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.
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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.
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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 Molding, 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. Banjare2016 Computational Analysis of Three way Monolithic Catalitic Convertor 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 nuero-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 nuero-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 nuero-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

1. Parametric study of a closed cycle reheat gas turbine power plant based on the harmonic mean isentropic exponent, H Chandra, **Ajay Tripathi** & S.C. Kaushik; Int. Journal of ambient energy, Vol. 30, pp 83-93, 2009.
2. Role of Harmonic mean isentropic exponent in the analysis of closed cycle gas turbine power plant cycle with intercooler, H Chandra, **Ajay Tripathi,** A Arora & M Agrawal; Int. Journal of Engineering research and industrial applications, Vol. pp 145-160, 2009.
3. Effect of mixture constituents on the laminar burning velocity of LPG-Co2-air mixtures, **Ajay Tripathi**, H Chandra & M Agrawal; Int. Journal of Engineering and Applied Sciences, Vol. 35/3, 2010.

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5. Hydrodynamics of oscillating slug flow inside mini channels: a state of art review; **A. Tripathi** & S.K. Agrawal; Int. Journal of theoretical and applied multiscale mechanics, Vol. 2, No.3, 2012.
6. Oscillating meniscus and slugs in a square capillary: a hydrodynamic study; **A. Tripathi** & S. K. Agrawal; Int. J. of multiphase science and technology", Vol. 24, No. 1, pp. 67-87, 2012.
7. Interfacial film dynamics of moving meniscus inside square capillaries: an experimental investigation; **A. Tripathi** & S. K Agrawal, Int. J. of flow visualization and image processing, Vol. 19 (1), pp. 37-56, 2012.
8. Mitigation of Emission in Thermal Power Plant Using Conventional and Non-Conventional Fuel, H. Chandra, S. Paliwal and **A. Tripathi**; International Journal of Engineering and Science Invention (IJESI) Vol. 2/4, pp 01-06, 2013.
9. Modelling and analysis on the basis of energy and environment for coal and gas fired thermal power stations, H. Chandra, S. Paliwal and **A. Tripathi**; European Journal of Science and Technology, Vol. 2/3, pp 232-238, 2013.
10. Thermodynamics performance analysis of Reversible Reheat Joule- Brayton cycle with Cogeneration System, M. Dubey, H. Chandra, **A. Tripathi** and Anil Kumar; 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.
11. Modelling of slug flow in vertical capillary using COMSOL", Workshop on Advances in Energy Engineering and Technology, **A. Tripathi** and S.K. Agrawal; IIT, BHU, ISBN: 978-93-82880-44-8, chapter 4, pp 27-33, June 29-30, 2013.
12. Design Investigations on improved wood cooking stove for rural India, S.K. Shukla and **Ajay Tripathi**; JUET Research Journal of Science and Technology, ISSN No. 2321-6026.,Vol.1/2, pp. 203-214, June 2014.
13. Determination of Laminar Burning Velocity of LPG- CO2-Air Mixtures, **Ajay Tripathi** & H Chandra; Journal of Institution of Engineers, Vol. 91, pp. 20- 24, January 2011.
14. Exergy Analysis of Evacuated Tube Two Fluid Solar Water Heating System, N. Yadav, **A. Tripathi,** STM Journals, Recent Trends in Fluid Mechanics, Volume 3, Issue 2, 2016.
15. Fabrication and analysis of evacuated tube solar air heater, **A. Tripathi,** Rudra Pratap Singh, and H. Chandra; Journal of thermal engineering and applications, Volume 4/2, 2017.
16. Design and Analysis of a Composite Cylinder for the Storage of Liquefied Gases, **Ajay Tripathi,** Anil kumar and M.K. Chandrakar, IJSRD- International Journal for Scientific Research & Development, Vol. 5/3, 2017.
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18. Development of Electro-Magnetic Anti-Lock Brake System: An Idea, **Ajay Tripathi,** H. Chandra, Rahul Bhargava, Journal of Automobile Engineering and Applications, Vol. 4(3): pp. 18–23, 2017.
19. Response of ATV rollcage under harmonic vibration, Ichhwak Malhare, Rahul Modi and **A. Tripathi,** International Research Journal of Engineering and Technology (IRJET), ISSN: 2395-0056 (online), Vol. 7/4, April 2020.
20. Tensile Behaviour of Friction Stir Welded Joints of Different Aluminium Alloys, Chaitanya Sharma, Vikas Upadhyay, Vijay Verma, **Ajay Tripathi** & Sumit Sharma; Journal of Engg. Research ICCEMME Special Issue 1, DOI: 10.36909/jer.ICCEMME.15693, 2021.
21. Microstructure and Mechanical Properties of Welded Al-Zn-Mg Armour Alloy:Influence of Welding Technique, Chaitanya Sharma, **Ajay Tripathi,** Sanjay Kumar Singh, Vijay Verma and Vikas Upadhyay, Evergreen-Joint Journal of Novel Carbon Resource Sciences & Green Asia Strategy (Scopus Indexed), Jul 30, 2021.
22. Material Flow Behaviour in Dissimilar Friction Stir Welds of AA2024 and AA5086 Aluminum alloys, Chaitanya Sharma, **Ajay Tripathi,** Vijay Verma and Vikas Upadhyay, Journal of Engineering Research (SCIE Indexed), Jul 30, 2021.

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24. Friction Stir Spot Welding-Process and Weld Properties: A Review", Chaitanya Sharma, **Ajay Tripathi,** Vikas Upadhyay, Vijay Verma and Sumit Kumar Sharma, Journal of Institution of Engineers (India): Series D (IEID), 102, pages 549–565, 2021.
25. Fatigue Crack Growth Rate and Quasi-Static Fracture Toughness behavior of Friction Stir Welds of AA7039, Vijay Verma, Chaitanya Sharma, Vikas Upadhyay, **Ajay Tripathi** and Sumit Kumar Sharma, Journal of Theoretical and Applied Fracture Mechanics.

B. International Conferences:

1. Reliable solar water pasteurizer; An approach to purify drinking water, Malvi C.S, **A. Tripathi** & M.K. Gaur; proceedings of 3rd Int. Conference on solar radiation and day lightening [SOLARIS 2007], Vol. II, pp 229-234 Anamaya publishers, New Delhi India (ISBN1081-88342-43-2), 2007.
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3. Practical design approach to Micro-Hydel Turbine at institution level, **A Tripathi** and C.S.Malvi; Int. conf. on challenges and strategies for sustainable energy, efficiency and environment, organized by U.P.T.U. Lucknow, pp228-234, New Age Int. Publisher, India (ISBN-81-224-1910), 2006.
4. Imaging analysis and micro-PIV of single meniscus inside square capillary, **A. Tripathi** & S. K Agrawal International conference on Advances in Mechanical Engineering, College of Engineering Pune; ID-ACAME2013 S4/01, May 29-31, 2013.
5. Performance Investigation of Automobile Radiator operated withZnFe2O4 Nano-fluid based coolant **A. Tripathi** & H. Chandra, ""DOI: 10.1051/matecconf/20153401003, published by EDP Sciences, 2015 / 00, held at Singapore during 15th -16th September 2015.
6. Microstructure and Mechanical properties of friction-stir welded interstitial free steel using WC tool, Mrinmoy Sinha, Mrinmoy Sinha, Atul Kumar, **Ajay Tripathi** & Surendra Kumar Chourasiya; IOP Conference Series Materials Science and Engineering 1136(1):012068, DOI: 10.1088/1757-899X/1136/1/012068, International conference on "Advance in Materials, Mechanics, Mechatronics and Manufacturing". 06-07 March 2021.
7. A critical Review on the wear and corrosion of carbide free bainitic steel, Siddharth Sharma, **Ajay Tripathi,** Ravi Kumar Dwivedi, Rajan Kumar and Anupma Agarwal "IOP Conference Series Materials Science and Engineering 1136(1):012027, International conference on Advance in Materials, Mechanics, Mechatronics and Manufacturing", June 2021 , DOI:10.1088/1757-899X/1136/1/012027.
8. Morphological parameters of nanoparticles used in nano lubrication - a review, Ravi Kumar Dwivedi, **Ajay Tripathi,** Anoop Pratap Singh, Matsyendra Nath Shukla & Amit Suhane, IOP Conference Series Materials Science and Engineering 1136(1):012029, DOI: 10.1088/1757-899X/1136/1/012029 June 2021.
9. Experimental and comparative analysis of zirconium oxide and fly ash reinforced with heat treated Al 7075 aluminum alloy hybrid, P.M. Mishra, **Ajay Tripathi** & Sanjay Soni, IOP Conference Series Materials Science and Engineering 1136(1):012036 DOI: 10.1088/1757-899X/1136/1/012036 June 2021.
10. Prediction of passenger flow for north central railway region through ANN, June 2021, Anoop Pratap Singh, **Ajay Tripathi,** Ravi Kumar Dwivedi & Rajan Kumar, IOP Conference Series Materials Science and Engineering 1136(1):012023, DOI: 10.1088/1757-899X/1136/1/012023.
11. 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.
12. 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.
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18. Experimental Investigation on condensation heat transfer coefficient using HFC refrigerants in micro-fins tubes, Sanjeev Singh, **Ajay Tripathi** & Rajeev Kukreja; 1st Inter. Conference on Material, manufacturing and energy (ICMME-2021), December 17-18 2021

C. National Conferences/Seminar:

1. **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.
2. **Ajay Tripathi** & C.S.Malvi; "Practical design approach to small educational gasifier for educational purpose", National conference AIME2006; pp 691-698, New Delhi.
3. 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.
4. **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.
5. 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 in a 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.