



# VIGNAN'S

Foundation for Science, Technology & Research

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## Department of Mechanical Engineering

### Faculty Research Publications: 2019

S.no	Faculty name(s)	Title of paper	Name of journal	Page no's From - to	Issn no.	Year of Publication	Indexed in scopus / sci / scie
1	Golla. ChittiBabu, M. Venkataiah, Annavarapu Vamsi Krishna, GajulaBhargavSai Nikhil	A study of natural convection inside a square enclosure by using rectangular cavities	IJMPERD	17-29	2249-8001	2019	SCOUPS
2	PhaneendraKumar . K, VengalRao. K, VenkataRavishankar. D, BhaskaraRao. P	An effect of permeability on the impact strength of gfrp laminates in vacuum assisted resin transfer molding process	IJMPERD	9-16	2249-8001	2019	SCOUPS
3	RatnamChanamala, Nerella Mary Jasmin, RaoVana Vital, Rao K. Venkata	Acoustic emission signature analysis on rolling element bearings due to localized defects	IJMMT			2019	SCOUPS
4	GayatriUppalapati, SrinivasaraoGunji, Ramakrishna Malkapuram (2019)	Development and characterization of chicken feather rachis, sawdust and HDPE hybrid composite material	Revue des composites et des matériaux avancés		DOI:10.3166/RCMA.28.509-528	2019	SCOUPS
5	Pravat Kumar Behera, Ravi Kumar Mandava and Pandu R Vundavilli	“Push Recovery System and Balancing of a Biped Robot on Steadily Increasing Slope of an Inclined Plane”	IJCVR Inderscience			2019	SCOUPS
6	Ravi Kumar Mandava and Pandu R Vundavilli	“An Analytical Approach for Generating Balanced Gaits of a Biped Robot on Stairs and Sloping Surfaces”	IJMIC Inderscience,			2019	ESCI, SCOUPS

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7	P.B.G.S.N. Murthy, Ch. SreenivasaRao, K. VenkataRao	Experimental and 3D FEM-ANN based analysis and prediction of cutting forces, tool vibration and tool wear in boring of TI-6AL-4V alloy	IJAME	6146-6160		2019	ESCI
8	Adarsha Kumar Kaladari, RatnamChanamala, VenkataRao K, Murthy B. S. N.	Experimental studies of machining parameters on surface roughness, flank wear, cutting forces and work piece vibration in boring of AISI 4340 steels: modeling and optimization approach	SN Applied Sciences	1-26		2019	Springer-ESCI
9	Ravi Kumar Mandava, Pandu R. Vundavilli	An adaptive PID control algorithm for the two-legged robot walking on a slope	Neural Computing and Applications		<a href="https://doi.org/10.1007/s00521-019-04326-2">https://doi.org/10.1007/s00521-019-04326-2</a>	2019	Springer-SCI
10	M. Venkataiah, T. Anup Kumar, K. VenkataRao, S. Anand Kumar, I. Siva, B. Ratna Sunil	Effect of grain refinement on corrosion rate, mechanical and machining behavior of friction stir processed ZE41 Mg alloy	Transactions of the Indian Institute of Metals		<a href="https://doi.org/10.1007/s12666-018-1467-9">https://doi.org/10.1007/s12666-018-1467-9</a>	2019	Springer-SCI
11	K. VenkataRao	A study on performance characteristics and multi response optimization of process parameters to maximize performance of micro milling for Ti-6Al-4V	Journal of Alloys and Compounds,	773-782		2019	Elsevier-SCI
12	K. VenkataRao	Power consumption optimization strategy in micro ball-end milling of D2 steel via TLBO coupled with 3D FEM simulation	Measurement Elsevier-SCI	68-78		2019	Elsevier-SCI
13	K Venkatarao, T. Anup Kumar	An experimental parametric analysis on performance characteristics in wire EDM of Inconel 718	Proceedings of the Part C: Journal of Mechanical Engineering Science		DOI: 10.1177/0954406219840677	2019	SAGE-SCI

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14	K VenkataRao, B Harish Babu, V UmasaiVara	A study on effect of dead metal zone on tool vibration, cutting and thrust forces in micro milling of Inconel 718	Journal of Alloys and Compounds		<a href="https://doi.org/10.1016/j.jallcom.2019.04.194">https://doi.org/10.1016/j.jallcom.2019.04.194</a>	2019	Elsevier-SCI
15	Ravi Kumar Mandava, Pandu R. Vundavilli	An adaptive PID control algorithm for the two-legged robot walking on a slope	Neural Computing and Applications		<a href="https://doi.org/10.1007/s00521-019-04326-2">https://doi.org/10.1007/s00521-019-04326-2</a>	2019	Springer-SCI
16	Gurmeet Singh, T.Ch. Anil Kumar, V.N.A. Naikan	Efficiency monitoring as a strategy for cost effective maintenance of induction motors for minimizing carbon emission and energy consumption	Reliability Engineering and System Safety	193-201		2019	Elsevier-SCI
17	K. Balamurugan, M. Uthayakumar, M. Ramakrishna, U. T. S. Pillai	Air Jet Erosion Studies on Mg/SiC Composite, Silicon	Springer-SCI)	1-11		2019	Springer-SCI
18	K. Balamurugan, M. Uthayakumar, S. ThirumalaiKumar an, G.S. Samy, U.T.S. Pillai	Drilling study on lightweight structural Mg/SiC	composite for defence applications, Defence Technology		<a href="https://doi.org/10.1016/j.dt.2019.01.002">https://doi.org/10.1016/j.dt.2019.01.002</a>	2019	Elsevier-SCI
19	T.P. Latchoumi, K. Balamurugan, K. Dinesh, T.P. Ezhilarasi	Particle Swarm Optimization approach for waterjet cavitation peening	Measurement 141	184–189		2019	Elsevier-SCI
20	B. K. Raj, Y. Jyothi, P. Kanasani, and D. Siva Gangadhar,	The best suitable alternative to diesel in a compression ignition engine between waste plastic oil and waste tire oil blends with diesel	Energy sources, Part A: recovery, utilization, and environmental effects		<a href="https://doi.org/10.1080/15567036.2019.1618985">https://doi.org/10.1080/15567036.2019.1618985</a>	2019	Taylor and Francis-SCI
21	Ravi Kumar Mandava, SukeshBondada and Pandu R.	“An Optimized Path Planning for the Mobile Robot using PFM and PSO Algorithm”	Soft Computing for Problem	139-150,	978-981-13-1594-7	2019	SCOUPS

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	Vundavilli		Solving, Advances in Intelligent Systems and Computing				
22	K. Balamurugan, M. Uthayakumar, S. Sankar, U. S. Hareesh, K. G. K. Warriar	Abrasive Waterjet Cutting of Lanthanum Phosphate—Yttria Composite: A Comparative Approach	Micro and Nano Machining of Engineering Materials	101-119	978-3-319-99900-5	2019	SCOUPS
23	N Rama Krishna, L SuvarnaRaju, G Mallaiah, A Kumar	Influence of SiC and B4C particles on microstructure and mechanical properties of copper surface composites fabricated by friction stir processing	Mechanical Engineering for Sustainable Development : State-of-the-Art Research	375-383		2019	SCOUPS
24	ThirumalaVasuAradhyula, Da Bian, A. Babul Reddy, Yeau-RenJeng, Murthy Chavali, E. R. Sadiku and Ramakrishna Malkapuram	Compounding and the mechanical properties of catla fish scales reinforced-polypropylene composite—from biowaste to biomaterial	Advanced Composite Materials		<a href="https://doi.org/10.1080/09243046.2019.1647981">https://doi.org/10.1080/09243046.2019.1647981</a>	2019	Taylor and Francis-SCI
25	<b>K. Balamurugan</b> , M. Uthayakumar, S. Sankar, U.S. Hareesh, K.G.K. Warriar	Predicting correlations in abrasive waterjet cutting parameters of Lanthanum phosphate/Yttria composite by response surface methodology	Measurement 131 (2019)	309–318		2019	Elsevier-SCI
26	N. Ramakrishna, L. SuvarnaRaju, G. Mallaiah	Role of process parameters on mechanical properties Of cu/sic surface composites fabricated By friction stir processing	IJMPERD	30-36		2019	SCOUPS
27	N. Narayan rao, M. V. RaoPavuluri,	Modelling and simulation of planar simulator	IJMPERD	37-44		2019	SCOUPS

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	Mihir Barman						
28	Deepthi. T, M. VenkataPavan, Shaik. Abrar	Design a work holding device forabrasive water jet turning	IJMPERD	45-50		2019	SCOPUS
29	Ramakrishna Malkapuram, JyothiYarlagadda, Vijaya Ram Gopal. N, Firoz Syed, Kiran Kumar Reddy. M &Vivek Roy. P	Effect of surface treatment on continuous and aligned palf reinforced epoxy composite	IJMPERD	51-58		2019	SCOPUS
30	T. Sreedhar, B. Nageswararao, D. Vinaykumar	Heat transfer enhancement with different fluids in double pipe heat exchanger by ansys fluent	IJMPERD	59-65		2019	SCOPUS
31	JyothiYarlagadda, Ramakrishna Malkapuram, JojiJeevan Kumar. D, Vivek Roy. P, GiridharaVenkata sai. G, DhavalVarma. P	An experimental investigation on treated kenaffiber reinforced composites	IJMPERD	66-72		2019	SCOPUS
32	JyothiYarlagadda, Ramakrishna Malkapuram, DhavalVarma. P, Varun. T, Mahendra. G &JojiJeevan	The preparation and characterization of sisal fiber reinforced epoxy composite	IJMPERD	73-80		2019	SCOPUS
33	K. MangapathiRao, D. Vinay Kumar, K. Chandra Shekar& B. Singaravel	Vegetable oil as an alternative source to mineral oil-based dielectric fluid in electric discharge machining - a review	IJMPERD	81-85		2019	SCOPUS
34	K. Phaneendra Kumar, G. Srikar, A. Kiran Kumar Yadav& P. BhaskaraRao	Experimental investigations on flexural behaviour of glass fiber reinforced composite containing artificial delamination	IJMPERD	86-91		2019	SCOPUS

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35	K. Adarsha Kumar, Ch. Ratnam, B. S. N. Murthy, K. VenkataRao	Experimental investigations on surface roughness, flank wear, cutting forces and work piece vibration in boring of inconel 718 - modeling and optimization approach	IJMPERD	92-109		2019	SCOPUS
36	GovindarajuluEedara, T. Ch. Anil Kumar, S. K. Chaturvedi	Reliability and maintainability analysis of complex repairable system: a case study of railways	IJMPERD	110-119		2019	SCOPUS
37	V. Sudheer Kumar, M. Balaji, Ch. Nagaraju, K. Venkatrao	Significance of input parameters on amplitude and frequency of vibration in rotor bearing system using rsm approach	IJMPERD	120-127		2019	SCOPUS
38	B. Harish Babu, K. VenkataRao, SirishaAdamala	Design and analysis of a sports vehicle chassis frame	IJMPERD	143-152		2019	SCOPUS
39	JyothiYarlagadda, Ramakrishna Malkapuram, Vivek Roy. P, LakshmanaRao. M, Vijay Krishna. K, Vijaya Ram Gopal. N	The preparation and characterization of flax-fiber reinforced epoxy composite	IJMPERD	153-160		2019	SCOPUS
40	JyothiYarlagadda, Ramakrishna Malkapuram, Firoz. S. D, Hussainsk, Tarun. A & Bhargav. Ch	Fabrication and testing the mechanical properties of hemp Fiber reinforced epoxy composite	IJMPERD	161-166		2019	SCOPUS
41	M. Balaji, M. Ashok Chakravarthy, V. Sridhar & V. U. S. Vara Prasad	Multi-response optimization of process parameters in turning AISI D2 steel	IJMPERD	167-173		2019	SCOPUS
42	K. VenkataRao, D. Siva Gangadhar, J. VamsiVenkatesh	Modelling and simulation of helical milling of AISI1020 steel	IJMPERD	174-182		2019	SCOPUS

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43	V. Sudheerkumar, P. Satheesh Kumar Reddy, ChNagaraju, K. Venkatarao	Consequence of input parameters on amplitude and frequency of vibration in rotor bearing system	IJMPERD	183-191		2019	SCOPUS
44	G. Ravi Krishnaswami, G. PruthviRaju, Ramakrishna Malkapuram, K. Balamurugan	Modeling, fabrication, and analysis of an experimental combustion chamber	IJMPERD	192-198		2019	SCOPUS
45	Bhavyaswathi, L. S. Raju, V. Uma SaiVara Prasad	An overview of ultrasonicvibration assisted friction stir processing	IJMPERD	199-206		2019	SCOPUS
46	V. Uma SaiVara Prasad, K. VenkataRao, Ch. KarthickSai, P. B. G. S. N. Murthy, D. O. V. Sai Ram	An evaluation of horn shape influence in ultrasonic vibration assisted machining using ansys	IJMPERD	207-213		2019	SCOPUS
47	D. BrahmeswaraRao, K. VenkataRao, A. Gopala Krishna	An experimental study on the surface roughness and tool wear in micro milling of AISI304 steel	IJMPERD	214-219		2019	SCOPUS
48	A. Chinnamahamma dBhasha, S K. Subani, V. K Singh	A static and dynamic analysis of protective structures:A critical review	IJMPERD	220-237		2019	SCOPUS
49	Golla.ChittiBabu, M.Venkataiah, AnnavarapuVams i Krishna, AncheKarthikChowdary, KanamarlapudiAnuvandhana	Mechanical behavior of eggshell & coir reinforced hybrid hdpe composite material	IJMPERD	238-253		2019	SCOPUS
50	VayalapalliBhogeswararao, B. NageswaraRao	A critical review on turbocharger centrifugal compressorin automotive applications	IJMPERD	254-261		2019	SCOPUS
51	N. B. PrakasThiruveedula, L. S. Raju,	Effect of layer thickness on strength of abs plastic fabricated using additive	IJMPERD	262-266		2019	SCOPUS

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	A.SriHarshavardhan, P. N. Madhusudhanreddy & Y. Gowtham	manufacturing technique					
52	N. Narayan rao, P.M. V. Rao, Mihir Barman, BorigorlaVenu	Modeling of overwhelming controller for single degree freedom system	IJMPERD	267-272		2019	SCOPUS
53	B.J.M.Rao	Effect of superficial air velocity on pressure drop off Fluidized chamber experimentally and computationally	IJITEE		2278-3075	2019	SCOPUS