

R&D

S.No	Grant Sanctioned Date	Title of the Seminar / Conference / Workshop / FDP / FDTP Symposium / Project	Name of the Convener / Co-ordinator	Name of the Organization	Amount Sanctioned (in Rs)
2019 - 20					
1	05.02.19	Scrutinizing the latest approaches in Sphere of Advanced Materials and Nanotechnology	Dr.T. Varunkumar Mr.N.Manikandan Mr.V.P.Sureshkumar	CSIR	50,000
2018 - 19					
1	28.12.18	Advanced Material Science and Engineering	Dr.T. Varunkumar Mr.V.P.Sureshkumar	CSIR	20,000
2	8.11.18	Innovative Strategies To Enhance Teaching Learning Process	Dr.T.Varunkumar Mr.I.Akilan Mr.N.Balasubramani	NAAC	-
2017 - 2018					
1	13.04.18	Application of Bioprocess Engineering in Medical Sector	Dr.T.Varunkumar Mr.clementchristydeepak Mr.I.Akilan	ICMR	40,000
2	16.10.17	The Future of Applied Biomaterials in Human Body	Dr.T.Varunkumar Mr.clementchristydeepak Mr.I.Akilan	ICMR	50,000
3	15.09.17	Recent Approach of Fracture Mechanics in Armament Materials	Mr.N.Gnanasekar Mr.M.Parthasarathy Mr.I.Akilan	DRDO	30,000
4	16.08.17	The Future of Applied Biomechanics in Human Body	Dr.T.Varunkumar Mr.clementchristydeepak Mr.I.Akilan	ICMR	28,000
2016 - 2017					
1	16.01.17	Application of Engineering Materials in Medical Sector	Dr.T.Varunkumar Mr.clementchristydeepak Mr.I.Akilan	ICMR	40,000
2015 - 2016					
1	27.10.15	Two day seminar on Human Resource Development in Radiation Technologies and Application	Mr. T.Varunkumar Mr. K.Gobi Mr. I.Akilan	AERB	30,000
2014 - 2015					
1	18.03.15	Two day National level seminar on Small Spacecraft Technology	Mr.P.T.Saravanakumar Mr.M.Parthasarathy Mr.K.Manikandan	ISRO	30,000

2	08.10.14	Seminar on Cryogenic Treatment & its Applications	Dr.D.Senthil Kumar Mr.R.Mohammed Farooq	DRDO - ARMREB	48,000
3	01.09.14	Seminar on Application of Smart Material and Structure in Automobile	Dr.V.Ramalingam Mr.M.Mohanprasad Mr.V.P.Suresh Kumar	INSA	20,000
2012 - 2013					
1	29.08.12	Commercialization of Renewable Energy	Dr.V.Ramalingam Mrs.C.Sowmya Danalakshmi	MNRE	50,000
2011 - 2012					
1	26.08.11	Metaheuristics:Emerging Paradigm in Engineering Optimization	Dr.V.Ramalingam, Mrs.C.Sowmya Danalakshmi	CSIR	25,000

Books Published

S. No.	Name of the Author	Book Title	Name of the publisher	ISBN
2016 - 2017				
1	Dr.T.Varun Kumar	Entrepreneurship Development	Air walk Publications	978-93-84893-61-3
2		Total Quality Management		978-93-84893-52-1
3		Manufacturing Technology-I		978-93-88084-00-0
4		Engineering Metallurgy		978-93-88084-19-2
5		Manufacturing Technology- II		978-93-88084-20-8
2015 - 2016				
1	Dr.T.Varun Kumar	Automobile Engineering	Air walk Publications	978-93-84893-02-6
2		Metrology and Measurement		978-93-84893-16-3
2014 - 2015				
1	Dr.D.Senthilkumar	Cryogenic Treatment on the behavior of En 19 Steel	Scholars' Press, Pages- 1-148	978-3-639-70871-4
2012 - 2013				
1	Mr.T.Varun Kumar	Composite Materials	Anuradha Publications, Chennai	978-81-8472-212-3
2	Mr.T.Varun Kumar	Introduction to Composites- Fibre, Reinforcement and Hybrid Composites	LAMBERTAcademic Publishing, Deutschland, Germany.	978-3-659-28077-1

Patent Details

S. No.	Name of the Inventor	Title of the Invention	Name of the Applicant	Application Number/Date
2016 - 2017				
1.	Mr.T.Varunkumar	Helmet Wear Notification System	Allinnov Research and Development Private Limited.	201741003249 A 07/04/2017
2.	Mr.V.P.Suresh Kumar	Universal Power Bridge	Allinnov Research and Development Private Limited.	201641041377 A 23/12/2016
3.	Mr.N.Manikandan	Universal Power Bridge	Allinnov Research and Development Private Limited.	201641041377 A 23/12/2016
2017 - 2018				
1.	Mr.V.P.Suresh Kumar	Navigation & Information Assistive Spectacle Published	Allinnov Research and Development Private Limited.	201741024458 A 20/11/2017
2.	Mr.C.Clement Christy Deepak	A Collapsible Electronic Storage Housing for Two Wheeler	Allinnov Research and Development Private Limited.	201741028098 A, TEMP/E-1/28496/2017 25/08/2017
3.	Mr.C.Clement Christy Deepak	Washing Machine	Allinnov Research and Development Private Limited.	201741035618 A, TEMP/E-1/28496/2017 06/10/2017
2021 - 2022				
1.	Mr.N.Manikandan	A Portable air conditioning system and setup for Automotives	Government of Australia	2021105737/18Aug

Journal Publications

2022 - 2023

Sl.No	Title of the paper	Name of the author(s)	Name of the Journal	Annexure-1/ Scopus	Month and Year of publication
1	Second law assessment of di methyl ether and its mixtures in domestic refrigeration system	A. Baskaran, N. Manikandan	Scientific Reports	A1	January-23
2	Influence of capillary tube length on the performance of domestic refrigerator with eco-friendly refrigerant R152a	A. Baskaran, N. Manikandan	Scientific Reports	A1	January-23
3	Enhancing thermal conductivity of TiCnanopowder with cryogenic treatment	D Senthilkumar	Materials Science and Technology	A1	February-23

4	A mathematical analysis of mass transfer phenomena with chemical reaction over the flow of Siskoferro nanofluid across a permeable surface	N. Manikandan	Scientific Reports	A1	January-23
5	Comparative analysis of mechanical behaviour of glass fiber and rice husk reinforced composites	N. Manikandan D.loganathan	Materials Today: Proceedings	Scopus	June-22
6	A Critical Success Factor in Auto Component Manufacturing Industry: An Emprical Study	T. Varunkumar	International Journal of Scientific Research in mechanical and Materials Engineering	Scopus	June -22

2021 – 2022

Sl.No	Title of the paper	Name of the author(s)	Name of the Journal	Annexure-1/ Scopus	Month and Year of publication
1	Investigation on the Performance of Domestic Refrigerator with Zirconium Oxide-R134a Nano refrigerant	A. Baskaran, N. Manikandan	Journal of Nanomaterials	A1	March-22
2	Exergy Performance Investigation of Eco-Friendly Refrigerant Mixtures as an Alternative to R134a in a Domestic Refrigerator	A. Baskaran, N. Manikandan	International Journal of Photo energy	A1	March-22
3	Analysis of the Performance Characteristics of ZnO Nanoparticles' Dispersed Polyester Oil	V.P Suresh Kumar, N Manikandan,	Advances in Materials Science and Engineering	A1	March-22
4	Carbon nanotubes and their properties-The review	N. Manikandan	Materials Today: Proceedings	Scopus	June-21
5	Mechanical strength analysis of Al6061&Al2024 based metal matrix composite prepared through stir casting method	N. Manikandan	Materials Today: Proceedings	Scopus	June-21
6	Mechanical characterization of aluminium 6061 hybrid metal matrix composites	D.loganathan	Materials Today: Proceedings	Scopus	

SI.No	Title of the paper	Name of the author(s)	Name of the Journal	Annexure-1/ Scopus	Month and Year of publication
1	Deep cryogenic treatment of En 31 and En 8 steel for the development of wear resistance	Dr.D.Senthilkumar	Advances in Materials and Processing Technologies, Taylor & Francis	Scopus	Jan 21
2	Influence of ZnO nanoparticles on thermophysical and tribological properties of polyolester oil	V. P. Suresh Kumar	Materials Research Express	A1	March 21
3	Investigation of Mechanical Behaviour of sisal bamboo and epoxy reinforced natural composite	Mr.K.Gobi	International Journal of Engineering Applied Sciences and Technology	Non Scopus	April 21
4	Investigation of Static and Dynamic Mechanical Properties of Short Palmyra Palm Leaf Stalk Fiber (PPLSF) Reinforced Polymer Composites	Mr.M.Jayaraj	Journal of Natural Fibers	A1	Nov 20
5	Fabrication of hybrid (AA6061/SiCp/B4C) composites using FSP method and analysing the thermal behaviour in the weld region	Mr.N.Manikandan	Materials Today: Proceedings	Scopus	April 21
6	GPS Based Autonomous Robot Navigation in Robotics Along With Directionality	Mr.N.Manikandan	IOSR Journal of Electronics and Communication Engineering (IOSR-JECE)	Non Scopus	May 21
7	Investigation on mechanical properties of reinforced glass fibre/epoxy with hybrid nano composites	Mr.N.Manikandan	Digest Journal of Nanomaterials & Biostructures (DJNB)	A1	April 21
8	Optimising the Parameters and Increasing the Hardness of Duplex Stainless Steel by Annealing Process in Valve Manufacturing Industries	T. Varun Kumar	IOP Conference Series: Materials Science and Engineering,	Scopus	September 20
9	SMEs Perception towards Adoption of Measurement System Analysis Strategy: A Case Study in Pump Manufacturing Industry	T. Varun Kumar	IOP Conference Series: Materials Science and Engineering,	Scopus	September 20

10	An Investigation Study On Effect Of Pressure Die Casting Process Parameters On Mechanical Properties	T. Varun Kumar	International Research Journal of Modernization in Engineering Technology and Science	Non Scopus	August 20
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2019 - 2020

Sl.No	Title of the paper	Name of the author(s)	Name of the Journal	Annexure-1/ Scopus	Month and Year of publication
1.	Tensile and Residual stress behavior of deep cryogenically treated En31 steel	Dr.D.Senthilkumar	Advances in Materials and Processing Technologies, Taylor and Francis Publications	Scopus	July 2019
2.	Influence of Cryogenic Treatment on TiC Nanopowder in R600a and R290 Refrigerant Used in Vapor Compression Refrigeration System	Dr.D.Senthilkumar	International Journal of Air-Conditioning and Refrigeration, World Scientific Publishing Company	Scopus	October 2019
3.	A Hybrid Approach Of Nsga-ii And Topsis For Minimizing Vibration And Surface Roughness In Machining Process	Dr.N.Zeelan Basha	International Journal of Operational Research.	Scopus	March 2020
4.	Influence Of Finite Element Model, Load – Sharing And Load Distribution On Crack Propagation Path In Spur Gear Drive	Mr.N.Gnanasekar	Engineering Failure Analysis	A1	January 2020
5.	Characterization of new natural cellulosic fiber from coconut tree primary flower leaf stalk fiber (CPFLSF)	Mr.M.Jayaraj	Journal of national fibers	A1	December 2019
6.	Study On Sliding Wear Of Fly Ash Metal Matrix Composites	Mr.G.Konguraja	International Journal of Scientific & Engineering Research (IJSER)	Non Scopus	November 2019
7.	Study On Sliding Wear Of Fly Ash Metal Matrix Composites	Mr.K.Manikandan	International Journal of Scientific & Engineering Research (IJSER)	Non Scopus	November 2019
8.	Effect on tool life by addition of nanoparticles with the cutting fluid	Mr.V.P. Suresh Kumar, & N.Manikandan	Materials Today: Proceedings, Elsevier	Scopus	January 2020
9.	Evaluation of mechanical and interfacial properties of carbon fiber reinforced polymer (CFRP) composite materials	Dr.T.Varun Kumar	Materials Today: Proceedings, Elsevier	Scopus	February 2020

2018 - 2019

Sl.No	Title of the paper	Name of the author(s)	Name of the Journal	Annexure-1/ Scopus	Month and Year of publication
1	Influence of deep cryogenic treatment on hardness and toughness of En31 steel	Dr.D.Senthilkumar	Advances in Materials and Processing Technologies	Scopus	Oct 2018
2	QCDM Cutting design: A new paradigm in manufacturing sector to meet the customer satisfaction	Dr.T. Varun Kumar	International journal of mechanical engineering and technology	Scopus	December 2018
3	Effective performance and influence of automated Inbuilt hydraulic jack in a four wheeler vehicle	Dr.T. Varun Kumar	International Journal On Engineering Technology and Sciences	Non Scopus	May 2019
4	Effective Implementation of Quality Management System (QMS) in Small Scale Manufacturing Firms	Dr.T. Varun Kumar	International Journal of Engineering and Advanced Technology	Non Scopus	April 2019
5	Design and Fabrication Of Domestic Herbal Water Filter	Dr.T. Varun Kumar	International Journal On Engineering Technology and Sciences	Non Scopus	May 2019
6	Effects Of Sub-Cooling On The Performance Of R152a And Re170 As Possible Alternatives In A Domestic Refrigeration System	Dr.A.Baskaren	Global journal for Research Analysis	Non Scopus	November 2018
7	Thermodynamic Analysis Of Di Methyl Ether And Its Blends As Alternative Refrigerants To R134a In A Vapour Compression Refrigeration System,	Dr.A.Baskaren	International Journal of Advance Engineering and Research Development	Non Scopus	December 2018
8	Fabrication and Testing of Metal Matrix Composites by Stir Casting Method	R.Mohammed Farooq	International Journal of Engineering Science Invention (IJESI)	Non Scopus	March 2019
9	Fabrication and Testing of Metal Matrix Composites by Stir Casting Method,	G.Konguraja	International Journal of Engineering Science Invention (IJESI)	Non Scopus	March 2019
10	Prediction of Cutting Force In Turning Using Design Of Experiments And Artificial Neural Network	G.Konguraja	Global Journal For Research Analysis	Non Scopus	January 2019
11	Fabrication and Testing of Metal Matrix Composites by Stir Casting Method	K.Manikandan	International Journal of Engineering Science Invention (IJESI)	Non Scopus	March 2019
12	Prediction of Cutting Force In Turning Using Design Of Experiments And Artificial Neural Network	K.Manikandan	Global Journal For Research Analysis	Non Scopus	January 2019
13	Investigation of the effect of load distribution along the face width and load sharing between the pairs	N.Gnanasekar	Engineering Failure Analysis	A1	January 2019

	in contact on the fracture parameters of the spur gear tooth with root crack				
14	Prediction of tooth root failure under static loading condition for EN353 steel spur gear	N.Gnanasekar	IOP Conf. Series: Materials Science and Engineering	Scopus	Aug 2018
15	Thermodynamic Analysis Of Di Methyl Ether And Its Blends As Alternative Refrigerants To R134a In A Vapour Compression Refrigeration System,	V. P. Suresh Kumar	International Journal of Advance Engineering and Research Development	Non Scopus	December 2018.
16	Effects Of Sub-Cooling On The Performance Of R152a And Re170 As Possible Alternatives In A Domestic Refrigeration System	V. P. Suresh Kumar	Global journal for Research Analysis	Non Scopus	November 2018
17	Thermodynamic Analysis Of Di Methyl Ether And Its Blends As Alternative Refrigerants To R134a In A Vapour Compression Refrigeration System	N.Manikandan	International Journal of Advance Engineering and Research Development	Non Scopus	December 2018
18	Effects Of Sub-Cooling On The Performance Of R152a And Re170 As Possible Alternatives In A Domestic Refrigeration	N.Manikandan	Global journal for Research Analysis	Non Scopus	November-2018
19	Performance and Emission Test of Canola and Neem Bio-oil Blend With Diesel	Mr. N. Balasubramani	International Research Journal of Engineering and Technology	Non Scopus	Mar 2018
20	Fabrication And Performance Analysis Of Hybrid Two Wheeler	Mr. N. Balasubramani	International Research Journal of Engineering and Technology (IJERT)	Non Scopus	Mar 2018