



Dr. Ajay Tripathi

Name	Dr. Ajay Tripathi
Designation	Professor and Head
Areas of interest	Exergy, Two phase flows, Thermal Systems
Room No.	E-103
Mobile	(+91) 9993862689
Email id	trip2ajay@gmail.com
	https://scholar.google.com/citations?hl=en&user=VkRUo2MAAAAJ

Qualification –

	Ph.D. (Mech. Engg., MNNIT Allahabad), M. Tech. (Thermal Engineering, IIT Delhi,), B.E. (Mechanical).
--	--

Academic Experience –

1. KIET Gaziabad – Lecturer (Regular)
2. IMS Gaziabad – Lecturer (Regular)
3. Jaypee Polytechnic and Training Centre Rewa (MP) - Principal
4. Jaypee University of Engg & Technology Guna – Assistant Professor (SG)
5. RJIT Gwalior - Associate Professor

Course Handled –

Thermodynamics

Refrigeration and Air conditioning

Heat and Mass Transfer

Thermal Science

RESEARCH PAPERS AFTER JOINING AS ASSOCIATE PROFESSOR (07/11/2016)

A. Journals:

1. 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.
2. 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.
3. Ajay Tripathi, April 2020, Ichhwak Malhare, Rahul Modi and A. Tripathi, Response of ATV rollage under harmonic vibration, International Research Journal of Engineering and Technology (IRJET), ISSN: 2395-0056 (online), Volume 7, Issue 4, April 2020.
4. 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, 2016; ISSN: 2455-1961 (online).
5. 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, 2017, ISSN: 2455-3360 (online).
6. 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.

7. 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.
8. 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.
9. 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). Vol. 102/2, pp 549-565., Dec. 2021.
10. Chaitanya Sharma, Vikas Upadhyay, Vijay Verma, Ajay Tripathi, Sumit Sharma. Tensile Behaviour of Friction Stir Welded Joints of Different Aluminium Alloys DOI :10.36909/jer.ICCEMME.15693, Journal of Engg. Research; ICCEMME Special Issue 1 October 2021.
11. Chaitanya Sharma, Vijay Verma, Basanth kumar, Sumit Kumar Sharma, Ajay Tripathi, Sanjay Kumar Singh, Pankaj Sonia, Estimation of fatigue crack growth rate in different zones of friction stir welded AA7039, Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2022.
12. Chaitanya Sharma, Ajay Tripathi, Vijay Verma, Vikas Upadhyay, Material Flow Behavior in Dissimilar Friction Stir Welds of AA2024 and AA5086 Aluminum Alloys; Journal of Engg. Research ICAPIE Special Issue pp 159, Vol 153, 2022.

B. International Conferences:

1. 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.
2. Dr. Ajay Tripathi "Microstructure and Mechanical properties of friction-stir welded interstitialfree steel using WC tool" International conference on "Advance in Materials, Mechanics, Mechatronics and Manufacturing". 06-07 March 2021; doi:10.1088/1757-899X/1136/I/012068.
3. 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/I/012027.
4. 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/I/012023.
5. 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:10.1088/1757899X/1136/I/012036.

6. 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/I/012029, Vol 1136/1, 2021.

Patents filed – 01

Conference/Workshops

Dr. Ajay Tripathi	FDP on manufacturing process	CSVTU Bhilai	IIT Bhilai	11 th to 13 th Sept 2019	03 Days
Dr. Ajay Tripathi	FDP on fundamentals on Thermal Engg.	CSVTU Bhilai	IIT Bhilai	16 th to 20 th Sept 2019	1 Week
Dr. Ajay Tripathi	Course on Ultra Clean and Low Pulsation Gas Turbines	IIT Indore	IIT Indore	03 rd to 07 th Nov 2019	1 Week
Dr. Ajay Tripathi	Administrative Training	Training Academy Nimora	Training Academy Nimora	02 nd to 07 th Nov 2019	1 Week
Dr. Ajay Tripathi	FDP on Aerodynamics	IIT Kharagpur	IIT Kharagpur	17 th to 22 nd Feb 2020	1 Week
Dr. Ajay Tripathi	Online FDP on Fundamentals and Applications of Additive Manufacturing	Rajkiya Engineering College, Mainpuri (U.P.)	Rajkiya Engineering College, Mainpuri (U.P.)	21 to 25 Dec 2020	1 Week
Dr. Ajay Tripathi	Transforming Lives with Experiential Learning	GEC Raipur	GEC Raipur	23 rd to 24 th Nov 2020	2 days
Dr. Ajay Tripathi	Latest trends in manufacturing engineering	GEC Raipur	GEC Raipur	17 to 18 Sept 2020	2 days
Dr. Ajay Tripathi	Online FDP on Alternate fuels	AICTE Training and Learning Academy	AICTE Training and Learning Academy	7 to 11 th Sept 2020	3 days
Dr. Ajay Tripathi	Administrative Training	Training Academy Nimora	Training Academy Nimora	02 nd to 07 th Nov 2019	1 Week

Dr. Ajay Tripathi		FDP on recent trends in manufacturing techniques	CIPET, Korba	GEC, Raipur	24 th Feb to 9 th March 2021	2 Week
1.	Dr. Ajay Tripathi	Leadership talk		MHRD's Innovation Cell	16/05/2020	1 day
2.	Dr. Ajay Tripathi	Lighting and Surge protection for HVAC & All electronics		ISHRAE, Raipur Sub Chapter	22/05/2020	1 day
3.	Dr. Ajay Tripathi	Modern centralized heating system through heat pump		ISHRAE, Raipur Sub Chapter	22/05/2020	1 day

Achievement

Additional responsibilities –

- 1) Head of the department
- 2) TEQIP Coordinator
- 3) Institute Research and Development head
- 4) Member of the institute purchase committee