

RESEARCH PUBLICATION

Dr . Y.P.Banjare

1. Y. P. Banjare, R. K. Sahoo, S.K. Sarangi, 2009, CFD Simulation of Gifford- McMahon type pulse tube Refrigerator, International Journal of Thermal Science Vol.48,PP2280-2287, June, 2009.
2. Y. P. Banjare, R. K. Sahoo, S.K. Sarangi, 2010 CFD Simulation and Experimental validation of a G M type double inlet pulse tube Refrigerator International Journal of Cryogenics Vol.50, pp. 271-280, January, 2010.
3. Y. P. Banjare, R.K. Sahoo, S.K. Sarangi, 2009 Comparison of Stirling type pulse tube refrigerators by CFD Simulation, Indian Journal of Cryogenics Vol-34,No.1-4.
4. Y. P. Banjare, R. K. Sahoo, S.K. Sarangi, 2010 Simulation of a Simple GM type double inlet pulse tube refrigerator IndianJournal of Cryogenics Vol-35A ,2010.
5. I.C. Bharti, M.F. Qureshi, Y. P. Banjare 2011, Performance Modeling of superheated system using ANFIS architecture based on classification and regression trees algorithm and its optimization, CSVTU research Journal, Vol-04, Nov. 01, 2011.
6. I.C. Bharti, M.F. Qureshi, Y. P. Banjare 2012 Neuro- Fuzzy based modelling of local heat transfer coefficient at the circumference of horizontal tube in free board region of fluidized bed, Journal of modelling and simulation in design and manufacturing , Vol.03, No. 1-2(June-December, 2012) PP. 157-165.
7. D.N. Dewangan, M. K. Jha, Y.P. Banjare, 2014, Reliability investigation of steam turbine used in Thermal power plant, International Journal of Innovative Research in Science, Engineering and Technology Vol.03,no.07, pp. 14915- 14923, Issue 07, July 2014.
8. D.N. Dewangan, M. K. Jha, Y.P. Banjare 2014 Rule Weight Based Behavior Modeling of Steam Turbine Genetic Tuned Adaptive Network Based Fuzzy Inference System, International Journal of Innovative Research in Science, Engineering and Technology Vol.03,no.12,pp18055-18069.
9. D.N. Dewangan, Ruchi Trivedi, Y.P. Banjare, 2014, IT2FLC based control model of steam turbine governing system of power plant International Journal of Innovative Research in Science, Engineering and Technology Vol.01, No.04, pp121-140.
10. D.N. Dewangan, M. K. Jha, Quresi M.F.,Y.P. Banjare 2014 Real Time Fault Diagnosis and Rectification System for Bearing Vibration of Steam Turbine by using Adaptive Neuro-Fuzzy Inference System and Genetic Algorithm- A Novel Approach, ASME, Journal, Advance in Modeling, B- Signal Processing and Pattern Recognition, Vol.55,No.01, pp1-21.
11. Virendra Nayak,Y.P. Banjare, M.F. Qureshi 2015, Multipoint adaptive neuro-fuzzy inference system based modeling of heated catalytic convertor performance International Journal of Innovative Research in Science, Engineering and Technology Vol.04, Issue 02, Feb. 2015.

12. Virendra Nayak, Y.P. Banjare, M.F. Qureshi 2015, Genetically optimized multiple ANFIS based discovery and optimization of catalytic materials, International Journal of Innovative Research in Science, Engineering and Technology Vol.04, Issue 02, February 2015.
13. Arun Kumar Sao, Dr. Y.P. Banjare, 2014, Analysis of thermal characteristics of transient conduction through long fin and comparison with exact fin theory and quasi steady theory, International journal of emerging technology and advanced engineering, Vol.04, issue-11, pp157-165, (ISSN2250-2459) November 2014.
14. Komesh Sahu, Dr. Y.P. Banjare 2014 Analysis of transient heat conduction of multidimensional in rectangular shape, International Journal of applied engineering and research, pp. 424-434, 2014.
15. Yugal Kishor Sinha, Dr. Y.P. Banjare 2016 Computational Analysis of Three way Monolithic Catalytic Converter Using FVM tools Ansys Fluent, International Journal of Engineering and Technology Vo.26, No.03 (2016).
16. Ritesh Singh, Dr. Y.P. Banjare, 2016 Development of CFD Solver Using FVM Method for the study of Normal Shock Theory International Journal of Engineering and Technology Vo.26, No.03 (2016).
17. I.C. Bharti, M.F. Qureshi, Y. P. Banjare 2010, Performance Modeling of Superheated system using ANFIS architecture based on classification and regression tree algorithm and its optimization, Association for the advancement of modeling and simulation techniques in enterprises (AMSE), Vol.79, No. 02.
18. I.C. Bharti, M.F. Qureshi, Y. P. Banjare, 2010 Adaptive inference neuro-fuzzy system ANFIS, Modeling a super heter system of a thermal power plant, Association for the advancement of modeling and simulation techniques in enterprises (AMSE), Vol.56, No. 01.
19. I.C. Bharti, M.F. Qureshi, Y. P. Banjare, 2013, Adaptive neuro-fuzzy Modeling for throttle control governing, Association for the advancement of modeling and simulation techniques in enterprises (AMSE), Vol.68, No. 01.
20. I.C. Bharti, M.F. Qureshi, Y. P. Banjare 2013, Adaptive inference neuro-fuzzy system ANFIS, Modeling a super heter system of a thermal power plant (AMSE), Association for the advancement of modeling and simulation techniques in enterprises (AMSE), Vol.56, No. 01.
21. I.C. Bharti, M.F. Qureshi, Y. P. Banjare 2013 Genetically optimized multiple ANFIS based discovery and optimization of catalytic materials Association for the advancement of modeling and simulation techniques in enterprises (AMSE), Vol.56, No. 02.
22. Dr. Y. P. Banjare, "Comprehensive Review on Thermal Conductivity Enhancement and Applications of Phase Change Materials in Air Condition Condenser Unit for Latent Heat Thermal Energy Storage Systems (LHTESS) 6th International Conference 19th - 20th December 2020.
23. Dr. Y. P. Banjare, "A Novel approach on Numerical Analysis for Performance Enhancement of an Air Condition's Condenser Unit Incorporation of Phase Change Material (PCM) as Latent Heat Storage" 6th International Conference 19th - 20th December 2020
24. Dr. Y. P. Banjare "Optimization and Analysis for Energy Saving by using Phase Change Material in Air Condition Unit" 6th International Conference 19th - 20th December 2020.

Dr. Ajay Tripathi

A. Journals

25. H. Chandra, A. Arora, S. C. Kaushik, A. Tripathi & A. Rai. "Thermodynamic analysis and parametric study of an intercooled-reheat closed-cycle gas turbine on the basis of a new isentropic exponent", Int. Journal of sustainable energy, Vol. 30/2, June 2011, pp.82-97.
26. Ajay Tripathi, H Chandra & M Agrawal "Effect of mixture constituents on the laminar burning velocity of LPG-Co₂-air mixtures", Int. Journal of Engineering and Applied Sciences, Vol

5/3; 2010.

27. H Chandra, Ajay Tripathi & S.C. Kaushik. "Parametric study of a closed cycle reheat gas turbine power plant based on the harmonic mean isentropic exponent", *Int. Journal of ambient energy*, Vol. 30, pp 83-93, 2009.
28. H Chandra, Ajay Tripathi, A Arora & M Agrawal. "Role of Harmonic mean isentropic exponent in the analysis of closed cycle gas turbine power plant cycle with intercooler", *Int. Journal of Engineering research and industrial applications*, Vol. pp 145-160, 2009.
29. A Tripathi & S.K. Agrawal, "Hydrodynamics of oscillating slug flow inside mini channels: a state of art review", *Int. Journal of theoretical and applied multiscale mechanics*, Vol. 2, No.3, 2012.
30. A. Tripathi & S. K. Agrawal, "Oscillating meniscus and slugs in a square capillary: a hydrodynamic study", *Int. J. of multiphase science and technology*, Vol. 24, No. 1, pp. 67-87, 2012.
31. A Tripathi & S. K Agrawal, "Interfacial film dynamics of moving meniscus inside square capillaries: an experimental investigation" *Int. J. of flow visualization and image processing*, Vol. 19 (1), pp. 37-56, 2012.
32. H. Chandra, S. Paliwal and A. Tripathi; "Mitigation of Emission in Thermal Power Plant Using Conventional and Non-Conventional Fuel" *International Journal of Engineering and Science Invention (IJESI)* Vol. 2/4, pp 01-06, 2013.
33. H. Chandra, S. Paliwal and A. Tripathi; "Modelling and analysis on the basis of energy and environment for coal and gas fired thermal power stations", *European Journal of Science and Technology*, Vol. 2/3, pp 232-238, 2013.
34. M. Dubey, H. Chandra, A. Tripathi and Anil Kumar; "Thermodynamics performance analysis of Reversible Reheat Joule-Brayton cycle with Cogeneration System", *Workshop on Advances in Energy Engineering and Technology*, IIT, BHU, ISBN: 978-93-82880-44-8, chapter 4, pp 27-33, June 29-30, 2013.
35. A. Tripathi and S.K. Agrawal; "Modelling of slug flow in vertical capillary using COMSOL", *Workshop on Advances in Energy Engineering and Technology*, IIT, BHU, ISBN: 978-93-82880-44-8, chapter 4, pp 27-33, June 29-30, 2013.
36. S.K. Shukla and Ajay Tripathi; "Design Investigations on improved wood cooking stove for rural India", *JUET Research Journal of Science and Technology*, ISSN No. 2321-6026., Vol.1/2, pp. 203-214, June 2014.
37. Ajay Tripathi & H Chandra, "Determination of Laminar Burning Velocity of LPG- CO₂-Air Mixtures"; *Journal of Institution of Engineers*, Issue January 2011, Vol. 91, pp. 20- 24.
38. Ajay Tripathi, Rudra Pratap Singh, and H. Chandra, Fabrication and analysis of evacuated tube solar air heater-8944 (online), Volume 4, Issue 2. *Journal of thermal engineering and applications*, ISSN: 2349.
39. Ajay Tripathi, Anil kumar and M.K. Chandrakar, Design and Analysis of a Composite Cylinder for the Storage of Liquefied Gases, *IJSRD- International Journal for Scientific Research & Development*, Vol. 5, Issue 03/2017/ ISSN (online): 2321-0613.
40. Neha Yadav, Gaurav Saxena and Dr. Ajay Tripathi, Thermal Performance Analysis of Evacuated Tube Collectors and Heat Exchanger: A Review, *IJSRD- International Journal for Scientific Research & Development*, Vol. 5, Issue 03/2017/ ISSN (online): 2321-0613.
41. Ajay Tripathi, April 2020, Ichhwak Malhare, Rahul Modi and A. Tripathi, Response of ATV rollcage under harmonic vibration, *International Research Journal of Engineering and Technology (IRJET)*, ISSN: 2395-0056 (online), Volume 7, Issue 4, April 2020.
42. N. Yadav, A. Tripathi, Exergy Analysis of Evacuated Tube Two Fluid Solar Water Heating System, *STM Journals, Recent Trends in Fluid Mechanics*, Volume 3, Issue 2, ISSN: 2455-1961 (online).
43. Ajay Tripathi, H Chandra and Rahul Bhargava, Development of Electro-Magnetic Anti-Lock Brake System: An Idea, *Journal of Automobile Engineering and Applications*; Volume 4, Issue

3, ISSN: 2455-3360 (online)

44. Vijay Verma, Chaitanya Sharma, Vikas Upadhyay, Ajay Tripathi and Sumit Kumar Sharma, Fatigue Crack Growth Rate and Quasi-Static Fracture Toughness behavior of Friction Stir Welds of AA7039, *Journal of Theoretical and Applied Fracture Mechanics*.
45. Chaitanya Sharma, Ajay Tripathi, Sanjay Kumar Singh, Vijay Verma and Vikas Upadhyay, Microstructure and Mechanical Properties of Welded Al-Zn-Mg Armour Alloy: Influence of Welding Technique, *Journal, Evergreen-Joint Journal of Novel Carbon Resource Sciences & Green Asia Strategy (Scopus Indexed)*, Jul 30, 2021.
46. Chaitanya Sharma, Ajay Tripathi, Vijay Verma and Vikas Upadhyay, Material Flow Behaviour in Dissimilar Friction Stir Welds of AA2024 and AA5086 Aluminum alloys, *Journal of Engineering Research (SCIE Indexed)*, Jul 30, 2021.
47. Vijay Verma, Ritesh Kumar Singh, Chaitanya Sharma, Ajay Tripathi, Arun Kumar Pandey, Sanjay Kumar Singh and Sumit Kumar Sharma, Microstructure and lap shear strength of dissimilar friction stir spot welds of aluminium alloys, *Indian Journal of Engineering and Materials Science (SCIE Indexed)*, Jul 30, 2021.
48. Chaitanya Sharma, Ajay Tripathi, Vikas Upadhyay, Vijay Verma and Sumit Kumar Sharma, "Friction Stir Spot Welding-Process and Weld Properties: A Review", *Journal of The Institution of Engineers (India): Series D (IEID)*.

B. International Conferences:

49. A Tripathi, S Khandekar & P.K. Panigrahi; "Oscillatory contact line motion inside capillaries" 15th International Heat Pipe Conference (15th IHPC) Clemson, USA, April 25-30, 2010.
50. A Tripathi and C.S.Malvi; "Practical design approach to Micro-Hydel Turbine at institution level"; Int. conf. on challenges and strategies for sustainable energy, efficiency and environment, organized by U.P.T.U. Lucknow, pp228-234, 2006 New Age Int. Publisher, India (ISBN-81-224-1910).
51. Malvi C.S, A Tripathi & M.K. Gaur; "reliable solar water pasteurizer; An approach to purify drinking water"; proceedings of 3rd Int. Conference on solar radiation and day lightening [SOLARIS 2007], Vol II, pp 229-234 Anamaya publishers, New Delhi India 2007 (ISBN-1081-88342-43-2).
52. A Tripathi, H.S.Chandra, & M.R.Ravi; "Determination of laminar burning velocity of LPG-CO₂-air mixtures" accepted for 14th International thermo conference Budapest 22-24 June 2005.
53. A Tripathi & S. K Agrawal, "Imaging analysis and micro-PIV of single meniscus inside square capillary" International conference on Advances in Mechanical Engineering, College of Engineering Pune; ID-ACAME2013 S4/01, May 29-31, 2013.
54. A. Tripathi & H. Chandra, "Performance Investigation of Automobile Radiator operated with ZnFe₂O₄ Nanofluid based coolant" accepted for Int. conf.(ICMME-2015) to be held at Singapore during 15th -16th September 2015.
55. Dr. Ajay Tripathi, "Fatigue Crack Growth Rate and Quasi Static Fracture Toughness Behavior of Friction Stir Welds of Al, Zn, Mg Alloy AA7039" ICSE-2021, 26-27 Feb 2021.
56. Dr. Ajay Tripathi, "Optimization of Maintenance Strategies for Two-Wheeler Vehicle Manufacturing Industry International conference on "Advance in Materials, Mechanics, Mechatronics and Manufacturing". 06-07 March 2021.
57. Dr. Ajay Tripathi "Microstructure and Mechanical properties of friction-stir welded interstitial-free steel using WC tool" International conference on "Advance in Materials, Mechanics, Mechatronics and Manufacturing". 06-07 March 2021; doi:10.1088/1757-899X/1136/1/012068.
58. Dr. Ajay Tripathi "A critical Review on the wear and corrosion of carbide free bainitic steel" International conference on "Advance in Materials, Mechanics, Mechatronics and Manufacturing". 06-07 March 2021 doi:10.1088/1757-899X/1136/1/012027.

59. Dr. Ajay Tripathi, "Tribological Testing Methods used in the field of Nano Lubrication- A Review" International conference on "Advance in Materials, Mechanics, Mechatronics and Manufacturing. 06-07 March 2021.
60. Dr. Ajay Tripathi "Failure Analysis of Automatic Depth and Draft Control Unit of Tractor Assembly" International conference on "Advance in Materials, Mechanics, Mechatronics and Manufacturing. 06-07 March 2021.
61. Dr. Ajay Tripathi "Tensile Properties of Friction Stir and Metal Inert Gas Welded Zn-Mg-Al Alloy" International conference on Computations in Materials and Applied Engineering (CMAE-2021) being organized by Elsevier publication.
62. Anoop Pratap Singh, Ajay Tripathi, Ravi Kumar Dwivedi, Anurag garg and Ranjan Kumar, Prediction of Passenger flow for north Central Railway region through ANN; International conference on "Advance in Materials, Mechanics , doi:10.1088/1757-899X/1136/1/012023.
63. P.M. Mishra, Ajay Tripathi and Sanjay Soni, Experimental and Comparative analysis of zirconium oxide and fly ash reinforced with heat treated Al 7075 aluminum hybrid alloy, International conference on "Advance in Materials, Mechanics,doi:10.1088/1757-899X/1136/1/012036.
64. Anoop Pratap Singh, Ajay Tripathi, Matsyendra Nath Shukla and Amit Suhane, Morphological parameters of nano materials used in nano Lubrication- a review International conference on "Advance in Materials, Mechanics, doi:10.1088/1757-899X/1136/1/012029.

C. National Conferences/Seminar:

65. Ajay Tripathi & Ishak Mohammad; "Recovery of wastage heat by heat exchanger in biomass gasifier", Ist National Conference AER 2006; pp117-122, I.I.T. Bombay.
66. Ajay Tripathi & C.S.Malvi; "Practical design approach to small educational gasifier for educational purpose", National conference AIME2006; pp 691-698, New Delhi.
67. M.K.Gaur, Ajay Tripathi & Basant Agrawal; "Energy saving by the use of solar water heating system- A case study for Gwalior town", National seminar on Eco-friendly technologies and challenges for mechanical engineers; pp 62-66, Indore, M.P.
68. A Tripathi & S.K Agarwal "Design of Air Conditioning system for Vortex lab of DRDE Gwalior" National conference on clean, efficient and affordable future through Sustainable energy at Sarguja University held during March 30-31, 2015.
69. H. Chandra, S. Paliwal and A. Tripathi; "Modeling and Analysis on the basis of Energy and Environment for Coal and Gas- Fired Thermal Power Stations"; National Conference on Energy sustainability and society: The growing Paradigm shift-ESS-2013, 30-31 March, 2013

Other Faculty Publications:

1. Ms. Swastika Patel ME Oct 2018 Buoyancy Induced Convection from Bi-heaters ina Cavity: A Numerical Study ASME Journal of Heat Transfer, Vol. 140, pp.102501/1-12, 2018. DOI: 10.1115/1.4040140.
2. Mr. Rahul Sahu ME May 2020 Shweta Sharma, Aniket Agrawal and Rahul Sahu, Heating and cooling analysis of workshop using CFD simulation, International Research Journal of Engineering and Technology (IR JET), ISSN: 2395-0056 (online), Volume 7, Issue 5, May 2020.