Profile Page



Name	:	Dr Vishal Santosh Sharma				
Designation	:	Professor				
Department	:	Industrial & Production Engg.				
Qualification	:	PhD Mechanical Engineering (Kurukshetra University INDIA)				
		Master of Engineering Production Engineering (Panjab				
		University INDIA)				
		Bachelor of Engineering Production Engineering (Shivaji				
		University INDIA)				
		Post-Doctoral Fellowship Machining (ENSAM Cluny,				
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Research Interests :

Additive Manufacturing/3D printing, Machining, Condition monitoring/IIOT/Industry 4.0

Journal Publications :

Year	Journal	Publication
2019	Progress in Additive	Sharanjit Singh, Vishal S Sharma, Anish Sachdeva, Application of
	Manufacturing, 4, 1, 3-12	response surface methodology to analyze the effect of selective laser
		sintering parameters on dimensional accuracy
2019	The International Journal of	Munish Kumar Gupta, Mozammel Mia, GurRaj Singh, Danil Yu
	Advanced Manufacturing	Pimenov, Murat Sarikaya, Vishal S Sharma , Hybrid cooling-lubrication
	Technology, 101, 1-4, 55-69	strategies to improve surface topography and tool wear in sustainable
		turning of Al 7075-T6 alloy
2018	Journal of Intelligent	Maraboina Raju, Munish Kumar Gupta, Neeraj Bhanot, Vishal S Sharma
	Manufacturing,1-16	, A hybrid PSO–BFO evolutionary algorithm for optimization of fused
		deposition modelling process parameters
2018	International Journal of Materials	Munish Kumar Gupta, PK Sood, Gurraj Singh, Vishal S Sharma,
	and Product	Investigations of performance parameters in NFMQL assisted turning of
	Technology,57,4,299-321	titanium alloy using TOPSIS and particle swarm optimisation method
2018	International Journal of Machining	GurRaj Singh, Vishal S Sharma, Munish Kumar Gupta , Sustainable
	and Machinability of Materials	drilling of aluminium 6061-T6 alloy by using nano-fluids and
	,20,3,252-273	Ranque-Hilsch vortex tube assisted by MQL: an optimisation approach
2018	Precision Engineering ,53,289-299	Mozammel Mia, GurRaj Singh, Munish Kumar Gupta, Vishal S Sharma,
		Influence of Ranque-Hilsch vortex tube and nitrogen gas assisted MQL in
		precision turning of Al 6061-T6

2018	The International Journal of	GurRaj Singh, Munish Kumar Gupta, Mozammel Mia, Vishal S Sharma ,
	Advanced Manufacturing	Modeling and optimization of tool wear in MQL-assisted milling of
	Technology ,97,1-4,481-494	Inconel 718 superalloy using evolutionary techniques
2018	Journal of cleaner production,	Manu Dogra, Vishal S Sharma, Jasminder Singh Dureja, Simranpreet
	197,281-231	Singh Gill, Environment-friendly technological advancements to
		enhance the sustainability in surface grinding-A review
2018	Materials and Manufacturing	Anil Kumar Singla, Jagtar Singh, Vishal S Sharma, Processing of
	Processes, 33,15, 1603-1640	materials at cryogenic temperature and its implications in manufacturing:
		A review
2017	The International Journal of	Analyzing machining parameters for commercially pure titanium (Grade
	Advanced Manufacturing	2), cooled using minimum quantity lubrication assisted by a
	Technology, Volume 88,2017,	Ranque-Hilsch vortex tube
	Issue 9–12, pp 2921–2928	
2017	Journal of Cleaner	Sustainable Machining of Aerospace Material - Ti (grade-2) alloy:
	Production,147,2017,614-627	Modelling and Optimization
2017	Journal of Engineering &	Performance Evaluation of Cubic Boron Nitride Tool in Machining of
	Materials Sciences;24, 2017,18-26	Titanium (Grade-II) Under Minimum Quantity Lubrication
2017	International Journal of Machining	Sustainable Drilling of Aluminum 6061-T6 alloy by using nano-fluids
	and Machinability of Materials;	and Ranque-Hilsch vortex tube assisted by MQL: An optimization
	Accepted, 2017	approach
2016	Journal of Cleaner	Optimization of machining parameters and cutting fluids during
	Production;135,2016,1276-1288	nano-fluid based minimum quantity lubrication turning of titanium alloy
		by using evolutionary techniques
2016	Materials and Manufacturing	Machining parameters optimization of titanium alloy using response
	Processes; 31/13, 2016, 1671-1682	surface methodology and particle swarm optimization under
		minimum-quantity lubrication environment
2016	Journal of Engineering	A review of empirical modeling techniques to optimize machining
	Manufacture; 230/3, 2016,	parameters for hard turning applications
2015	International Journal of Material	Influence of sintering parameters on dynamic mechanical properties of
2015	Forming: 8/1 2015 157-166	selective laser sintered parts
2015	Materials and Manufacturing	A review on minimum quantity lubrication for machining processes
2010	Processes; 30/8, 2015, 935-953	received on minimum quantity recreation for machining processes
2014	Advances in Manufacturing; 2/1,	SCADA data based condition monitoring of wind turbines
	2014, 61-69	
2014	Bulletin of Materials Science;	Effect of tempering after cryogenic treatment of tungsten carbide-cobalt
	37/2, 2014, 327-335	bounded inserts
2014	The International Journal of	Investigation of tool geometry effect and penetration strategies on cutting
	Advanced Manufacturing	forces during thread milling
	Technology; 74/5-8, 2014,	
	963-971	
2013	Materials and Manufacturing	Optimization and analysis of mechanical properties for selective laser
	Processes;28/2, 2013, 163-172	sintered polyamide parts
2013	The International Journal of	Investigating surface roughness of parts produced by SLS process
	Advanced Manufacturing	
	Technology; 64/9-12, 2013,	
	1505-1516	
2013	The International Journal of	Modelling the effects of cutting parameters on residual stresses in hard
	Advanced Manufacturing	turning of AISI H11 tool steel
	Technology; 65/5-8, 2013,667-678	
2012	Journal of Engineering	Tool life and surface integrity issues in continuous and interrupted finish
	Manufacture; 226/3, 2012,	hard turning with coated carbide and CBN tools
	431-444	

2012	International Journal of Precision	Influence of cutting parameters on tool wear and surface roughness in
	Engineering and Manufacturing;	hard turning of AISI H11 tool steel using ceramic tools
	13/8, 2012, 1295-1302	
2012	Materials and Manufacturing	Residual stresses, surface roughness, and tool wear in hard turning: a
	Processes;27/6, 2012, 583-598	comprehensive review
2012	Materials and Manufacturing	Optimization and analysis of shrinkage in selective laser sintered
	Processes; 27/6, 2012, 707-714	polyamide parts
2012	Materials and Manufacturing	Finish hard turning of continuous and interrupted surfaces with cubic
	Processes; 27/5, 2012, 523-530	boron nitride (CBN) and coated carbide tools
2012	Materials and Manufacturing	Machinability and surface quality issues in finish turning of hardened
	Processes; 27/10, 2012, 1110-1117	steel with coated carbide and CBN tools
2012	International Journal of Materials	Modelling, optimisation and experimental validation of cutting
	Engineering Innovation; 3/3-4,	parameters to achieve minimum tool wear and surface roughness in hard
	2012, 295-315	turning of AISI H11 tool steel
2011	Journal of Manufacturing Science	Effect of thread milling penetration strategies on the dimensional
	and Engineering; 133; 2011; 41014	accuracy; Fromentin, Guillaume
2011	The International Journal of	A statistical analysis of rotary friction welding of steel with varying
	Advanced Manufacturing	carbon in workpieces
	Technology: 57/9, 2011, 957-967	1
2011	The International Journal of	Performance evaluation of CBN, coated carbide, cryogenically treated
-	Advanced Manufacturing	uncoated/coated carbide inserts in finish-turning of hardened steel
	Technology: 57/5, 2011, 541-553	
2011	International Journal of Machining	Modelling and optimisation of tool acceleration, surface roughness,
	and Machinability of Materials:	acoustic emission and flank wear during turning of Al-Si-SiC composite
	9/1-2, 2011, 131-148	
2011	Journal of Engineering Science	Effect of tool geometry variation on finish turning - A review
	and Technology Review: 4/1.	
	2011. 1-13	
2010	Materials and Manufacturing	Cryogenic treatment of tool materials: a review
	Processes: 25/10, 2010, 1077-1100	
2010	Materials and Manufacturing	Cryogenic treatment of tool materials: a review
	Processes: 25/10, 2010, 1077-1100	
2010	International Journal of Precision	Tool wear, chip formation and workpiece surface issues in CBN hard
	Engineering and Manufacturing:	turning: A review
	11/2, 2010, 341-358	
2010	Journal of Engineering	Wear mechanisms of TiN-coated CBN tool during finish hard turning of
2010	Manufacture: 224/4 2010	hot tool die steel
	553-566	
2010	Journal of Mechanical Engineering	Wear mechanisms of coated mixed-ceramic tools during finish hard
2010	Science: 224/1, 2010, 183-193	turning of hot tool die steel
2010	The International Journal of	Review of research work in sinking EDM and WEDM on metal matrix
2010	Advanced Manufacturing	composite materials
	Technology: 50/5, 2010, 611-624	
2010	International Journal of Precision	Tool wear, chip formation and workpiece surface issues in CBN hard
	Engineering and Manufacturing	turning: A review
	11/2, 2010, 341-358	
2009	Journal of Engineering	Design optimization of cutting conditions and analysis of their effect on
	Manufacture: 223/11 2009	tool wear and surface roughness during hard turning of AISI-H11 steel
	1441-1453	with a coated—mixed ceramic tool
2009	International Journal of Machine	Cooling techniques for improved productivity in turning
	Tools and Manufacture: 49/6	come cominques for improved productivity in turning
	2009 435-453	
L	2007, 100 100	

2009	International Journal of Machining	Design optimisation of flank wear and surface roughness for CBN-TiN
	and Machinability of Materials;	tools during dry hard turning of hot work die steel
	7-1/2, 2009, 129-147	
2008	International Journal of Precision	Assessment and optimization of cutting parameters while turning AISI
	Engineering and Manufacturing;	52100 steel
	9/2, 2008; 54-62	
2008	Journal of Intelligent	Estimation of cutting forces and surface roughness for hard turning using
	Manufacturing; 19/4, 2008,	neural networks
	472-483	
2008	Journal of Intelligent	Cutting tool wear estimation for turning
	Manufacturing; 19/1, 2008, 99-108	
2008	Journal of Engineering	Advances in the turning process for productivity improvement—a review
	Manufacture; 222/11, 2008,	
	1417-1442	
2007	Journal of Engineering	Evaluating various factors for turning of Adamite
	Manufacture; 221/12, 2007,	
	1715-1723	

Conference Publications :

Year	Conference	Publication
2018	3rd International Conference on Design and	Vishal Santosh Sharma, Amit Kumar, Munish Kumar
	Manufacturing Engineering (ICDME2018), Monash	Gupta and Neeraj Bhanot, Process parameter
	University, Melbourne, Australia	optimization for Abrasive Water Jet machining of
		Titanium Alloy using Meta-Heuristic Algorithms
2016	International workshop of Advanced Manufacturing	V S Sharma, G Singh, K Sorby Parametric
	and Automation (IWAMA-2016),10-11 November	Optimization Using The Particle Swarm Optimization
	2016, University of Manchester, Manchester, UK.	(PSO) Technique for Minimizing Tool Wear While
		Milling Inconel 718 Alloy Assisted by Minimum
		Quantity Lubrication (MQL),
2012	International workshop of Advanced Manufacturing	V S Sharma, J Singh, A Sachdeva ,Using Audible
	and Automation (IWAMA 2012), 21-22 June 2012,	Sound Signals to evaluate various parameters during
	Trondheim, Norway	Turning process,
2006	International Conference on High Performance	V S Sharma, S K Sharma, A K Sharma, A Method for
	Cutting, 12-13 June, 2006, University of British	cutting Tool wear prediction,
	Columbia University, Vancouver, Canada	
2006	The 4th International conference on Manufacturing	V S Sharma, H Singh, Development of automatic
	Research (ICMR 06), 5-7, September 2006, Liverpool	machine for filling of cement and embossing on cap
	John Moores University, Liverpool, UK	for lighting industry

Book/Chapter Publications :

Туре	Title	Publisher	Authors	ISBN/ISS	Year
				N No.	

Experimenta	Advanced Manufacturing Technologies,	Springer	Munish K.	978-33195	2017
1	Materials Forming, Machining and	International	Gupta, P.K.	60984	
Investigatio	Tribology	Publishing DOI	Sood, Gurraj		
n and		10.1007/978-3-31	Singh and Vishal		
Optimizatio		9-56099-1_10	S. Sharma		
n on					
MQL-Assist					
ed Turning					
of					
Inconel-718					
Super Alloy					
Grey-Based	Analytical Approaches to Strategic	IGI Global	N S Kalsi,	978146665	2014
Taguchi	Decision- Making: Interdisciplinary		Rakesh Sehgal,	9582	
Analysis:	Considerations		Vishal S Sharma		
Approach					
for					
Optimizatio					
n of					
Multi-Objec					
tive Problem					
Report	SCADA Data Mining for Wind Turbine	SINTEF,Norway	Wang	978-82-14	2012
	Fault Diagnosis and Failure Prognosis		Kesheng,Sharma	0549-6-5	
			Vishal S.Zhang		
			Zhenyou		

Events Organized :

Category	Туре	Title	Venue	From	То	Designation
GIAN	International	Manufacturing	DR BR Ambedkar	17-12-18	22-12-18	Professor
course		Automation - Robotics	NIT-J			
		and Process integration				
		by				
GIAN	International	Artificial intelligence	DR BR Ambedkar	11-11-18	16-11-18	Professor
course		techniques and their	NIT-J			
		applications in design				
		and manufacturing				

PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Jaivir Singh	Composites	In process	Jan18	Dr. NOE G ALBA
				BEANA
Ramesh Chand	Additive manufacturing	In process	Jan18	Dr Rajeev Trehan
Gurraj singh	MQL	Completed	2017	NA

Admin. Responsiblities :

Position Held	Organization	From	То
Head	Central Work shop	02/2/18	Till in service
Head	Department IPE	02/2/16	02/02/18