

Research Publication -ME

Research Publication in Journal

2024

1. **Mr. Piyush Mahendru**, “Optimization of erosion parameters of coated SS316L using Taguchi method”, International Journal on Interactive Design and Manufacturing (IJIDeM), <https://doi.org/10.1007/s12008-023-01673-2>, ISSN No: 1955-2513

2023

1. **Dr. Ajit**, “Effect of different aluminium oxide based nanofluid concentrations on the efficiency of solar water desalination system”, Journal of Thermal Engineering, DOI: 10.18186/thermal.1242844 , Vol. 9, No. 1, Page No. 61–68, January 2023, ISSN No: 2148-7847
2. **Dr. Prashant Bhardwaj**, “Optimization of series and parallel combination of N-SPVT air collectors based on overall thermal energy and exergy”, International Journal of Renewable Energy Technology, <https://doi.org/10.1504/IJRET.2023.130033>, Vol. 14, No. 2, Page No. 171-191, February 2023 ,ISSN No. 1757-3971
3. **Dr. Prashant Bhardwaj** “Thermal and Exergy Analysis of N-Semi-Transparent Photovoltaic Thermal (N-SPVT) Air Collectors Connected in Series/Parallel”, International Journal of Renewable Energy Technology, DOI: [10.1504/IJRET.2023.132969](https://doi.org/10.1504/IJRET.2023.132969) , ISSN No: 1757-3971
4. **Ms. Smriti Mishra** “A Study on Microstructural Behaviour and Mechanical Properties of Composites Fabricated by Friction Stir Processing”, Indian Journal of Engineering and Material Sciences, <https://doi.org/10.56042/ijems.v30i2.1628> Vol. 30, Page No. 212-225, April 2023, ISSN No: 0971-4588
5. **Ms. Smriti Mishra**, “Effect of tooltip profile and tilt angle on Al8090-TiH2/Al2O3 foam and its mechanical characterization”, SAGE-Part E, Journal of Process Mechanical Engineering, doi:10.1177/09544089231211167
6. **Ms. Smriti Mishra, Dr. Prashant Bhardwaj** “An experimental analysis of natural heat transfer between rectangular solid and perforated fins having different perforation characteristics”, EVERGREEN Joint Journal of Novel Carbon Resource Sciences & Green Asia Strategy, DOI: [10.5109/6781094](https://doi.org/10.5109/6781094) Vol. 10, Issue 01,Page No. 366-371, March 2023, ISSN No: 2189-0420
7. **Ms. Smriti Mishra, Dr. Prashant Bhardwaj** “Reliability Prediction and its Simulation for a Friction Stir Processing Tool”, Springer-Lecture Notes in Mechanical Engineering

8. **Mr. Gianender**, “Productivity Analysis of Pyramid Solar Still Using Phase Change Material and Hybrid Nanofluid”, Recent Advances in Mechanical Engineering
9. **Pradeep Kumar Mouria**, “Optimizing the Parameters of Spark Plasma Sintering to Enhance the Hardness of MgO/TiC Composites”, HINDAWI- Advances in Materials Science and Engineering, <https://doi.org/10.1155/2023/1335481>, Volume 2023, Article ID 1335481, 14 pages, ISSN No. 1687-8442
10. **Dr. Vineet Dubey**, “Comparative study of dry machining with MQL assisted soybean oil in turning operation of AISI 304 steel”, Materials Today Proceedings, <https://doi.org/10.1016/j.matpr.2023.02.228>, ISSN No: 2214-7853
11. **Dr. Vineet Dubey**, “Thermal Modelling of Cutting Tool under Different Cutting Environment in Turning”, <https://doi.org/10.1016/j.matpr.2023.04.193>
12. **Gianender Kajal**, “A review on the effect of residual stresses in incremental sheet metal forming used in automotive and medical sectors”, Materials Today Proceedings, <https://doi.org/10.1016/j.matpr.2022.11.235> , Volume 78, Part 3, 2023, Pages 524-534

2022

1. **Dr. Ajit**, “PRODUCTIVITY ANALYSIS OF PYRAMID SOLAR STILL WITH SOLID CLAY POTS”, Materials Today Proceedings, <https://doi.org/10.1016/j.matpr.2022.04.629> , ISSN No: 2214-7854
2. **Dr. Prashant Bhardwaj, Ms. Smriti Mishra**, “Influence of Process Parameters of Friction Stir Processing on the Fabrication of Metal Foam”, Materials Today Proceedings, <https://doi.org/10.1016/j.matpr.2022.04.577>, Volume 64, Part 3, 2022, Pages 1398-1402, ISSN No: 2214-7854
3. **Dr. Prashant Bhardwaj, Ms. Smriti Mishra**, “Fabrication of aluminium MMCs & associated difficulties-A Review”, Materials Today Proceedings, <https://doi.org/10.1016/j.matpr.2022.04.102> , Volume 64, Part 3, 2022, Pages 1276-1282, ISSN No: 2214-7854
4. **Gianender Kajal**, “Finite Element Analysis of Residual Stresses during Incremental Sheet Forming of Ti-6Al-4V Alloys Using Different Tool Path Profiles”, Advances in Engineering Design
5. **Gianender Kajal**, “Productivity Analysis of Pyramid Solar Still Using Phase Change Material and Hybrid Nanofluid”, Recent Advances in Mechanical Engineering
6. **Dr. Joginder Singh**, “VIRTUAL ANALYSIS AND MANUFACTURING OF FLAT SPECIMEN OF CARBON FIBER COMPOSITE FOR COMPUTING TENSILE STRENGTH”, International Journal of Engineering Sciences Paradigms and Research

7. **Dr. Joginder Singh**, “Remodelling of a Jet Engine Mounting Bracket using Structural Analysis and Topology Optimization”, International Journal of Research, Volume XI, Issue XI, November 2022, ISSN No: 2236-6124
8. **Dr. Joginder Singh**, “Frequency and Static Structural Linear Analysis of Non-Flexible Pedestrian Iron Bridge by Simsolid Software”, International Journal of Research, Volume XI, Issue XI, Page No. 707-715, November/2022, ISSN No: 2236-6124

2021

1. **Dr. Prashant Bhardwaj**, “Design and Simulation of a semi-transparent photovoltaic thermal (PVT) indirect solar dryer integrated with kitchen chimney using ANN technique”, Indian Journal of Engineering & Materials Sciences, DOI: [10.56042/ijems.v28i6.45821](https://doi.org/10.56042/ijems.v28i6.45821) , Vol. 28, December 2021, pp. 633-639, ISSN No: 0971-4588
2. **Dr. Prashant Bhardwaj, Ms. Smriti Mishra**, “Remaining useful life estimation by stochastic Markov Model and Monte-Carlo simulation”, International Journal of Industrial and Systems Engineering, DOI: [10.1504/IJISE.2021.117654](https://doi.org/10.1504/IJISE.2021.117654) , Vol. 39, No. 1, ISSN No: 1748-5037

Research Publications – ME

RESEARCH PUBLICATIONS IN JOURNALS

2020

- **Joginder Singh and M.R.Tyagi**, “Effect of Angular Orientation of Continuous Fibers on the Extensional Properties of Carbon Fiber Composites”, Lecture Notes in Mechanical Engineering, ISSN No.: 21954356, 21954364, Springer Nature , https://doi.org/10.1007/978-981-15-5519-0_1, Sep 2020.
- **Joginder Singh and M.R.Tyagi**, “Variation of Shear Properties in Carbon Fiber Composites as Extensional Forces Applied with Different Fiber Orientation”, International Conference on Mechanical and Energy Technologies (ICMET), 2019, November, Galgotia College of Engineering & Technology, Greater Noida, UP, Smart Innovation, Systems and Technologies, 427-438, https://doi.org/10.1007/978-981-15-2647-3_38.
- **Sanjay Taneja**, “Effect of Tyre Unbalance on Performance of Vehicle”, International Journal of Mechanical Engineering and Technology (IJMET)”, Volume 11, Issue 12, December 2020, pp. 12-18, Article ID: IJMET_11_12_002, <http://www.iaeme.com/ijmet/issues.asp>, ISSN Print: 0976-6340 and ISSN Online: 0976-6359.
- **Pradeep Kumar Mouria**, “Measurement of residual stress on H13 tool steel during machining for fabrication of FSW/FSP tool pins”, Materials Today: Proceedings, www.elsevier.com/locate/matpr, <https://doi.org/10.1016/j.matpr.2020.11.656>, 2214-7853.

2019

- **J. P. Sharma**, “Prediction of Universal Joint Behavior Under Small Axial Loading Using FEM”, in Indian Journal of Science and Technology, ISSN: 0974-6846, pp. 12(9), March 2019: 1-7
- **Gianender Kajal**, Himanshu Garg, “A Systematic Review: Effect of TIG and A-TIG Welding on Austenitic Stainless Steel”, Advances in Industrial and Production Engineering, ISSN NO. 2195-4356 pp: 375-385, April 2019
- **Dr Sujata Nayak**, “An Experimental Drying Study of Locally available Medicinal Plants by hybrid mixed even span Greenhouse dryer. International Conference on “SOLARIS-2019”, in International Conference on Renewable Energy & Sustainable Climate held at amia Millia Islamia, New Delhi and Hi-Institute of Engineering and Technology, Ghaziabad from 7-9 February 2019.
- **Joginder Singh**, M R Tyagi, Gurpreet Singh and Ravi Dutt Sharma, “Design, Analysis and Manufacturing of Front Sprocket of a Bicycle using Carbon Fiber Reinforced Plastics”, in IOP Conf. Series: Journal of Physics, ISSN: 1742-6596,

August 2019.

- Rahul Sharma, Sumit Kumar Shaw, S.Somesh, Mukul Bhatia, **Joginder Singh and Jai Prakash Sharma**, "Prediction of Universal Joint Behavior Under Small Axial Loading Using FEM", in Indian Journal of Science and Technology, ISSN (Online) : 0974-5645, pp. 12(9), March 2019: 1-7

2018

- Harpreet Singh, Himanshu Rawat, Mayank Sadhra & **Prashant Bhardwaj**, "Cutting Tool Prognostic using Markov Model", Indian Journal of Science and Technology 11(45), ISSN No.: 0974-6846, December 2018: 1-4
- Himanshu Garg, **Joginder Singh**, M.R. Tyagi, Kunal Singh, K. Aditya, Himanshu Gupta, "Comparative Study of Sheet Metal and Carbon Fiber Reinforced Composites Ceiling Fan Blade", Lecture Notes in Mechanical Engineering, ISSN No.: 2195-4356, October 2018.
- **Joginder Singh**, M. R. Tyagi, Abdul Ahad, Abhinav Chawla, Dinesh Kashyap, Vinay Prabhakar, "Evaluation Of Tensile Properties Of Hot Rolled Carbon Steel Using Finite Element Analysis", Lecture Notes in Mechanical Engineering, ISSN No.: 2195-4364, October 2018.
- **Joginder Singh**, M R Tyagi, **Ajit, Gianender and Rinki Yadav**, "Design and Manufacturing of a holding fixture to test the tensile strength of a flat specimen", International Journal of Applied Engineering Research, ISSN No.: 2195-4356, October 2018.
- **Joginder Singh and Rinki Yadav**, "Implementation of CATIA V5 in Modeling and Simulation of Workbench Vice", International Journal of Emerging Technologies in Engineering Research, ISSN No.: 2454-6410, May 2018.
- **J. P. Sharma**, "Textiles for protection against Electromagnetic Radiations: A review", International Journal of Engineering Research and Applications, 8(6) Part-III, 2018: 32-37 ISSN No.: 2248-9622.
- Smriti Mishra, **Prashant Bhardwaj**, Neha Badhauria, "Reliability and Availability Analysis for a Manufacturing Network by using Active Redundancy", International Journal of Applied Engineering Research, 13(6), 2018: 116-126 ISSN No.: 0973-4562.
- Sanjay Taneja, "LPG (Liquified Petroleum Gas) as a Fuel", International Journal of Emerging Trends in Engineering and Development, 3(8), 2018: 26-30 ISSN No.: 2249-6149 May 2018.
- **R.Yadav, J.P. SHARMA, Gianender & Rekha Yadav**, "Prediction of Mechanical and Wear Properties of Al-6061/MoS₂ (Molybdenum Disulphide) Composites", International Journal of Innovative Research in Science, Engineering and

Technology, 6(8), 2017: 15839-15849 ISSN No.: 2319-8753.

- Paras Mittal, **Gianender & R. Yadav** "Wear Behaviour of Aluminium 7075 based Composites Reinforced with SiC, Red Mud and Al₂O₃", International Journal for Research in Applied Science & Engineering Technology, 6(IV), 2018: 2802-2816 ISSN No.: 2321-9653.
- Pramod Yadav, A.Kumar, P.Kumar & **Gianender**, "Reverse Engineering on Process Cycle Time in a Medium Scale Industry – Data Anthology", International Journal for Research in Applied Science & Engineering Technology, 5(XI), 2017: 196-202 ISSN No.: 2321-9653.
- **Gianender** & Rekha Yadav, "Process Parameter Selection for Optimizing the Mechanical Properties of Stainless Steel (SS 202 & SS 316) in the Gas Tungsten Arc Welding", International Journal of Innovative Research in Science, Engineering and Technology, 6(IV), 2018: 2684-2695 ISSN No.: 2321-9653.
- **Gianender** & Rekha Yadav, "Process Parameter Selection for Optimizing the Weld Pool Geometry of Stainless Steel (SS 202 & SS 316) of the TIG", International Journal for Research in Applied Science & Engineering Technology, 6(IV), 2018: 2674-2683 ISSN No.: 2321-9654.
- Pratibha Malik, Astha Sharma, **Gianender & J.P Sharma**, "Textiles for protection against Electromagnetic Radiations: A review", International Journal of Engineering Research and Applications, 8(6) Part-III, 2018: 32-37 ISSN No.: 2248-9622.
- Somesh S., Sumit Kumar Shaw, **Piyush Mahendru**, "A Comprehensive Review on LiBr–H₂O Based Solar-Powered Vapour Absorption Refrigeration System", Advances in Interdisciplinary Engineering, August ISSN No.: 2195-4356.

2017

- Dr Sujata Nayak has published a book chapter title "Solar Drying Technology" Concept, Design, Testing, Modelling, Economics and Environment in November 2017 in Springer.
- Dr Sujata Nayak has published a book chapter title "Renewable Energy Technology" Design, Development and exergy analysis of a hybrid PV solar dryer in Narosa Publishing House.
- **Dr Sujata Nayak** and Kapil Narwa "Economic Analysis of hybrid Photovoltaic-Thermal (PV/T) Integrated Indirect type Solar Dryer" Solar Drying Technology (Springer, Singapore) Book: Solar Drying Technology pp 515-528 ISSN No.:978-981-10-3832-7
- Dr Sujata Nayak has presented a paper titled "Experimental drying study of Pudina by mixed hybrid greenhouse dryer" in International Conference on IRECS 2018 in Goa on 19th to 21st January, 2018.
- Ajit, Mandeep Bhadana, Gianender, "Occupational health hazards of welding

workers: Piping Industry Perspective” International Journal of Emerging Trends in Science and Technology, Volume 4, Issue 09, September (2017), **pp.6039-46, I.F-4.219.**

- Pramod Yadav, Ajay Kumar Agarwal, Pradeep Kumar Mouria, Gianender, Dr. Rakesh Kumar, “Reverse Engineering on Process Cycle Time in a Medium Scale Industry – Data Anthology” International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume 5 Issue X1, November 2017, **pp.196-202, I.F-6.8**
- Jai Prakash Sharma, Gianender, Rekha Yadav, “Prediction of Mechanical and Wear Properties of Al-6061/MoS₂ (Molybdenum Disulphide) Composites” International Journal of Innovative Research in Science, Engineering and Technology, Vol. 6, Issue 8, August 2017, **PP.15839-849, I.F-7.089.**
- Kuldeep Singh, Gianender, Ajay Kumar Agarwal & Ajit, “Effect of Dielectric fluids used on EDM Performance: A Review”, International Journal of Emerging Technologies in Engineering Research (IJETER) Volume 5, Issue 10, October (2017),**pp.10-16,I.F-4.225**
- Tarun Tiwari, Ajit, Gianender, “A Review of Working Fluid Combinations used in Diffusion Absorption Refrigeration Technologies” IJRASET, Volume 05, Issue XI, November, 2017, **pp.2105-2111, I.F-6.887**
- Mahesh Pandey, Ashutosh Pandey, Ajit, Gianender, “Electricity generation using vertical axis wind turbine:design and development,InternationalJournal of Advance Research in Science and Engineering, Vol. No. 06,Special Issue No.(02), Dec. 2017, pp. 234-44.

Publications 2016

- OPTIMIZATION OF CUTTING PARAMETERS FOR SURFACE ROUGHNESS IN TURNING OF ALLOY STEEL EN47” in IJARMET, Vol 2 Issue 4. oct-Dec 2016, Jai Prakash Sharma
- Remaining Useful Life (RUL) Estimation of a Turning Tool Using Statistical Trend Exploration Technique August 2016, Prashant Bhardwaj, Smriti Mishra , Prashant Vashishtha
- Optimal Availability Analysis of Brake Drum Manufacturing System by using Markov Approach August 2016, Smriti Mishra , Prashant Bhardwaj, Neha Bhadouri