

BIO DATA



Name	Dr. MANI KANT PASWAN
Date of Birth	10 th July 1964
Correspondence Address	Department of Mechanical Engineering N.I.T. Jamshedpur, P.O: NIT, P.S: RIT, Adityapur, District : Seraikela-Kharsawan PIN : 831013
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2. Present Position

a. Designation	Professor & Head
b. Organization	National Institute of Technology Jamshedpur
c. Pay Scale	288440/=
d. Total Experience	31 Years

3. Details of Experience

S. No	Position held	Pay Scale	Nature of duties	Experience
1.	Professor	288440/-	Teaching	16 years
2.	Assistant Professor	52,400/-	-do-	8 years
3.	Scientist–B	31,200/-	Research	6.5 years
4.	Junior Manager	3300/-	Blast Furnace	1.5 years
5.	Management Trainee (Tech)	2200/-	Human Resource Training	1 years

4. Educational Qualification

S. No.	Qualification	University	Year	Subject	Result
1.	Ph.D	R.I.T, Jamshedpur (Now: N.I.T JAMSHEDPUR)	2002	Mechanical Engineering	Awarded
2.	M.Tech.	-do-	1995	-do-	7.21
3.	B.Tech	B.C.E PATNA (Now: NIT PATNA)	1988	-do-	6.23
4.	Gate score	Gate 1988	1988	-do-	72.3

5. Administrative Experience/Post(s) & responsibilities held

S. No	Post	Organization	Duration		Experience
			From	Till-	
1	Head of Department	NIT Jamshedpur	14/05/18	Till date	N.B.A Acceleration successfully completed .
2	President of India Nominee Academic Council.	Nagaland central University	31-12-18	Till date	
3	Senate member	NIT Meghalaya	5-7-18	Till date	
4	Marg-Darshak Assignment, AICTE	AICTE New Delhi	10-10-19	Till date	
5	Expert member	AICTE/NBA/NAAC	2017-	Till date	
6	Senator	N.I.T. Jamshedpur	2011-	Till date	
7	Tabulator	Tata steel course	2018	Till date	
8	Academic Council Member,	Jain University Jamshedpur	2019 May	Till date	
9	Research ,Council Member	OP JINDAL University, Raygadh	2019 May	Till date	
10	Research Council Member	VIT Vellore	2019 March	Till date	
11	Chairman S/C&S/T cell	NIT Jamshedpur	2012	Till date	
12	Associate Dean	-do-	21/04/	26/05/2017	02 years
13	Chief Warden	-do-	14/05/2011	21/04/2015	04 years
14	Warden	-do-	20-12-1999	1/4/2006	07 years
15	Prof I/C Estate	-do-	2006	2009	03 years
16	Faculty advisor	M.Tech CIDM	2001	2006	
17	Faculty advisor	M.Tech Energy Eng. & Management	2008	2012	04 years
18	Faculty advisor	Ph.D. Course	1999	2001	03 years
19.	Coordinator	M.Tech Machine Design (PTPG)	1998	2000	02 years
21	Resource person /chief guest (Session in FDP Program on New T M M Engineering	NIT Raipur & Mechanical Engineering, VEC Lakhimpur, Ambikapur, Chhattisgarh	September 16 th - 20 th , 2019		

20	Chairman (Session in FDP Program)	NIT Jamshedpur Metallurgy and Material Science department	July 17 to July 27, 2019		
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6.a) Academic/Teaching Experience & responsibilities

S. No	Post	Organisation	Duration		Experience (Years)
			From (Date)	To (Date)	
1.	Professor	NIT Jamshedpur	21.04.2004	Till date	16
2.	Assistant Professor	NIT Jamshedpur	21.04.1996	21.04.2004	8
3.	Scientist-B	NML Jamshedpur	28.09.1989	21.04.1996	7
4.	Jr. Manager	SAIL Durgapur	10.04.1988	27.09.1989	1.5

6.b) Participation and contribution in relevant areas in higher education

Participation	Organization	Area of Specialization
Visiting Professor	Maryland Institute of Technology Jamshedpur	Material Science, workshop technology
Resource Person (Webinar)	Howrah Institute of Technology, Kolkata	Manufacturing
Resource Person	CIT Ranchi & R.V.S. Engineering College	Renewable Energy
Resource Person	W.I.T Dehradun, Uttarakhand	Research Methodology (5days)
Other(Specify)	Maryland Institute of Technology, Jamshedpur	Conference Talk
Advisor in National conference in Mechanical Engineering	Mechanical Engineering Chandigarh University	Mechanical Engineering
Question Setter/ Interview board member.	A.P.P.S. C Hyderabad	Mechanical Engineering
Question Setter/ Interview board member.	J.P.S.C RANCHI	Mechanical Engineering
Interview Panel member	BPSC PATNA	Mechanical Engineering
Resource Person	Jyoti Vidyapeeth University, Jaipur	Innovation & Research Methodology (3 days)

Resource Person	Manufacturing Engineering Department, NIT Jamshedpur	Materials, Manufacturing and Modelling-Its Advances and Constraints”
Resource Person	Tuning activity W.I.T Dehradun, Uttarakhand	To start Master degree course in technical university
Observer NTA Examination	JEE Mains 2019 January	To take 08 days examination Jamshedpur center.
Chairman FDP Program	Mechanical Engineering NIT Jamshedpur 17 June19- 22 June 19	Machines and mechanism
Chairman FDP Program	Mechanical Engineering NIT Jamshedpur 20 th to 25 th May,2019.	“Finite Element Structural Analysis using ANSYS”

6c). Involvement with formulation of academic programs

S. No.	Nomenclature of Innovative Academic Programs formulated	Date of Approval By Academic Council	Year of Introduction
1	M.Tech. Energy Management	2015	2015
2	M. Tech .Energy Engg. & Management (Part time)	2018	2019
3	M. Tech. Maintenance Engg. (Part time)	2018	2019
4	Certificate 3years course for TATA STEEL	2011	2012
5	NBA Accreditation of the Department	2019	2022

7. Scholar achievement: 5 Ph.D. completed 6 Ph.D in process (ongoing)

8. Publications:

International (SCI/ Scopus)	35
National/ International (UGC approved)	23
Conference (National/ International)	19
Total	77

9. Total Articles:

S. No	Date	Title	Name of Magazines /Newspapers
1.	July20 16	Environmental problem in Jamshedpur	Hindustan Newspapers Hindi
2.	Feb20 11	Basic Teaching policy in India (Hindi)	Hindustan Newspapers Hindi

3.	Feb 15 2020	Design Analysis and Pressure Loss Optimization of Automobile Muffler	SPRINGER Intelligent Manufacturing and Energy Sustainability pp 93-107 Design Analysis and Pressure Loss Optimization of Automobile Muffler
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D. Participation and contribution n National/International Forum the area of your academic and professional expertise

		Number(s)
Plenary Lectures/ Invited Talks	National	10
	International	01
Examinership etc.	National	06

10. List of Ongoing Funded Projects:

S. No	Topics	Funding Agency	Duration	Amount
1	Effect of Perforation and Corrugation on the Nonlinear Flexural and Vibration Behavior of Heated Layered/Graded Composite Panels under Various Loads	SERB, DST, Govt of India	2017-2020	11.52 Lakhs
2	Effect of Nanoparticles in Visco plastic Complex Fluids: A Thermo-rheological Characterization and Heat Transfer Investigation	SERB, DST, Govt of India	2017-2020	28.05 Lakhs
3	Blast Analysis of Functionally Graded Materials Plate & Shell Panels	SERB, DST, Govt of India	2019-2022	17.36 Lakhs
4	Hydraulic Design of Ash disposal system of thermal plant to minimize the heavy metal contamination of ground water	SERB, DST, Govt of India	2019-2022	22.21 Lakhs
5	Comparative Analysis of TEG and WHR system Used for Energy Harvesting from Engines	SERB, DST, Govt of India	2019-2022	21.28 Lakhs
6	Design and Development of Compact Semi-Automatic Parboiling Machine with Dryer for Marginal Farming	TDP, DST, Govt of India	2020-2022	12.50 Lakhs
7	Nanoparticle Oxygen Carrier Assisted Chemical Looping Combustion	SERB, DST, Govt of India	2020-2023	48.74 Lakhs
8	Investigation of Instabilities and Vibrations in Cables and Belts Travelling over Pulleys	SERB, DST, Govt of India	2020-2023	77.76 Lakhs

12. List of Completed research

S. No.	Organization	Nature of Project	Duration	Amount
1.	MHRD	Renewable Energy/ Timber seasoning by solar energy	03years	12 lakhs
2.	TEQIP	Bio-diesel	01year	0.5 Lakh
3.	NID	Water lifting by ox	01	2 Lakhs
4.	MNRE	Solar Roof Top Project	3 Years	30 Lakhs
5.	Consultancy Testing (L&T, Hyderabad)	Different size of Rods testing	3months	0.25 lakhs
6	Consultancy Testing (SAIL EQR)	Different size of Rods testing	3months	0.25 lakhs
7	Consultancy &Testing (Jindal Panther)	Different size of Rods testing	3months	0.25 lakhs
8	Consultancy Testing (Electro Steel)	Different size of Rods testing	3months	0.25 lakhs
9	Consultancy Testing (TATA Tiscon)	Different size of Rods testing	3months	0.25lakhs

13. Teaching Engagements:

S.L	Subject	Subject Code	Class
1	Renewable Energy sources	ME 2706	4 th Year
2	Environmental Pollution	ME 2806	4 th Year
3	Machine fault Analysis	ME 2607	3 rd Year, 6 th semester
4	Engineering Materials	ME6103	PG 1 st Semester

14. No. of Research Scholar successfully guided :

Name of Program	Completed / Ongoing
Ph.D.	5 completed (6 under progress)
PG Dissertation	45
UG Dissertation	25

1	Investigation of thermal performance artificial roughness rhombus shape in solar air heater	Pankaj Kumar BIT Sindri 2008 PHD 006
2	Investigation of thermal performance artificial roughness swirl shape in solar water heater.	Ujjal Kumar Nayak BIT Sindri 2008 PHD 008
3	Investigation of thermal performance artificial roughness rhombus shape in solar air heater.	Rajiv Ranjan NIT Jamshedpur 2011 PhD 002

4	A Study of Non-Linear Physical Models and Non-Newtonian flow Phenomena using Analytical Techniques	Bhunesh Sharma NIT Jamshedpur 2014 RSME011
5	Analysis, Prediction and optimization of weld bead geometry	Jigesh Yadav NIT Jamshedpur 2014 RSME004
6	Thermal Performance investigation of artificial roughness half rhombus shape in solar air heater with CFD analysis	Ashish Ranjan 2017 PHD 005 (To be submitted)
7.	Design of self-energy efficient building by using Green technology	Mrs Rekha 2017 PHD 007 (To be submitted)
8	Investigation of Heavy metals effect on Swarn rekha river in Kohlan Area Jharkhand	Sushmita Ganguli 2017PHD 009 (To be submitted)
9	Mechanical characteristics of Composite material: preparation, properties and application of natural fibre	Komal Kumar 2017 PHD 012 (To be submitted)
10	Experimental Investigation on vapour compression Refrigeration system by using different cooling with TiO ₂ non lubricant	Simhadri Kambala 2018 PHD 012

15. No. of Workshops and Conferences organised:

S.L	Programme	Position	Sponsor	Year
1	ATAL FDP Programme On Robotics	Chairman	AICTE	March 2020
2	ATAL FDP on Artificial Intelligence	Chairman	AICTE	June 2020
3	ATAL FDP Programme on Robotics	Chairman	AICTE	June 2019
4	TEQIP Sponsors on Metal and Matrix composite	Coordinator	TEQIP	2019
5	National conference on Heat and Mass Transfer	Coordinator	NIT Jamshedpur	August 2008
6	Non-Conventional Energy and sources	Coordinator	AICTE	1999

16. No. of Postgraduate Scholar successfully guided :

SL	Topic	Name	Roll No
1	Optimization of welding process parameter for weld penetration through response surface methodology	Ravi Sinha	2014PGMEES01
2	C.F.D Analysis of semi-circular transverse roughened solar air heater	Kanhaiya Jhariya	2013PGMEES05
3	Fractional homotropy analysis transform method for a fin With Temp dependent internal heat generation	Subhas Chand pal	2013PGMEES08
4	Development of endurance test cycle for 4 cylinder diesel engine for Generator application	Anku Kr Singh	2012PGMEES04
5	Optimization of cutting parameter on surface roughness in m/c of hardened steel using coated carbide insert	ADas	2011PGMEES03
6	Design improvement of truck leaf spring	Saket Kumar	2009PGMEES02
7	Secondary processing and characterization of Cu-Ni base alloy	Bipin Kumar	2007PGMEES03
8	Analysis of thermal performance of solar air heater using wire mess roughness	Samir Das	2006PGMEES02
9	Industrial Safety in Steel Plant	Mukhopadhyay	2006PGMEES05
10	Productivity improvement in automobile industries through implementation of system applications	M. Balakrishan	2006PGMEES04
11	Solving Burning Problems of Directly reduced iron insteel industries – A case Study	C. Mukherjee	2006PGMEES07
121	Total productive maintenance in manufacturing through developing high performing process for cnc M/C in small scale industry	KK Purve	2006PGMEES08
13	Design &Analysis of heat exchanger	Jaswinder Singh	2006PGMEES10
14	Investigation of metallurgical properties for improving Machinability of cylinder block and head	V.K. Verma	2006PGMEES10
15	Finite element analysis of thick walled pressure vessel	Hemanshu Bhardwaj	2005PGMEES10
16	Computer aided analysis of coal fuelled combined cycle cogeneration system	G. Lakra	2002PGMEES05
17	Productivity improvement in Six high role unit of cold rolling mills in Tinplates	A.C. Toppno	2002PGMEES03
18	Improvement in supply chain management–A case study	Debtosh Dey	2005PGMEES04
19	CFD Analysis of Solar Air Heater with Artificial Roughened absorber Plate	Nitin Kumar	2012PGMEES03
20	Design Development and evaluation of pilot plant for making Paving Block.	D.P. Sahu	2010PGMEES04
21	Refurserment of Power Plant	C.S. Shekhar Rao	2005PGMEES02
22	Wear Behavior on deformation processing of sic articulate reinforced Al alloy	Sumit Kumar.	2005PGMEES03
23	Failure Analysis of Boiler component	Manoj Sharma	1999PGMEES03

24	Establishing the induction Harding process parameters of 6 cylinder diesel engine Cranss haffor improving the quality-2001	A.K .Goel	1997PGMEES03
25	Improving process capability of induction harding process on cast iron valve seats of diesel engine cylinder head-2002	V. Deshmukh	1997PGMEES04
26	Computer aided analysis of non-linear flexibly supported finite turbulent flow oil journal bearing-2002	Praveen Mishra	1999PGMEES02
27	Computational Investigation of Thermal Performance of Solar Air Heater having Roughness Elements As Transverse Wire on the Two Side Absorber Plate	Sumit Kumar	2016PGMEES02
28	Hybrid Renewable Energy Design for Rural Electrification – A Case Study	Sandip Kumar	2016PGMEES03
29	Lube oil Consumption estimation for condition based monitoring & automation of ventilation system tool for gas turbines	Souvik Singh Rathore	2017PGMECI05
30	Thermal separation in Vortex tube using different shapes of the nozzles and working fluids	Ashish Kumar Gupta	2017PGMECI07
31	CFD Analysis of Thermal Performance of Solar air heater with inclined Rib shape roughness	Abhishek Choudhary	2017PGMECI08
32	Turbulent Convective heat transport in equilateral prism rib roughened solar air heater	Inzamam Ahmad	2017PGMECI08
33	Nano fluids in flat plate solar collector: An Experimental Investigation	Ravindra Kumar Pal	2017PGMECI03
34	Numerical analysis of suspension system with fractional order controller of quarter car model	Shekhar Baghel	2017PGMECI05
35	Trajectory Planning and failure recovery of redundant robot docking a floating object	Prasad Namdeo Das	2017PGMEES05
36	Interaction of Matrix cracking and delamination in curved composites laminates.	Vasvani Ashish, Maheshbhai,	2017PGMECI07
37	Hybrid Biofuel used in Diesel Engine	Reshmi Kumari, CUJ Ranchi	2017MEEE12
38	Design and CFD Analysis of the Flat Plate Collector - Solar Water Heater under Steady-State conditions	Anand Bharati	2018PGMECI15
39	Composite material: preparation, properties and application of natural fibre(luffa and date leaves)	Ajeet Kumar	2018PGMECI14
40	Aerodynamic Optimization Of Transonic Centrifugal Compressor Using Artificial Neural Network Coupled With CFD	Kartik Reddy	2018PGMETE07
41	Thermal & Structural Analysis Of Gas Turbine Blade Cooling Through Holes By Using CFD Simulation	Krityanshu Raj	2018PGMETE04
42	Analysis of automobile engineer cooling system specially crank shaft	Simple Singh	2018PGMETE10

43	Heat Transfer augmentation in a mini channel using MWCNT-water Nano fluid as a coolant	Shashi Avhashti	2018PGMEES11
44	Experimental Study on Heat Transfer and Fluid Flow Characteristic of three sided Artificially Roughened Solar Air Heater	Navam Srivastava	2018PGMETE10

17. No. of Undergraduate successfully guided

1	Thermodynamics Analysis of OCGT	Bharket Alietal	2016UGME061
2	Double Reflector solar cooker	D Ashish Sharma	2012UGME037
3	Study of thermal performance of solar air heater having roughened &smooth	Y. Harsh	2009UGME063
4	Solar Air Heater Wire Mesh Roughened Solar air Heater.	Pankaj Kumar	2013UGME045
5	Recent Development in Food Grain Storage Structure for Kohlan Area	Maheedhar Reddy	2014UGME064
6	Hybrid System Analysis with a Renewable Energy and Thermal Energy for Health Clinic- A Case Study	M. Nithin Choudhary	2014UGME065
7	A thermal performance of three Dimensional flow CFD based triangular rib roughened solar air heater.	Sonal Mishra, Gaurav, Randhir	2015UGME035, 2015UGME036, 2015UGME037
8	Aerodynamic Flow Analysis of commercial Truck for Improving Fuel Economy	Sanat, Suresh Jain	2015UGME072, 2015UGME073
9	CFD analysis of fluid flow and heat transfer of an automotive radiator with non-Newtonian fluid.	Ayush Kumar, Vivek Raj Thakur, Sourav Kumar Saw	2015UGME065, 2015UGME066, 2015UGME067
10	Use of corrugated Pipe Heat Exchangers In Waste Heat Recovery Steam Generators	Abu Sharique Shamshad Khan, Nihal Kumar, Kamisetty Sai Sudharsan	2016UGME057, 2016UGME058, 2016UGME007
11	Fatigue Failure Analysis Of A Specimen(Axle)	Bellamkonda Sandeep Kumar, Padala Vineet, Eslavath Rajesh	2016UGME036, 2016UGME049, 2016UGME056
12	The Response Of Coir Fibre – Jute Fibre – Glass Fibre Reinforced With Epoxy Composites	Suraj Pookkattuparambil Suresh, Abhishek Anand	2016UGME004, 2016UGME001,
13	The Response Of Fibre Composites To Ballistic Impact	Balaga Naga Sai Vardhan, Pilla Deva Chakradhar	2016UGME021, 2016UGME072,

14	Performance and Emission Test in Diesel Engine using Blends of zatropa oil 6-stroke engines.	Y. Karun Kumar	2010UGME015
15	Implementation of proylsis for efficient conversion of waste seeds into Bio fuel	Ravi Shankar Topno	2013UGME072
16	Study an Analysis of Solar Dryer	Mohit M. Bhardawaj	2013UGME073
17	Implementation of proylsis for efficient conversion of waste seeds into Bio fuel-A Review	Sumit Tiwari	2013UGME052
18	Effect of Artificial roughness of heat transfer characteristics of solar air heater.	P.S. Bajwa	2014UGME064
19	CFD Analysis of Solar Dryer System in Agriculture	S.V.S Pramod	2014UGME065
20	Simulation Analysis of Semi active Suspension System	Depo Gupta	2011UGME047
21	Enhancement in Thermal Performance of Solar Air heater By using Wire Mesh Roughened Surface	Manish	2007UGME036
22	Design and approach of automated Guided Vehicles	Anurag Kumar Bhardwaj	2014UGME027
23	Solar Dryer Performance	Bhargav, Kumandan, suraj,B. Patel	2015UGME070, 2015UGME071, 2015UGME072
24	Investigation of solar air heater with spiral coil horizontal roughened absorber plate	P.Venkatesh, A.Bhardwaj.	2017UGME066, 2017UGME067
25	Investigation of solar air heater with spiral coil Vertical roughened absorber plate	R.R. Kumar, Prabhat Kumar	2017UGME084, 2017UGME085

18. List of Publications: SCI/SCOPUS Index

1. Prabhakar, M., Prasad, A.K. and **Paswan, M.K., 2020**. Durability improvement of axle housings by compressive residual stress inducement. *Applied Materials Today*, 19, p.100584.
2. Prabhakar, M., Prasad, A.K., Paswan, M.K. and Tendulkar, V., 2020. Fatigue life Prediction of welding in Axle Housing using Notch Stress approach. *Materials Today: Proceedings*, 22, pp.2233-2240.
3. Prabhakar, M., Prasad, A.K. and **Paswan, M.K., 2020**. Fatigue Life Prediction of Lap Welds in Axle Housings Using Notch Stress Modelling Approach and Design Modifications to Overcome the Failure. *Journal of Failure Analysis and Prevention*, pp.1-12.
4. K. Simhadri, P. Srinivasa Rao, **M.K. Paswan** Experimental investigation on Vapour Compression Refrigeration system employing R290/R600a (50/50) and TiO₂nano-lubricant, *Test Engineering and management*, May – June 2020 ISSN: 0193-4120 Page No. 14159 – 14166, **2020**
5. Mittal, P., **Paswan, M.K.**, Sadasivuni, K.K. and Gupta, P., **2020**. Structural, wear and thermal behaviour of Cu–Al₂O₃–graphite hybrid metal matrix composites. *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications*, p.1464420720929377.
6. Agrawal, R., Singh, K.D.P. and **Paswan, M.K., 2020**. Review on Enhancement of Thermal Conductivity of Phase Change Materials with Nano-Particle in Engineering Applications. *Materials Today: Proceedings*, 22, pp.1617-1627.
7. Sharma, H.K., Verma, S.K., Singh, P.K., Kumar, S., **Paswan, M.K.** and Singhal, P., **2020**. Performance analysis of paraffin wax as PCM by using hybrid zinc-cobalt-iron oxide nano-fluid on latent heat energy storage system. *Materials Today: Proceedings*.
8. Gupta, S.D., Mahato, D.N. and **Paswan, M.K., 2020**. Differential fabrication and characterization of natural fiber composite laminates–An investigative approach. *Materials Today: Proceedings*.
9. Sharma, B., Mohan, M., Yadav, J., **Paswan, M.K.**, Chandrasekaran, R., Sharma, V.K. and Choudhary, M.S., 2020. Linear Programming Archetypal for Collective Assembly and Preventive Aliment Arrangement for Reconfigurable Accomplishment System. *Materials Today: Proceedings*, 22, pp.2058-2065.
10. Kumar, S., Jena, S., Lahoty, V., **Paswan, M.K.**, Sharma, B., Patel, D., Prasad, S.B. and Sharma, V.K., **2020**. Experimental investigation on the effect of welding parameters of TIG welded joints using ANOVA. *Materials Today: Proceedings*, 22, pp.3181-3189.
11. Ahmad, I., Khan, N.H., Hassan, M.A. and **Paswan, M.K., 2020**. Three-Dimensional Thermo-Hydraulic Analysis of Solar Air Heater With Equilateral Prism-Shaped Rib Roughness. *Journal of Solar Energy Engineering*, 142(5).

12. Khan, N.H., **Paswan, M.K.** and Hassan, M.A., **2020**. Convection of Viscoplastic Fluid in U-Tube Bends. In *Recent Advances in Mechanical Engineering* (pp. 299-311). Springer, Singapore.
13. Kumar, V., Prasad, N., **Paswan, M.K.**, Kumar, P. and Biswas, S., **2020**. Design Analysis and Pressure Loss Optimization of Automobile Muffler. In *Intelligent Manufacturing and Energy Sustainability* (pp. 93-107). Springer, Singapore.
14. Sharma, H.K., Verma, S.K., Singh, P.K., Kumar, S., **Paswan, M.K.** and Singhal, P., **2020**. Performance analysis of paraffin wax as PCM by using hybrid zinc-cobalt-iron oxide nano-fluid on latent heat energy storage system. *Materials Today: Proceedings*.
15. Sharma, B., Kumar, S. and **Paswan, M.K.**, **2019**. Numerical investigation of MHD stagnation-point flow and heat transfer of sodium alginate non-Newtonian nanofluid. *Nonlinear Engineering*, 8(1), pp.179-192.
16. Sharma, B., Kumar, S., **Paswan, M.K.** and Mahato, D., **2019**. Chebyshev Operational Matrix Method for Lane-Emden Problem. *Nonlinear Engineering*, 8(1), pp.1-9.
17. Kumar, U., Kumar, S., Niraj, M. and **Kant, M.**, **2019**. Application of Time Series Analysis for the Prediction of Liquid Metal Height in Basic Oxygen Furnace. *Available at SSRN 3437624*.
18. Rathore, S.S., Mishra, S. and **Paswan, M.K.**, **2019**, November. An overview of diagnostics and prognostics of rotating machines for timely maintenance intervention. In *IOP Conference Series: Materials Science and Engineering* (Vol. 691, No. 1, p. 012054). IOP Publishing.
19. Yadav, J. and **Paswan, M.**, **2019**, Different Methods for Predicting and Optimizing Weld Bead Geometry with Mathematical Modeling and ANN Technique.
20. Yadav, J. and **Paswan, M.** **2019**, Prediction and Optimization of Weld Bead Geometry.
21. Sharma, B., Kumar, S. and **Paswan, M.K.**, **2018**. Analytical solution for mixed convection and MHD flow of electrically conducting non-Newtonian nanofluid with different nanoparticles: A comparative study. *International Journal of Heat and Technology*, 36(3), pp.987-996.
22. Kumar, S., **Paswan, M.K.** and Behera, S., **2018**. Micro Study of Hybrid Power System for Rural Electrification-A Case Study. *International Journal of Applied Engineering Research*, 13(7), pp.4888-4896.
23. Ranjan, R., **Paswan, M.K.** and Prasad, N., **2017**. CFD based analysis of a solar air heater having isosceles right triangle rib roughness on the absorber plate. *International Energy Journal*, 17(2).
24. Yadav, J., **Paswan, M.** and Sharma, B., **2017**. Experimental Analysis and Mathematical Modeling of Weld Bead Geometry Formed During Gas Metal ARC Welding Using Linear Regression. *International Journal of Mechanical Engineering and Technology*, 8, p.12.
25. Kumar, P., Roy, S.C. and **Paswan, M.K.**, **2016**. Experimental Study of Effect of Friction Factor on Flat-Plate Solar Air Heater having Roughened (Rhombus Shape) Absorber Plate. *International Journal of Engineering and Management Research (IJEMR)*, 6(4), pp.230-238

26. Ranjan, R., **Paswan, M.K.** and Prasad, N., **2016**. CFD analysis of thermal performance in isosceles right triangle rib roughness on the absorber plate solar air heater. *Indian Journal of Science and Technology*, 9(38).
27. Nayak, U.K., Roy, S.C., **Paswan, M.K.** and Gupta, A.K., **2015**. Heat transfer and flow friction characteristics of solar water heater with inserted baffel inside tube. *International Journal of Engineering Research & Science (IJOER)*, 1(4), pp.33-38.
28. M.K. Paswan, Pankaj Kumar, S.C.Roy, **2014** “Experimental Analysis of Renewable Energy as Solar Air Heater With Artificial Roughness” *International Journal of Mechanical production Engineering Research and Development (IJMPERD)* ISSN (P): 2249-6890; ISSN (E): 2249-8001 vol.4, Issue 1, Feb **2014**, 125-134.
29. Kumar, A. and **Paswan, M.K.**, **2013**. Optimization of Cutting Parameters of AISI H13 with Multiple Performance Characteristics. *International Journal of Mechanical Engineering and Robotics Research*, 2(3).
30. Pal, S.C., Sahu, M.K., Bishnoi, P., **Paswan, M.K** **2013**. and Kumar, S., Fractional Homotopy Analysis Transform Method for a Fin with Temperature Dependent Internal Heat Generation and Constant Thermal Conductivity.
31. Ranjan, R., Srivastava, R.K. and **Paswan, M.K.**, **2013**. Quality Engineering Applications in Continuous Casting for Steel Making Technology.
32. **Paswan, M.K.** and Mukherjee, C., **2012**. Economic analysis of transportation directly reduced iron (DRI) through ship. *International Journal of Services Technology and Management*, 17(2-4), pp.251-266.
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I, hereby, declare that all the statements/ particulars made/furnished in this application are true, complete and correct to the best of my knowledge and belief. I also declare and fully understand that in the event of any information furnished being found false or incorrect at any stage, my application/candidature is liable to be summarily rejected at any stage and if I am already appointed, my services are liable to be terminated without any notice from the post of Director as per Act/Statutes etc. and other applicable rules.

Place

Date:

(Signature of the Applicant)