3,20,000	Prof.V.Karthickeyan

5.	Modified Catalytic Converter for Carburetor Engine with Flipper (oscillating) Joint.	IEDC	2013(1 Year)	Rs.81,000	Dr.P.AshokaVarthanan
6.	An Alternate Socket Design for Above or Below Knee Prosthetic Users	IEDC	2013 (1 Year)	Rs.75,000	Dr.P.AshokaVarthanan
7.	Manually Operated Paper Cycling Machine	IEDC	2013 (1 Year)	Rs.95,000	Mr.M.Vignesh Kumar
8.	Design and Fabrication of belt drive using composite materials	IEDC	2014 (1 Year)	Rs. 1,00,000	Mr. R. Soundararajan
9.	Automatic paper cup manufacturing machine	IEDC	2015 (1 Year)	Rs. 1,00,000	Dr. M. Suresh
10.	Effect of reinforcement on A356 aluminium alloy with Fly ash/SiCp hybrid metal matrix composite using squeeze casting route	UGC Minor Research	2016 (2 Years)	Rs.4,70,000	Mr. R. Soundararajan

Completed Funded Projects

S.No	Project Title	Funded Agency	Duration	Cost	Investigator and Co-Investigator Details
1.	Under MODROBS scheme to modernize the Metallurgy Lab.	AICTE - MODROBS	2013 (2 Years)	Rs.9,50,000	Dr.A.Ramesh
2.	Experimental Investigation on back pressure analysis and emission characteristics of catalytic converter using different coat materials.	UGC – Minor Projects	2013(1 Year)	Rs.3,20,000	Prof.V.Karthickeyan
3.	Modified Catalytic Converter for	IEDC	2013(1 Year)	Rs.81,000	Dr.P.AshokaVarthanan

	Carburetor Engine with Flipper (oscillating) Joint.				
4.	An Alternate Socket Design for Above or Below Knee Prosthetic Users	IEDC	2013 (1 Year)	Rs.75,000	Dr.P.AshokaVarthanan
5.	Manually Operated Paper Cycling Machine	IEDC	2013 (1 Year)	Rs.95,000	Mr.M.Vignesh Kumar
6.	Design and Fabrication of belt drive using composite materials	IEDC	2014 (1 Year)	Rs. 1,00,000	Mr. R. Soundararajan
7.	Automatic paper cup manufacturing machine	IEDC	2015 (1 Year)	Rs. 1,00,000	Dr. M. Suresh

Publication Details

S.No.	Paper Title	Author Details	Name of the Journal	Volume and Page Number	Year of Publishing
1.	“Recent vistas in engineering surface modification techniques”	Mohammed Yunus.J, FazlurRahman, A.Ramesh,	<i>International Journal of Mechanical Engineering and Technology</i>	Vol. 3, pp. 92 -107.	2012
2.	“Effect of vibratory treatment on Hardness of the weldment”	Balasubramanian. K And Balusamy.V	<i>International Journal of Mechanical and Manufacturing Technology.</i>	(ISSN:2277-8446), Vol.1, Issue 1, pp.1-5	2012
3.	“Effect of vibratory treatment on hot cracking resistance in AA6061 alloy”	Balasubramanian. K And Balusamy.V	<i>Advanced Material Research</i>	(ISSN:1022-6680), vol. 584, 2012, pp.516-520.	2012
4.	“A simulation based heuristic discrete particle swarm algorithm for generating integrated production-distribution plan”	P.AshokaVarthanan , N. Murugan And G. Mohan Kumar	<i>Applied Soft Computing, Elsevier</i>	Vol 12, No. 9, pp. 3034-3050.	2012
5.	“Development of simulation based AHP-DPSO algorithm for	P.AshokaVarthanan , N. Murugan, G. Mohan Kumar,	<i>International Journal of Advanced</i>	Vol. 60, No. 1-4, pp. 373-396.	2012

	generating multi criteria production-distribution plan”	S. Parameswaran,	<i>Manufacturing Technology, Springer Verlag</i>	(ISI Impact Factor: 1.205)	
6.	“A simulated annealing algorithm to the multi-period fixed charge distribution problem associated with backorder and inventory”	Jawahar N, Gunasekaran. A, Balaji. N	<i>International Journal of Production Research</i>	Vol-50, No-9, pp. 2533-2554. (ISI Impact Factor: 1.460)	2012
7.	“A genetic algorithm based heuristic to the multi-period fixed charge distribution problem”	Jawahar. N, Balaji. N	<i>Applied Soft Computing, Vol-12,</i>	Vol-12, Pages 682-689. (ISI Impact Factor: 2.140)	2012
8.	“Few heuristic optimization algorithms to solve the multi-period fixed charge production-distribution problem”	Balaji. N ,Jawahar.N	<i>Journal of Computational and Applied Research in Mechanical Engineering</i>	Pages 77-87, Vol-1, No.2	2012.
9.	"Heat and mass transfer studies on compact generator of R134a/DMF vapour absorption refrigeration system"	Balamurugan. P , Mani. A	<i>International Journal of Refrigeration</i>	35 (3), 506-517	2012
10.	"Experimental studies on heat and mass transfer in tubular generator for R134a-DMF absorption refrigeration system"	Balamurugan. P , Mani. A	<i>International Journal of Thermal Sciences, 61, 118-128</i>	61 (2012), 118-128	2012
11.	“Continuous quality improvement in investment castings: An experimental study using a modified FMEA approach called FEAROM”,	Selvan.T.A , Jegadheesan.C, Senthilkumar.K.M	<i>European journal of scientific research</i>	Vol No: 74, issue no.2, pp. 308-325.	2012
12.	“Enhancing quality using FEAROM model for finalizing casting product methods design in preproduction trials”	Selvan.T.A , Jegadheesan.C, Senthilkumar.K.M, Alagirisamy.P.S	<i>Springer-verlag berlin Heidelberg CCIS.</i>	Vol No: 330, issue no.2, pp. 511-519.	2012
13.	V “Effect of vibratory treatment on Hardness of the weldment”	Balasubramanian, K And Balusamy,	<i>International Journal of Mechanical and Manufacturing Technology</i>	(ISSN:2277-8446), Vol.1, Issue 1, pp.1-5.	2012
14.	“Effect of vibratory treatment on hot cracking resistance in AA6061 alloy”	Balasubramanian.K And Balusamy, V	<i>Advanced Material Research</i>	(ISSN:1022-6680), vol. 584	2012
15.	“A simulated annealing problem algorithm to the multi period fixed charge distribution problem asociatedwith back order and inventory”	N. Balaji ,	<i>International Journal of production research</i>	vol.50, No 9,pp. 2533-2554,taylor-Francis publication.	2012
16.	“A genetic algorithm based heuristic to the multi	N. Balaji	<i>Applied soft computing,vol.12</i>	vol.12no-2, pp.682-699,	2012

	period fixed charge distribution problem”		<i>no-2,Elsevier publication.</i>		
17.	“Few heuristic optimization algorithms to solve the multi –period fixed charge production-distribution problem”	N. Balaji	<i>Journal of computational and applied research in engineering</i>	Vol.1 No.2,pp. 77-87	2012
18.	“Effect of operational parameters on heat and mass transfer in generator of R134a/DMF absorption refrigeration system”	Balamurugan. P And Mani.A,	<i>14th International Refrigeration and air conditioning conference, Purdue</i>	<i>14th International Refrigeration and air conditioning conference</i>	2012
19.	“An AHP based DPSO algorithm for generating multi criteria production-distribution plan”	P.AshokaVarthanan , N. Murugan And G. Mohan Kumar,	<i>Journal of Manufacturing Systems, Elsevier,</i>	Vol.32, No. 4, pp. 632–647.	2013
20.	“Failure Effects and Resolution Modes: A Novel FMEA Treatise for Finalizing Mould Designs in Foundries”	T.A.Selvan, C.Jegadheesan, P.AshokaVarthanan ,	<i>South African Journal of Industrial Engineering</i>	Vol.24, No.2, pp. 181-195. (ISI Impact Factor: 0.214)	2013
21.	“A Discrete PSO Approach for Generating an Integrated Multi-Plant Aggregate Production-Distribution Plan”	P. AshokaVarthanan, N. Murugan And G. Mohan Kumar,	<i>International Journal of Knowledge Based and Intelligent Engineering Systems</i>	Vol.17, No. 3, pp. 195–207.	2013
22.	“A Novel FMEA approach for ranking Mould Designs in foundries”	T.A.Selvan, C.Jegadheesan, P. AshokaVarthanan,	<i>Life Science Journal</i>	Vol.10, No.2, pp. 51-60. (ISI Impact Factor: 0.158)	2013
23.	“Determining the Natural resting orientation of a part using drop test and theoretical methods”,	Suresh.M, Jagadeesh. K.A, AshokaVarthanan.P	<i>Journal of Manufacturing Systems</i>	Vol 32, pp 220-227. (Impact factor – 1.872)	2013
24.	,”Comparison of compact and tubular generators performance for R134a-DMF”	Balamurugan. P And Mani. A	<i>Experimental Thermal & Fluids Science</i>	45 (2013)	2013
25.	“A Novel FMEA approach for ranking Mould Designs in foundries”	Selvan.T.A, Jegadheesan.C, Ashokavarthanan.P And Senthilkumar.K.M,	<i>Life Science Journal</i>	Vol No: 10, issue no.8, pp. 51-60.	2013
26.	“Failure Effects And Resolution of Modes: A novel FMEA treatise for Finalizing Mould Designs in Foundries.”	Selvan.T.A, Jegadheesan.C, Ashokavarthanan.P And Senthilkumar.K.M,	<i>South African Jornal IndustrialEngg.</i>	Vol No: 24, issue no.2, pp. 181-195.	2013
27.	“Optimization and analysis of a part feeding system for an asymmetric part”	Mr.M.Suresh	<i>National conference on Trends in Automotive Parts Systems and</i>	March 15-16, 2013.	2013

			<i>Applications at Sri Krishna College of Engineering and Technology,</i>		
28.	, “Experimental investigation of process parameters in wire electrical discharge machining by response surface methodology on IS2062 steel”	R.ArunBharathi, P. AshokaVarthanan and K. Manoj Mathew	, <i>Applied Mechanics and Materials, Trans Tech Publications</i>	Vol.550, pp. 53 –61 (doi: 10.4028/www.scientific.net/AMM.550.3).	2014
29.	“A drop test for finding the most probable resting orientation of a part”	M. Suresh , K.A. Jagadeesh, P. AshokaVarthanan ,	<i>Applied Mechanics and Materials, Trans Tech Publications</i>	Vol.550,pp.3 –13.(doi: 10.4028/www.scientific.net/AMM.550.53).	2014
30.	“A Drop test for finding the most probable resting orientation of a part ”	Suresh.M , Jagadeesh.K.A, AshokaVarthanan.P	<i>Applied Mechanics and Materials</i>	Vol 550, pp 3-13.	2014
31.	“Design and Development of a singularizing unit for part feeding system”	Suresh.M ,Jagadeesh. K.A, Rathish.R	<i>Journal for Manufacturing Science and Production</i>	Vol 14, issue 1, 2014, pp 39-45.	2014
32.	“Optimization of Parameters for Hopper Unit in Linear Vibratory Part Feeder”	Suresh.M , Jagadeesh.K.A, Rathish.R	<i>International Journal of Research in Manufacturing Technology & Management</i>	Vol 2, issue 1, pp 1-5.	2014
33.	“Mathematical Investigation of a Trap in Vibratory Part Feeders for Effective Part Motion”.	Suresh.M , Don Parthiban.D, Sakthivel.J	<i>International Journal of Research in Mathematics & Computation</i>	Vol 2, issue 2, pp 33-38.	2014
34.	“Design And Development Of A Trap For Part Feeders To Obtain The Most Favorable Orientation Of Part”	Suresh.M ,Rakesh.N, Don Parthiban.D	<i>International Journal of Applied Engineering Research</i>	Vol 9, issue 24, pp 27733-27750.	2014
35.	, “Investigations Of Water Barrier And Thermal Stability Properties Of Glass Fiber Reinforced Epoxy Polymer Nanocomposites”	R.Ramamoorthi , P.S.Sampath	<i>Applied Mechanics and Materials,</i>	Volume 550, Pages 14-20.	2014
36.	“Investigations Of Influence Of Halloysite Nanotubes On The Thermo-Mechanical And Vibration Characteristics Of Glass Fiber Reinforced Epoxy Laminates”	R.Ramamoorthi , P.S.Sampath	<i>Romania Journal of Materials,issue44 (4), Pages 360-364</i>	issue44(4), Pages 360-364	2014
37.	“Preparation And	S.Sivananthan,	<i>Applied</i>	Volume 550,	2014

	Characterization Of Aluminium Nanocomposites Based On Mwcnt”	S.Gnanasekaran, C.Samson Jerold Samuel,	<i>Mechanics and Materials</i>	Pages 30-38	
38.	“Design And Development Of A Trap For Part Feeders To Obtain The Most Favorable Orientation Of Part”	Suresh.M, Rakesh.N, Don Parthiban.D	<i>International Journal of Applied Engineering Research</i>	Vol 9, issue 24, 2014, pp 27733-27750	2014
39.	“Experimental Investigation Of Process Parameters In Wire Electrical Discharge Machining By Response Surface Methodology On Is2062 Steel”	R.ArunBharathi, Dr.P.AshokaVarthanan, K.Manoj Mathew	<i>Applied Mechanics and Materials Journal</i>	Vols. 550,pp 53-61	2014
40.	“Wear Characteristics Of Phosphor Bronze/Boron Carbon Particulate Composites”	Babu N., Samuelgemsprim M.,P Sankaravadivel.,Dr N Natarajan	<i>Applied Mechanics and Materials Journal</i>	Vols. 550,pp 48-52	2014
41.	“Experimental Investigation On Emission Characteristics Of Catalytic Converter Using Different Wash Coat Materials”	V.Karthickeyan, P.Arulraj ,	<i>Applied Mechanics and Materials</i>	Volume 550, 2014, Pages 62- 70	2014
42.	“Investigation Of Wear Behaviour Za 27 Using Bio-Lubricants”	Samuelgemsprim M, Babu N., ParimalaMurugaveni .Thyla	<i>Applied Mechanics and Materials Journal</i>	Vols. 550(2014) pp 21-29	2014
43.	“An Analysis on Temperature & Surface roughness During End Milling of Ti-6Al-4V Alloy”	S.Samsudeensadham., V.Krishnaraj	<i>International Mechanical Engineering Congress, Applied Mechanics and Materials Journal,</i>	Vols. 592-594 pp 38-42	2014
44.	“A study on high speed end milling of titanium alloy”	V Krishnaraj, S SamsudeenSadham, R Sindhumathi, P Kuppan	<i>12th global congress on manufacturing and management, Procedia Engineering</i>	vol 97 , (2014), pp 251 – 257, ELSEVIER	2014
45.	“Preparation and Characterization of Aluminium Nano Composites based on MWCNT”	Mr.C. Samson Jerold Samuel,	<i>International Conference on Emerging Trends in Powering the Nation, Sri Krishna College of Engineering and Technology</i>	<i>International Conference on Emerging Trends in Powering the Nation, Sri Krishna College of Engineering and Technology</i>	2014
46.	An investigation of	R. Soundararajan,	<i>Journal of Alloys and Compounds</i>	685, pg:533-5	2016

	material removal rate and surface roughness squeeze casted A413 alloyon WEDM by multi-response optimisation using RSM”	A. Ramesh, N. Mohanraj, N. Parthasarathi	<i>Compounds</i>		
47.	“Case study of Spark Plasma Sintering process”	Guddakesh Kumar Chandran, R.Soundararajan , R. Balaji, AshokaVarthanan,	<i>International Journal of Innovative Research in Science, Engineering and Technology</i>	Vol 5, Special Issue 7	2016
48.	“Performance Improvement Of Stir Casting Blade”	Prakash K, Soundararajan. R , R. Ramamoorthi , Jeyakumar R	<i>International Journal of Innovative Research in Science, Engineering and Technology</i>	Vol 5, Special Issue 7	2016
49.	“A review of control methods for the electron beam free form fabrication process”	Arul Navalan.G.K, Soundararajan.R , Suresh M ,	<i>International Journal of Innovative Research in Science, Engineering and Technology</i>	Vol 5, Special Issue 7, April 2016	2016
50.	“Evaluation of Mechanical Behaviour of AA6061-TiB2 Composites- A review Paper	Deepavasanth.P.S, Soundararajan.R , Parthasarathi.N, Saravanakumar P,	<i>Vol 5, Special Issue 7</i>	Vol 5, Special Issue 7	2016
51.	“A Review on Effect of Reinforcement and Squeeze Casting Process Parameters on Mechanical Properties of Aluminium Matrix Composites”	Saravanakumar.P, Soundararajan.R , Deepavasanth.Ps, Parthasarathi N	<i>International Journal of Innovative Research in Science, Engineering and Technology</i>	Vol 5, Special Issue 7	2016
52.	, “Modelling and Analysis of Mechanical Properties of Aluminium alloy (A413) Processed through Squeeze casting Route using Artificial Neural network model and Statistical Technique	R. Soundararajan , A. Ramesh , S. Sivasankaran And Sathishkumar	<i>Advances in Materials Science and Engineering</i>	Vol 2015, Article ID 714762	2015
53.	“Production of Orange oil methyl ester and experimental investigation on Thermal barrier coated diesel engine”	V. Karthickeyan	<i>Asian Journal of Research in Social Sciences and Humanities</i>	ISSN:2249-7315 (ONLINE) 2250-1665(PRINT)	2016
54.	“Experimental	R. Arunbharathi ,	<i>Asian Journal of</i>	ISSN:2249-	2016

	investigation of process parameters in Drilling EDM using RSM and ANN in Air Hardened Tool Steel (AISI A2)	P. AshokaVarthanan, A.G. Danraj,	<i>Research in Social Sciences and Humanities</i>	7315 (ONLINE) 2250-1665(PRINT)	
55.	“Experimental Investigation on weld strength of Copper wire-A18011 Sheet using Ultrasonic Metal welding”	R. Karthik, P. AshokaVarthanan, V.S Gowthaman,	<i>International Journal of Advanced Research in Science, Enggasnd technology,</i>	Vol 1, No.1	2016
56.	“Effect of vibratory treatment on Metallurgical and Mechanical properties of Aluminium alloys weldments”	Dr.K.Balasubramanian, Dr. V Balusamy,	<i>International Journal of Advanced Research in Science, Enggasnd technology</i>	Vol 1, No.1, May-	2016
57.	“Investigation of vision inspection method for surface defects in image processing Techniques- A review”	Balasubramani S, Balaji N,	<i>Advances in Natural and Applied Sciences</i>	May 2016, ISSN: 1995-0772, EISSN:1998-1090, pages 115-119	2016
58.	‘Effect of Water Absorption on the Mechanical Properties of Halloysite Nanotube Crammed Glass Fiber Reinforced Epoxy Hybrid Nanocomposites’	Ramamoorti. R, Sampath, PS	<i>International Journal of ChemTech Research</i>	Vol.8, pp. 52-57	2015
59.	‘Experimental Investigations of Influence of Halloysite Nanotube on Mechanical and Chemical Resistance Properties of Glass Fiber Reinforced Epoxy Nano Composites’	Ramamoorti.R, Sampath, PS	<i>Journal of Scientific and Industrial Research, (Impact Factor : 0.5000)</i>	Vol.	2015
60.	‘Effect of Halloysite Nanotube on the Fatigue Life of Glass Fiber Reinforced Epoxy Composites’	Ramamoorti,R, Sampath, PS	<i>‘Effect of International Journal of Engineering Science and Technology’</i>	Vol.	2015
61.	“An Improvement of hot cracking resistance through vibratory treatment in aluminiumalloy weldment”	Dr.K. Balasubramanian, Dr. V Balusamy	<i>International Conference on Recent Advancements in Design, Automation and</i>	Dr. N.G.P Institute of Technology	24 March 2016,

			<i>Intelligent Systems</i>		
62.	"Investigation of the effect of Sot Peening process on the corrosion characteristics of Aluminium 2024-T3 Alloy"	A Rajesh, Dr.P.Ashokavarthan, S. Kalidass	<i>International Conference on Recent Advancements in Design, Automation and Intelligent Systems</i>	March 2016, Dr. N.G.P Institute of Technology	24 March 2016
63.	V.C.Uvaraja, "Machining chara of A hybrid Aluminium Metal matrix comPOSITE"	R.Arunkumar, A.Shanmugasundaram	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
64.	V.C.Uvaraja, "Comparison of two unique reinforcement Materials with Al 6061 Alloy produced by squeeze casting method"	R. Arun Kumar, A. Shanmugasundaram	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
65.	"Study on effect of copper addition with A356 Alloy"	J.Bhaskaran, P.Raghuvaran	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
66.	"Design and Analysis of advanced composite spur gear"	Dr.K.Marimuthu, Karthi V	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
67.	"performance improvement of multi stage noryl impeller submersible pump"	C.Vigneshkumaran, R.Jeyakumar	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
68.	"Theoretical & experimental investigation of heat transfer in squeeese casting of Lm6 aluminium alloy under various process parameters"	Premkumar N, Dr.A.Ramesh, R.Soundararajan	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015

69.	"Experimental investigation of wear and corrosive resistance of ceramic coated disc brake"	R.Rajapradeepan, Dr. K.Balasubramanian	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
70.	"Modelling the effect of in-cylinder flow in Si engine for different inlet port configurations using Ansys fluent"	Sathish Kumar J N, ArunBharathi R	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
71.	"Experimental Investigation of Aluminium Zinc alloy metal foam for automobile application"	Srinathkumar.S, Dr.A.Ramesh	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
72.	"experimental investigation of mechanical properties from glass/carbon hybrid fiber reinforced epoxy composite"	Sureshkumar.P, R.Ramamoorthi	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
73.	"Mechanical and tribological behaviour of squeeze casted aluminium boron composites for piston application"	M.Vignesh, R.Soundararajan, A.Ramesh, R. Rajkumar	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
74.	"Mechanical and metallurgical characteristics of friction stir welding of aluminium alloy 6061 with high strength low alloy steel"	Vignesh S, Dr. P.AshokaVarthanan	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
75.	"Optimisation of tribological behavior of enhanced aluminium 6061 alloy using response surface methodology"	C.Vigneshkumaran, R. Jeyakumar	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
76.	"Friction stir processing on Aa6063/B4c surface composite layer"	Keerthivel, Rajesh E, Dr.N.Balaji	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
77.	"Multi objective parametric	B. Karthick,	<i>Advances in</i>	ADAMS '15	2015

	optimisation of EDM Drilling using Surface response methodology"	Arunbharathi	<i>Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>		
78.	, "Experimental investigation about mechanical properties of graphite reinforced Za 27 alloy Mmc through vortex method"	J.Justin Maria Hillary, N.V. Krishnamoorthy, R. Soundararajan	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
79.	"Comparative experimental investigation of rotational viscosity of rice bran and synthetic oil"	Jothi Mani M, S.Raja,	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
80.	"Experimental investigation of temperature dependent impact property of friction stir welded Al-Alloy"	Dinakaran.S, Dr.K.Balasubramanian,	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
81.	, "efficiency improvement of solar panel using tilt mechanism"	Aravindkumarn, Dr.A.Ramesh, Santhanakrishnan P, Senthil Kumar SL	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
82.	"Fatigue behaviour of Tig Welded joint in an Al alloy 2024 T4 by shot peening process"	S.Arunkumar, M.Muralidharan, A.Rajesh, P.AshokaVarthanan	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
83.	"A review of fiber reinforced epoxy nano-composites"	Ramamoorthi R, Sampath P.S, Jeyakumar R	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
84.	"Experimental investigation on metal matrix composites by squeeze casting process"	C.Samson Jerold Samuel, Dr. A. Ramesh	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
85.	,"experimental study on	Abinesh P, Rakesh N	<i>Advances in</i>	ADAMS '15	2015

	machining parameters of Edm for inconel 800"		<i>Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>		
86.	"Computational and experimental investigation of wind turbines with winglets"	Akhil Raj, N. Balaji , Anu C.H,	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
87.	"design and analysis of trap for linear vibratory feeders for handling irregular part"	Chandra Bose, M. Suresh , Sabareesh Kumar M	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
88.	"Investigation of impact of nickel shots on the corrosiveness of Aluminium alloy 2024-T3 plates through shot peening process"	T Ganapathy, A. Rajesh	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
89.	,"Experimental investigation of Process parameters of aluminium alloy using squeeze casting"	N B Jebin Paul, C Samson Jerold Samuel	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
90.	"Effect of volume fraction on mechanical properties of natural fibres reinforced composites"	Karthi N, Ramamoorthi R	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
91.	"Effect of fibre orientation on mechanical properties of natural fibres reinforced epoxy composites"	M Kumaresan, Jeyakumar R	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
92.	"Effect of thermo-mechanical analysis of friction stir welding parameters of Al-6024"	Prabhakaran V, P. AshokaVarthanan , Suriyaprakash M,	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
93.	"Weight optimisation of	R..Rajkumar,	<i>Advances in</i>	ADAMS '15	2015

	squeese cast AA7075-b4c connecting rod using FEA"	R. Soundararajan, A. Ramesh, M. Vignesh	<i>Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>		
94.	"Automatic feeding system using vibratory bowl feeder "	M. Sabareesh Kumar, M. Suresh	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
95.	"An investigation on hot cracking resistance in Al-Cu Alloy through vibratory treatment"	Dr.K. Balasubramanian	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
96.	"Experimetnalinvestiagtion on DI Diesel engine wih orange oil as an alternate fuel"	Karthikeyan V, Balamurugan P	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
97.	"Experimetnalinvestiagtion on DI Diesel engine wih orange oil as an alternate fuel"	Karthikeyan V, Balamurugan P	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
98.	"Experimental studies on optimisation process parameters and finite element analysis of temperature and stress distribution on joining of Cu wire and Al plate using "ultrasonic welding	A.T Samrajan Paul Dhinakaran, R.Karthik	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
99.	"A comparison study fomechancial properties of flax, keanf and pineaplefibres reinforced epoxy hybrid composites "	Sathish S, R. Ramamoorthi,	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
100	"Experimental investigation on thermal barrier coated in Si Engines"	M. Suriyaprakash, Dr. P.AhokaVarthanan	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015

101	"Modeling the Machining parameters of wire electrical discharge machining of H13 steel using RSM"	S.T,Anishanth, R. Arunbharathi	<i>Advances in Design and Manufacturing of Mechanical Systems(ADAMS '15)</i>	ADAMS '15	2015
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Consultancy Projects

S.No	Name of the Organization	Project Details	Duration	Cost	Team Members