


Yadavindra College of Engineering
Punjabi University Patiala South Campus
Talwandi Sabo (Damdama Sahib)

FACULTY PROFILE

Name	Sunil Kumar Baghla		
Designation	Assistant Professor (Mechanical Engg.)		
Department/Section/Subject	Mechanical Engineering		
Official Address	Yadavindra College of Engineering, Punjabi University Patiala South Campus, Talwandi Sabo, (Distt. Bathinda) Punjab India - 151302		
Contact No. (s)	+91-81465 51445		
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ACADEMIC QUALIFICATIONS			
Degree	Degree Name	University	
Post-Graduation	M.E. (CAD/CAM & Robotics Engg.)	Thapar Institute of Engg. & Technology, Patiala (Pb)	
Graduation	B.E. (Mechanical Engg.)	Punjab Technical University, Jalandhar (Pb)	
GATE	GATE 2000	IIT Kharagpur (Organizing Institute)	
Thrust Areas	Manufacturing Automation, Optimization, CAD/CAM		
Subjects Taught	PDD, CAM, CAD&M, CAMD, CAPP, NTM, CAD, MD, EG		
Total Experience (Years)	Approx. 19	Teaching Experience	Approx. 19
Administrative/ Academic Duties performed.	Coordinator IQAC, Nodal Office NAAC, Incharge ME Section, President IPR Club, Member Admission Committee, Supdt. Exams, Deputy Supdt Exams, Class Counselor, Lab Incharge		

Google Scholar ID, Citation Index, h-Index, i10-index	https://scholar.google.com/citations?user=02i-jdEAAAj&hl=en		
PG Thesis guided	18	PG Thesis Ongoing	03
Papers in International Journals	32	Book Chapters	
Papers in International Conferences	04	Papers in National Conferences	07
International Conferences Attended	05	National Conferences Attended	03
Total National Workshops/ Seminars/ STCs/ FDPs attended	15	National Webinars Organized	02

List of Publications

<i>Journals</i>							
Sr	Title	Name of Journal	Vol	No	Pages	ISSN	Year
1	An improved technique for sclera image enhancement	International Journal of Advanced Science and Technology	29	10S	8670-8677	22076360	2020
2	Plant disease detection using neural network	International Journal of Advanced Science and Technology	29	10S	8678-8686	22076360	2020
3	Performance evaluation of cryogenically treated wires during wire electric discharge machining of AISI D3 die tool steel under different cutting environments	Multidiscipline Modeling in Materials and Structures	15	6	1318-1336	15736105	2019
4	Automatic die cast part redesign for better manufacturability	International Journal of Applied Engineering Research	13	14	11362-11368	09734562	2018
5	Effect of heat input on the characteristics of 304L austenitic stainless steel weld deposited by GTAW for root pass and SMAW for filler passes	International Journal of Research in Advent Technology	6	7	1616-1621	23219637	2018
6	Study of microstructure 304L austenitic stainless steel weld deposited by GTAW for root pass and SMAW for filler passes	Asian Journal of Engineering and Applied Technology	7	2	21-25	2249068X	2018
7	Pressure distribution in hydrodynamic journal bearings using Meshfree method	International Journal of Management, IT & Engineering	8	8(1)	12-22	22490558	2018
8	Design of back purging apparatus for the welding of 304L austenitic stainless steel using SMAW process	International Journal of Production Technology and Management	9	1	1-9	09766383	2018
9	Study of process parameters for injection molded polypropylene end caps for GI pipes	International Journal of Advanced Research in Engineering and Technology	9	4	84-90	09766480	2018
10	Optimization of process parameters in wire electrical discharge machining process using graph theoretic approach	International Journal of Management, IT & Engineering	8	7(1)	213-224	22490558	2018
11	Multiple machining characteristics optimization of process parameters in wire electrical discharge machining process using Taguchi, Grey Relational and Entropy methods	International Journal of Emerging Technologies and Innovative Research	5	8	396-403	23495162	2018
12	Enhancement of Sift algorithm to check authenticity of Indian Currency	International Journal of Computational Intelligence Research	13	5	945-953	09731873	2017
13	Simulation based designing of defect free parts in die casting	International Journal of Mechanical and Production Engineering	4	5	100-102	23202092	2016
14	Optimization of machining characteristics in WEDM of AISI D2 tool steel using Taguchi method	International Journal of Mechanical and Production Engineering	4	2	84-87	23202092	2016

15	A novel approach for watermarking of digital images using Fourier coefficient, DWT and DES	International Journal of Advances in Computer Science and Cloud Computing	4	1	1-5	23214058	2016
16	A hybrid approach to detect and correct a skew in scanned document images using fast Fourier transform and nearest neighbor algorithm	International Journal of Advances in Electronics and Computer Science	3	5	1-6	23932835	2016
17	Enhancement of ZH algorithm to improve thinning rate: A review	Research Cell : An International Journal of Engineering Sciences	18	7	53-58	23200332	2016
18	A review on probability based techniques for efficient object tracking from videos	Research Cell : An International Journal of Engineering Sciences	18	7	79-86	23200332	2016
19	A Review on Watermarking of Digital Images	International Journal of Advances in Science Engineering and Technology	3	3	149-153	23219009	2015
20	A review: Audio noise reduction and various techniques	International Journal of Advances in Science Engineering and Technology	3	3	132-135	23219009	2015
21	Study of various character segmentation techniques for handwritten off-line cursive words: A review	International Journal of Advances in Science Engineering and Technology	3	3	154-158	23219009	2015
22	Automatic determination of parting line and number of cavities in die casting die	International Journal of Mechanical and Production Engineering	2	1	13-17	23202092	2014
23	Investigation on interaction effects of tool geometry and welding speed on tensile strength of friction stir welded AA1080 joints	International Journal of Research in Mechanical Engineering and Technology	3	2	130-132	22495762	2013
24	Influence of various heat treatment processes on tensile properties of TIG welded AA6082 joints	International Journal of Research in Mechanical Engineering and Technology	3	2	133-135	22495762	2013
25	Weight reduction and analysis of trolley axle using ANSYS	International Journal of Engineering and Management Research	2	6	32-36	22500758	2012
26	Analysis of steady state heat conduction problem using EFGM	International Journal of Engineering and Management Research	2	6	40-47	22500758	2012
27	Design evaluation and optimization of connecting rod parameters using FEM	International Journal of Engineering and Management Research	2	6	21-25	22500758	2012
28	Finite element analysis and optimization of crankshaft design	International Journal of Engineering and Management Research	2	6	26-31	22500758	2012
29	Analysis of one dimensional beam problem using element free Galerkin method	International Journal of Engineering and Management Research	2	6	7-20	22500758	2012
30	Genetic algorithm optimization of operating parameters for multiobjective multipass end milling	International Journal on Manufacturing and Material Science	1	2	35	21620059	2011

31	Meshless methods for process simulation of die casting: A review	International Journal of Applied Engineering Research	5	17	2949-2956	09734562	2010
32	Stress analysis of spur gear using FEM method	International Journal of Engineering Science and Technology	4	1	82-85	09755462	2010
Conferences							
1	An automated system for design for manufacturability analysis for die-casting	ASME-International Manufacturing Science and Engineering Conference, Texas A & M University, College Station, Texas USA, 2018					
2	Genetic Algorithm optimization of process parameters in drilling of AISI 316 stainless steel for minimum surface roughness	National Conference on Latest Developments in Materials, Manufacturing and Quality Control, 2014					
3	Effect of post weld heat treatment on tensile strength of TIG welded 6082 Aluminium alloy joints	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, 2013					
4	Application of Taguchi method and Grey Relational Analysis in optimization of machining processes: A Review	National Conference on Trends and Advances in Mechanical Engineering, 2012					
5	Application of Graph Theory: A Review	National Conference on Trends and Advances in Mechanical Engineering, 2012					
6	Friction stir welding: A review	National Conference on recent advancements and innovations in Science and Engineering, 2012					
7	Study of various properties for optimum results of epoxy based material - A review	National Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, 2011					
8	Automatic selection of optimum parting line and parting direction in die casting: A review	National Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, 2011					
9	Optimization of process parameters of multiobjective single pass end milling using Genetic Algorithm	National Conference on Recent Trends in Mechanical and Automobile Engineering, 2010					
10	Comparison of various crossover techniques of Genetic Algorithm for optimum job sequencing based on minimum elapsed time	International Joint Colloquium on Emerging Technologies in Computer Electrical and Mechanical, 2011					
11	Recognition of intersecting features and identification of separable regions for design-manufacturing integration	International Conference on Digital Factory, 2008					