

1. Name : Dr. J. L. Bhagoria

2. Designation : **Professor (HAG)**, Mechanical Department

3. Total No. of experience : **33 Years (15 Years as Professor)**

4. Employer Name : Maulana Azad National Institute of Technology, Bhopal  
(MP)INDIA

5. Area of Specialization : Thermal Engineering

## (Super Specialization- Heat transfer and Solar energy)

6. Date of Birth : 02/07/1968

## 7. Qualification:

Degree	Board/University	Class/Award	Year
Higher Secondary	M.P.Board	First class	1985
B.E.(Mechanical)	Barkatullah Univ., Bhopal	First class	1990
M.Tech(Thermal)	Barkatullah Univ., Bhopal	Honours	1995
Ph.D. (Thermal)	IIT, Roorkee	Awarded on 15 <sup>th</sup> December	2001

## 8. Appointments Held:

Position	Organization	Duration	
		From	To

Lecturer	M.A.N.I.T. Bhopal	1 July 1992	30 June 1998
Sr. Lecturer	M.A.N.I.T. Bhopal	1 July 1998	30 June 2003
Asst. Professor	M.A.N.I.T. Bhopal	1 July 2003	30 June 2006
Associate Professor	M.A.N.I.T. Bhopal	1 July 2006	30 June 2010
Professor	M.A.N.I.T. Bhopal	1 July 2010	03 June 2025
<b>Professor(HAG)</b>	M.A.N.I.T. Bhopal	<b>04 June 2025</b>	<b>Continue</b>

#### 9. Administrative Experience:

S. No.	Post Held	Organization	From Date	To Date	Experience Duration	Nature of Work/ Duties
1.	Dean(Student Welfare)	MANIT, Bhopal	May 1, 2018	May 1, 2021	3 years,	Students related activities-Training and placement cell, all student cultural and sports activities, student council election, Hostels Administration and student discipline
2.	Head of Mechanical Department	MANIT, Bhopal	Jul 9, 2015	Dec 31, 2017	2 years, 5 months,	Department level Activities
3.	Head of Chemical Department	MANIT, Bhopal	Sep 24, 2013	Jul 8, 2015	1 year, 9 months,	Department level Activities
4.	Chairman UG,AIEEE, Admission	MANIT, Bhopal	Jul 1, 2009	Jul 1 2010	1 year,	1 <sup>st</sup> year admission related
5.	Prof. In charge Maint. Of Refrigeration and Air Conditioning	MANIT, Bhopal	Jul 1, 2004	Jul 1, 2010	6 years,	Maintenance of AC and Water Coolers
6.	Asst. Proctor	MANIT, Bhopal	Jul 1, 2002	Jul 1, 2003	1 year,	Discipline related work
7.	Member of Academic Senate	MANIT, Bhopal	Apr 1, 2011	Apr 30, 2022	10 years, 13 months,	Academics, Research
8.	Member of BOS	MANIT, Bhopal	Jan 1, 2017	Apr 30, 2022	5 years, 4 months,	Academics related work

9.	Member in M. Tech Admission Committee	MANIT, Bhopal	Jan 1, 2001	Jan 1, 2007	6 years,	Admission related work
10.	Member in College Convocation Committee	MANIT, Bhopal	Jan 1, 2004	Apr 30, 2022	18 years, 4 months,	Coordinator of registration committee and Robe distribution
11.	In charge M. Tech Thermal course	MANIT, Bhopal	Jan 1, 2001	Jan 1, 2010	9 years,	Coordinator of syllabus, time-table, and thesis related work
12.	Department Examination coordinator	MANIT, Bhopal	Jan 1, 2004	Jan 1, 2006	2 years,	Examination of end term and mid term
13.	Industry Institute Partnership cell (Department Coordinator)	MANIT, Bhopal	Jan 1, 2004	Jan 1, 2006	2 years,	Expert lectures and consultancies
14.	In charge U.G. Time Table	MANIT, Bhopal	Jan 1, 1992	Jan 1, 1997	5 years,	Time-Table preparation
15.	In charge Heat Engine Lab.	MANIT, Bhopal	Jan 1, 2002	Jan 1, 2004	2 years,	Responsibilities of all mechanical labs
16.	Chairman Library	MANIT, Bhopal	Nov 1, 2023	Continue	-	Administrative and financial work
17.	Chairman PG ordinance	MANIT, Bhopal	Mar 26, 2024	Jun 26, 2024	3 months,	Preparation of New PG Ordinance 2024 for MANIT

## 10. Total Number of Research Publications : 172

(A) Paper Published In International Journal: 67

Sr No	Title Of Paper	Isbn/Issn Number	Name Of Journal	Author/ Editors	Co-Authors/Co- Editors	Page Nos. Volume Issue No. & Year	Impact Factor Scopus Index
1	Heat Transfer Coefficient And Friction Factor Correlations For Rectangular Solar Air Heater Duct Having Wedge Shaped Rib	Issn 1960-1481	Int. Journal Of Renewable Energy	J.L .Bhagoria	J.S.Saini S.C.Solanki	Pp-341-369, Vol.25, 2002	2.226 Scopus Index

	Roughness On The Absorber Plate						
2.	Augmentation Of Heat Transfer Coefficient By Using 90 <sup>0</sup> Broken Ribs On Absorber Plate Of Solar Air Heater” International Journal Of Renewable Energy	Issn 1960-1481	Int. Journal Of Renewable Energy	J.L. Bhagoria	M.M.Sahu	Pp-2057-2073, Vol.30, 2005	2.226 Scopu Index
3.	Heat Transfer And Friction Correlations For Artificially Roughned Solar Air Heater Duct With Discrete W-Shaped Ribs”	Issn 0196-8904	Int.Journal Of Energy Conversion And Management	J.L. Bhagoria	Arvind Kumar, R.M.Sarviya	Pp-2106-2117, Vol.50, Issue 8, August 2009	2.465 Scopu Index
4.	Heat Loss Study Of Trapezoidal Cavity Absorbers For Linear Solar Concentrating Collector	Issn 0196-8904	Int.Journal Of Energy Conversion And Mgmt.	J.L. Bhagoria	P.L.Singh ,R.M.Sarviya	Pp- 329-337,Vol.51 ,Issue 2, Feb.2010	2.465 Scopu Index
5.	Thermal Performance Of Linear Fresnel Reflecting Solar Concentrator With Trapezoidal Cavity Absorbers	Issn 0306-2619	International Journal Of Applied Energy	J.L. Bhagoria	P.L.Singh,R.M.Sarviya	Pp-541-550,Vol.87 , Issue 2, Feb. 2010	2.209 Scopu Index
6.	Investigation And Optimization Of Surface Roughness For Wire Cut Electro Discharge Of Ss 304l Using Taguchi Dynamic Experiments	Issn 0975-6469	Int. Journal Of Engg. Studies	Vishal Parashar	J.L. Bhagoria, A.Rehman, Y.M.Puri	Pp.257-267, Vol .1,Number 4 ,2009	
7.	Statistical And Regression Analysis Of Material Removal Rate For Wire Cut Electro Discharge Of Ss 304l Using Design Of Experiments	Issn:0975-5462	Int. Jou. Of Engg. Science And Tech.	Vishal Parashar	J.L.Bhagoria, A.Rehman, Y.M.Puri	Pp.1021-1028, Vol .2,(5) ,2010	
8	Investigation And Optimization Of Material Removal Rate For Wire Cut Electro Discharge Of Ss 304l Using Taguchi Dynamic Experiments	Issn:0973-4562	Int. Jou. Of Applied Engineering Research	Vishal Parashar	J.L.Bhagoriaa.Rehman, Y.M.Puri	Pp.1957-1967, Vol .5, Number 11 , 2010	
9	Investigation And Optimization Of Kerf Width For Wire Cut Electro Discharge Of Ss 304l Using	Issn: 0976-6693	International Journal Of Engineering Sciences	Vishal Parashar	J.L.Bhagoria A.Rehman, P.K.Soni	Pp-369-373, Vol. 03, No. 04, April-2010	

	Taguchi Dynamic Experiments						
10	Kerf Width Analysis For Wire Cut Electro Discharge Of Ss 304l Using Design Experiments	Issn: 0976-6693	International Journal Of Science & Technology	Vishal Parashar	J.L.Bhagoria A.Rehman, Y.M. Puri	2010	Scopus Indexed
11.	Ht Characteristics Of A Copper-Nickel Multi Tube With Corrugated Fins In A Cross Flow Heat Exchanger	Issn:0974-6846	Indian Journal Of Science And Technology	J.L. Bhagoria	Yogesh Agarwal	Pp-1532-1536, Vol. 04, No. 11, Nov. 2011	Scopus Indexed
12	An Expert System For Aid In Material Selection Process Using Artificial Neural Network	-	Int.Jou. Of Advanced Engg. & Application	Vandana Somkuwar	J.L.Bhagoria H K Khaira	Pp.169-171,Jan. Issue, 2011	
13	Flat Absorbers With Trapezoidal Cavity For Linear Fresnel Reflecting Solar Concentrator	Issn 1757-398x	Int. Jou. Of Renewable Energy Tech.	J.L. Bhagoria	P.L.Singh,R.M.Sarviya	Pp 392-408 Vol.2,No.4 , 2011	2.147 Scopus Indexed
14	Experimental Study Of Augmented Heat Transfer And Friction In Solar Air Heater With Different Orientations Of W-Rib Roughness.	Issn 0894-1777	Experimental Thermal And Fluid Science Journal	J.L. Bhagoria	Atul Lanjewar R.M. Sarviya	Vol.35, Issue 6,Pp-986-995,Sept.,2011	1.234 Scopus Indexed
15	Performance Analysis Of W-Shaped Rib Roughned Solar Air Heater	Issn 0894-1777	Journal Of Renewable And Sustainable Energy	J.L. Bhagoria	Atul Lanjewar R.M. Sarviya	Vol3,Issue 4, 07/2011	2.234 Scopus Indexed
16	Heat Transfer And Friction In Solar Air Heater Duct With W-Shaped Rib Roughness On Absorber Plate		Journal Of Energy	J.L. Bhagoria	Atul Lanjewar R.M. Sarviya	2011	Scopus Indexed
17	Recent Research & Developments		International Journal Of Advances In	J.L. Bhagoria	Rajivvarshney C.R.Mehta	Pp86-116,Vol.3, No.2,2011	

	Inbiomassgasificat-Ion In India		Science & Technology				
18	An Expert System For Aid In Material Selection Process Using Artificial Neural Network		International Journal Of Advanced Engineering And Application(Ijaea)	J. L. Bhagoria	Vandana Somkuwar H. K. Khaira	Vol.2. Issue 1, Jan 2011, Pp 169-171	
19	The Effect Of Raised Temperature On Automotive Engines Combustion Chamber Material By Continuous Use Of Auto Lpg-Cng.		Journal Of Materials Science And Engineering (Jmse 20110107-3) Usa	J. L. Bhagoria	Mandloi Rk, Rehman A	Vol.5 No.10.,2011	Scopus Index
20	Performance Measurement And Data Analysis Of Material Removal Rate For Wire Cut Edm Process		Applied Mechanics And Material, Trans Tech Publication, Switzerland	J.L. Bhagoria	Vishal Parashar A.Rehman,	Pp.27-37, Vol .1,(1),2012	Scopus Index
21	Exergy Evaluation Of Packed Bed Solar Air Heater		Renewable And Sustainable Energy Reviews	J. L. Bhagoria	Mukesh Lalji Rm Sarviya	Vol.16, Issue 8, Oct .2012. Pp 6262-6267	6.619 Scopus Index
22	Improvement Of Heat Transfer Coefficient By Using Various Combination Of Helical Ribs In Tubes	Issn 2277-4378	International Journal Of Research In Engineering & Technology(Ijret)	J.L. Bhagoria		Pp316-318,Vol.1, No.6,2012	Scopus Index
23	Analysis Of Wind Characteristics Around Open Cast Uranium Mine.	Issn-0974-4290	International Journal Of Chem Tech Research	J.L. Bhagoria	Siraj Ahmed	Pp-602-609,Vol.5, No.2,2013 Icgsee-2013	Scopus Index
24	A Cfd Analysis Of A Solar Air Heater Having Triangular Rib Roughness On The Absorber Plate	Issn-0974-4290	International Journal Of Chem. Tech Research	J.L. Bhagoria	Anil Yadav	Pp-964-971,Vol.5, No.2,2013	Scopus Index

						Icgsee-2013	
25	Heat Transfer And Fluid Flow Analysis Of Solar Of Solar Air Heater: A Review Of Cfd Approach		Renewable And Sustainable Energy Reviews	J.L. Bhagoria	Anil Yadav	Pp 60-79,23,2013	6.619 Scopu Indexe
26	Enhancement Of Heat Transfer Coefficient Using Diamond Shaped Roughness On The Absorber Plate Of Solar Air Heater	Issn-2248-9622	International Journal Of Engineering Research& Application	J L Bhagoria	D A Hindoliya S S Pawar	Pp-968-974,Vol.3, Issue 2,March-April,2013	
27	Renewable Energy Sources-An Application Guide	Issn-2218-6026 (Print) 2304-3679 (Online)	International Journal Of Energy Science (Ijes)	J.L. Bhagoria	Anil Yadav	Pp 70-90,Vol.3, Issue 2, April 2013	Scopu Indexe
28	Development And Performance Evaluation Of Mixed Mode Solar Dryer With Forced Convection	Issn: (Print) 2008-9163 (Online) 2251-6832	International Journal Of Energy And Environmental Engineering	J.L. Bhagoria	C.K.Pardhi	May 2013,4:23	3.43 Scopu Indexe
29	Earth Air Heat Exchanger In Parallel Connection	Issn:223 1-5381	International Journal Of Engineering Trends And Technology (Ijett)	J.L. Bhagoria	Manoj K Dubey Atul Lanjewar	Issue 6.,Vol.4, June 2013	4.33 Scopu Indexe
30	A Cfd Based Heat Transfer And Fluid Flow Analysis Of Solar Air Heater Provided With Circular Wire Rib Roughness On The Absorber Plate		International Journal Of Energy	J.L. Bhagoria	Anil Yadav	Pp 1127-42,55, 2013	4.00 Scopu Indexe

31	Experimental Study Of Nusselt Number And Friction Factor In Solar Air Heater With Diamond Shaped Rib Roughness On Absorber Plate	Eissn-2320-0847 Pissn-2320-0936	American Journal Of Engineering Research	J L Bhagoria	D A Hindoliya S S Pawar	Pp-60-68,Vol.2, Issue 6,2013	
32	Numerical Investigation Of Flow Through An Artificially Roughened Solar Air Heater		International Journal Of Ambient Energy(Taylor & Francis)	J.L. Bhagoria	Anil Yadav	4 <sup>th</sup> July 2013	2.00 Scopus Index
33	Modeling And Simulation Of Turbulent Flows Through Solar Air Heater Having Square Sectioned Transverse Rib Roughness On The Absorber Plate	Issn 2356-6140	Scientific World Journal	J.L. Bhagoria	Anil Yadav	2013	1.219 Scopus Index
34	A Cfd Based Thermo-Hydraulic Performance Analysis Of An Artificially Roughened Solar Air Heater Having Equilateral Triangular Sectioned Rib Roughness On The Absorber Plate		International Journal Of Heat And Mass Transfer (Elsevier)	J.L. Bhagoria	Anil Yadav	Pp. 1016-1039, Vol .70., 2014	3.00 Scopus Index
35	A Numerical Investigation Of Square Sectioned Transverse Rib Roughened Solar Air Heater.	Issn1290-0729	International Journal Of Thermal Science	J.L. Bhagoria	Anil Yadav	2014	3.615 Scopus Index
36	A Numerical Investigation Of Turbulent Flows Through An Artificially Roughened Solar Air Heater	Issn 1040-7782	Numerical Heat Transfer, Part A:Applications (Taylor & Francis)	J.L. Bhagoria	Anil Yadav	2014	1.93 Scopus Index
37	Heat Transfer And Fluid Flow Analysis Of An Artificially Roughened Solar Air Heater:A Cfd Based Investigation.	Issn 2095-1701	Frontiers In Energy, Springer	J.L. Bhagoria	Anil Yadav	2014	Scopus Index
38	Review Of Development Of Artificial Roughness In Solar Air Heater And Performance Evaluation Of Different		Renewable And Sustainable Energy Reviews	J.L. Bhagoria	Atul Lanjewar M.K.Agrawal	43,Pp 1214-1223, 2015	6.619 Scopus Index

	Orientations For Double Arc Rib Roughness						
39	A Review On Air Pollution And Various Dust Models For Opencast Mines In India			J.L.Bhagoria	Sangeeth.M.G., Dr.Siraj Ahmed, Dr.G.G.Pandit –	Nse -17, Iit Kanpur, May 13-15, 2010	
40	Investigation On Thermal Performance Of Solar Air Heater By Using Artificial Roughness- A Review	Issn:231 9-8753	International Journal Of Innovative Research In Science , Engg. & Technology	J.L.Bhagoria	M.M.Sahu	Vol.3,Issue 5,May, 2014 Pp-12574-12579	
41	Experimental Investigation Of Heat Transfer And Friction Factor In Solar Air Heater Duct Using Discrete Arc Shaped Rib Roughness On Absorber Plate.	Issn: 2278-0181	International Journal Of Engg. Research & Technology	J.L.Bhagoria	M.M.Sahu	Vol.4,Issue 6,June, 2015 Pp-248-253	
42	Re-Powering Of Wind Farms: State Of Art	Issn 0975-8364	International Journal On Emerging Technologies	J.L.Bhagoria	Dr.Siraj Ahmed, Manoj Verma	6(2),Pp-112-118.2015	Scopus Index
43	Compare Results Of Experimental With Cfd Analysis Using Diamond Shaped Roughness On The Absorber Plate Of Solar Air Heater To Enhance Heat Transfer Coefficient	Issn: 2250-1991	Indian Journal Of Research	J.L.Bhagoria	D A Hindoliya S S Pawar	Vol.05, Issue-12 December 2016 Pp. 30-35	Impact Factor 5.215
44	An Analysis For Repowering Prospects Of Jamgodarani Wind Farm Using Wasp		<a href="#"><u>International Journal Of Control Theory And Applications</u></a>	J.L. Bhagoria	Siraj Ahmed, Manoj Verma	9(21):155-161 · January 2016	Scopus Index
45	An Analysis For Repowering Prediction Of Jamgodarani Wind Farm Using Matlab		International Journal Of Engineering & Technology	J.L. Bhagoria	Siraj Ahmed, Manoj Verma	7(2.31) (2018) Pp 255-258	Scopus Index
46	Heat Transfer Improvement In A Solar Air Heater By Using Different Types Of Artificial Roughness: A Review”	Issn Print: 0976-6340 And Issn Online: 0976-6359;	International Journal Of Mechanical Engineering & Technology (Ijmet)	J.L. Bhagoria	Yogesh Agrawal	Volume 9, Issue 9, September 2018, Pp. 945-967, 2018	Journal Impact Factor 9.228 Scopus Index
47	Experimental Investigation Of Heat Transfer And Friction Factor In Solar Air Heater Duct Using Double	Issn (Print): 2249-6890;	"International Journal Of Mechanical And Production	J.L. Bhagoria	Yogesh Agrawal	Volume 8, Issue 6 December 2018	Scopus Index

	Arc Reverse Shaped Rib Roughness On Absorber Plate	Issn Online: 2249-8001	Engineering Research And Development (Ijperd)				
48	Development And Performance Evaluation Of Cabinet Type Solar Dryer By Using Roughened Absorber Collector	Issn Print 0976-6340 Online 0976-6359	International Journal Of Mechanical Engineering And Technology (Ijmet)	J.L. Bhagoria	Sanjeev Kumar Yadav	Accepted For Publication In December Issue	Scopus Indexed
49	Development Of Heat Transfer And Friction Factor Correlations Using Discrete Double Arc Reverse Shaped Rib Roughness On Absorber Plate		"International Journal Of Mechanical And Production Engineering Research And Development (Ijperd)	J.L. Bhagoria	Yogesh Agrawal	Volume 10, Issue 1,Pp 585-600 December 2020	Scopus Indexed
50	Experimental Investigation Of Heat Transfer And Friction Characteristics Of Solar Collector By Using Discrete Double Arc Reverse Shaped Rib Roughness On Absorber Plate		"International Journal Of Mechanical And Production Engineering Research And Development (Ijperd)	J.L. Bhagoria	Yogesh Agrawal	Volume 10, Pp 151-168 December 2020	Scopus Indexed
51	Experimental Investigation For Pitch And Angle Of Arc Effect Of Discrete Artificial Roughness On Nusselt Number And Fluid Flow Characteristics Of Solar Air Heater		Materials Today Proceedings 2020	J.L. Bhagoria	Yogesh Agrawal	2020	Scopus Indexed
52	Enhancement Of Thermohydraulic Performance Using Double Arc Reverse Ribs In A Solar Collector :Experimental Approach		Materials Today Proceedings 2021	J.L. Bhagoria	Yogesh Agrawal	2021	Scopus Indexed
53	Enhancement Of Thermo-Hydraulic Performance Using Double Arc Reverse Ribs In A Solar Collector: Experimental Approach		Materials Today Proceedings 2021	J.L. Bhagoria	Yogesh Agrawal	2021	Scopus Indexed
54	Analysis Of Wind Characteristics Parameters		Wind Energy	J.L. Bhagoria	Atul Gautam	2021	Scopus

	With The Application Of Lidar And Mast						Indexe
55	Transverse Wedge-Shaped Rib Roughened Solar Air Heater (Sah) - Exergy Based Experimental Investigation		Renewable Energy	J.L. Bhagoria	Kapil Chaudhri	2022	Scopu Indexe
56	Enhancement Of Thermal Efficiency Of Solar Air Collector By Using Discrete Double Arc Reverse Shaped Roughness On The Absorber Plate		Materials Today Proceedings	J.L. Bhagoria	Yogesh Agrawal	2022	Scopu Indexe
57	Heat Transfer Analysis Of Double Discrete Arc Roughness With Different Relative Rib Altitudes And Relate To A Single Discrete Arc In The Solar Air Heater		International Journal Of Ambient Energy	J.L. Bhagoria	P. K. Jain	2022	Scopu Indexe
58	Computational Investigation Of Blast Furnace Internal Phenomenon Having Different Zones Using Fluent		Materials Today Proceedings	J.L. Bhagoria	Yogesh Agrawal	2022	Scopu Indexe
59	Thermohydraulic Performance Of Solar Air Heater Having Discrete Double Arc Roughness Elements On Absorber Plate		Materials Today Proceedings	J.L. Bhagoria	Yogesh Agrawal	2022	Scopu Indexe
60	Augmentation Of Heat Transfer And Fluidity Characteristics Of Rectangular Solar Air Collector Using Discrete Roughness Elements On The Absorber Plate: An Experimental Analysis		Journal Of Physics: Conference Series	J.L. Bhagoria	Yogesh Agrawal	2022	Scopu Indexe
61	Experimental Evaluation Of Hydrothermal Performance Of Solar Air Heater With Discrete Roughened Plate		Applied Thermal Engineering	J.L. Bhagoria	Yogesh Agrawal	2022	Scopu Indexe
62	A Comparative Analysis Of Wind Characteristics For Distinct Terrains Of India		Sustainable Energy Technologies And Assessments,	J.L. Bhagoria	Atul Gautam	2022	Scopu Indexe
63	Comparison Of Weibull Parameter Estimation Methods Using Lidar And Mast Wind Data In An Indian		Ocean Engineering	J.L. Bhagoria	Atul Gautam	2022	Scopu Indexe

	Offshore Site: The Gulf Of Khambhat						
64	Experimental Investigation Of Heat Transfer And Flow Analysis Of Artificially Roughened Solar Air Heater By Using Double Arc Reverse Shaped Roughness With Gap On The Absorber Plate		Materials Today Proceedings	J.L. Bhagoria	Yogesh Agrawal	2023	Scopus Index
65	Investigation Of Thermal Performance Of A Ribbed Solar Air Heater For Sustainable Built Environment		Sustainable Energy Technologies And Assessments,	J.L. Bhagoria	Yogesh Agrawal	2023	Scopus Index
66	Heat Transfer And Friction Factor Correlation For Rhombus-Shaped Roughness Geometry On The Absorber Plate Of Solar Air Collector		Journal Of Thermal Analysis And Calorimetry	J.L. Bhagoria	Kapil Chaudhri	2024	Scopus Index
67	Experimental Validation Of Ansys And Ann-Optimized Coanda Bump Aerofoil Shaped Roughness Element For Enhanced Performance In Solar Air Heating Systems		International Communications In Heat And Mass Transfer	J.L. Bhagoria	Jailal Patel	2024	Scopus Index

**(B)Paper Published In National Journal: 20**

Sr. no	Title of Paper	ISBN/ ISSN No.	Name of journal	Author/ Editors	Co-authors/Co-Editors	Page Nos. volume issue No. & year	Impact fac

1	A Simplified Numerical Model for Nucleate Boiling at High Heat Flux		Journal of MANIT	J.L.Bhagoria	A.K.Patil, R.M.Sarviya	Vol.37, pp-69-80, 2004.	
2	An Optimization for computing the augmentation rate in solar collector using rough surface		Journal of MANIT	J.L.Bhagoria	Satyashree Ghodke	Vol.37, pp-81-94,2004	
3.	Experimental Study of Natural Convective multishelf solar dryer	-	Engineering and Environmental Sciences Journal	J.L. Bhagoria	Ajay Kumar Pandey	pp-29-35, Vol. 2 No.1, January-July <b>2006</b>	-
4.	Sustainable development through efficient solar air heaters	ISSN 0973-6921	Journal of environmental research and development	J.L. Bhagoria	Arvind Kumar, and R.M.Sarviya	pp-796-807, Vol. 2, No. 4, April – June <b>2008</b>	0.078
5.	Effect of some parameters on linear fresnel solar concentrating collector	ISSN 0973-6921	Journal of environmental research and development	J.L. Bhagoria	P.L.Singh, R.M.Sarviya	Vol 4, No 2, 2 oct to Dec <b>2009</b>	0.078

6	Effect of shot peening on fatigue corrosion on Austenitic stainless steel	-	Al-Falah's Journal of Science and Technology, New Delhi	Vilas Warudkar	J.L. Bhagoria, Siraj Ahmed	pp 73- 81, Vol 1, No 2, Apr- Jun <b>2009</b>	-
7	Kerf Width analysis for wire cut electro discharge of SS 304L using design of experiments	ISSN: 0974-6846	Indian Journal of science and technology	Vishal Parashar	J.L. Bhagoria A.Rehman, Y.M.Puri	pp-369- 373, Vol. 03, No. 04, April- <b>2010</b>	-
8	Statistical and regression analysis of Surface Roughness for for wire cut electro discharge of SS 304L using design of experiments	ISSN: 0973-6344	Mathematics Applied in science and Technology	Vishal Parashar	J.L. Bhagoria A.Rehman, Y.M.Puri	pp.27-37, Vol .1,(1) , <b>2009</b>	-
9	Performance Measurement and data analysis of Material removal rate for Wire cut EDM process		Applied Mechanics and Material,Trans Tech Publication, Switzerland	J.L. Bhagoria	Vishal Parashar A.Rehman,	pp.27-37, Vol .1,(1) , <b>2009</b>	
10	Enhancement of H T Ratio in a solar air Duct with W-shaped roughened absorber plate	ISSN 0973-6921	Journal of environmental research and development	J.L. Bhagoria	Atul lanjewar, R.M.Sarviya	pp-53-59, Vol. 5, No. 1, July – Sept. <b>2010</b>	0.078
11	Heat transfer Enhancement in solar air Heater	ISSN: 0974-6846	Indian Journal of science and technology	J.L. Bhagoria	Atul lanjewar, R.M.Sarviya	pp-908- 910, Vol. 03, No. 08, Aug. <b>2010</b>	
12	Small scale biomass gasification technology in Indian overview		Journal of engg. science and mgmt. education	J.L. Bhagoria	Rajiv Varshney C.R.Mehta	Vol.3,2010 pp 33-40	
13	Heat transfer enhancement in packed bed solar air heater.	ISSN: 0974-6846	Indian Journal of science and technology	J.L. Bhagoria	Lalji.M R.M.Sarviya	pp-747- 749, Vol. 04, No. 07, Aug. <b>2010</b>	
14	Different methods for efficiency enhancement of		Indian Journal of applied life sciences	J.L. Bhagoria	Lalji.M R.M.Sarviya	pp-1-2, Vol. 06, <b>2010</b>	

	packed bed solar air heater.						
15	Experimental investigations on packed bed solar air heater.		Current world Environment	J.L. Bhagoria	Lalji.M R.M.Sarviya	pp-151-157, No-1,Vol. 06, <b>2011</b>	
16	Various designs of solar collectors for enhancement of thermal performance		Material Science Research India	J.L. Bhagoria	Lalji.M R.M.Sarviya	pp-101-105, No-1,Vol. 08, <b>2011</b>	
17	Experimental analysis of overall HTC & PD for cross flow fin tube type heat exchanger	ISSN 2249-3107	Journal of Engineering Research and technology	J.L. Bhagoria	Yogesh Agarwal	pp-69-79, Vol. 01, No. 01, <b>2011</b>	
18	HT Characteristics of a copper-nickel multi tube with corrugated fins in a cross flow heat exchanger	ISSN:09 74-6846	Indian Journal of science and technology	J.L. Bhagoria	Yogesh Agarwal	pp-1532-1536, Vol. 04, No. 11, Nov. <b>2011</b>	
19	A CFD based heat transfer and fluid flow analysis of conventional solar air heater.		Journal of engg. science and mgmt. education	J.L. Bhagoria	Anil s yadav	Vol.6(2),2013 pp 137-146	
20	An economic analysis of a solar system		Corona journal of science and technology	J.L. Bhagoria	Anil s yadav	2013;2(1), pp:3-7	

**(C) Paper Published In International Conference: 43**

Sr no	Title of paper	Conference venue & duration	Author	Name of Co-authors	Page Nos. & year
1	Shot peened surface and boiling heat transfer	International Conference on shot peening and blast cleaning. At M.A.C.T., Bhopal.	J.L.Bhagoria	H.K. Khaira M.C. Sharma	Feb.22-23, 1996
2	Effect of staggered Discrete Square Roughness elements on heat transfer and friction factor	Proceeding of Int.conference on Recent Advances in Solar Energy and Conversion Systems on 28-29 Sept.2002 at M.A.N.I.T., Bhopal.	J.L.Bhagoria	A.R.Jaurarkar	pp-87-89

3	Enhancement of heat transfer coefficient by packed bed solar air heater	Proceeding of Int.conference on Recent Advances in Solar Energy and Conversion Systems on 28-29 Sept.2002 at M.A.N.I.T., Bhopal.	J.L .Bhagoria	R.M Sarviya and S.S.Arora	pp-96-100
4	Benefits of Solar Energy with reference to Indian Economy	Proceeding of Int.conference on Recent Advances in Solar Energy and Conversion Systems on 28-29 Sept.2002 at M.A.N.I.T., Bhopal.	J.L .Bhagoria	Deepak Paliwal, Dinesh Agrawal, Anshu Malhotra	pp 406-411
5	Six- Sigma an Emerging Technique for Quality Production; A Case Study	E-Manufacturing International Conference at MANIT, Bhopal,	J.L .Bhagoria	H.B. Khurasia, Virendra Titaria Ashutosh Pandey	Nov,17-19,2002.
6	Heat Transfer and fluid flow studies in Double pipe Heat Exchanger by using Turbulator	10 <sup>th</sup> International Refrigeration and Air Conditioning Conference at Purdue, Univ. of Purdue..	J.L .Bhagoria	Shivkumar Pardhi	July 10-15, 2004
7	Thermal performance of Solar Air Heater by using Shot Peened Absorber Plate	9 <sup>th</sup> International conference on shot peening, at Paris, France	J.L .Bhagoria	Amit Jain,MC Sharma	6-9 Sept 2005, 67-74.
8	Investigation of Heat transfer Coefficient and Pressure Drop During Condensation of R22 using coiled wire inserts	11 <sup>th</sup> Int. Refrigeration and Air Conditioning Conference at Purdue, 04 days	J.L .Bhagoria		July 17-20, 2006.
9	Effects of geometrical and flow parameters on solar air collectors	World renewable Energy Congress- IX Florence,Italy, 07 days	J.L Bhagoria		19-25 August 2006
10	Effect of change of duct shapes on heat transfer and fluid flow in a cross flow heat exchanger	Proceedings of International Conference Recent Advances in Heat transfer, KITS,Coimbatore, 2 days	J.L .Bhagoria	Manish Diwan	pp- 351-363, 21-22 sept. 2006
11	Augmentation of Heat Transfer Coefficient by using W-Shape Ribs on Absorber Plate of Solar Air Heater	Proceedings of International Conference Recent Advances in Heat transfer, at KITS, Coimbatore, 02 days	J.L. Bhagoria	Atul Lanjewar, R.M. Sarviya	pp-307-314, 21-22 sept. 2006
12	Experimental investigation of heat transfer characteristic of bundles of brass tube	Proceedings of International Conference on Recent Advances in	J.L. Bhagoria	Irshad hassan , R.M.Sarviya	pp-179-187, 21-22 sept. 2006

	with corrugated copper fins	Heat transfer, at KITS, Coimbatore, 02 days			
13	Augmentation of Heat Transfer Coefficient by using Discrete W - Shape Ribs on Absorber Plate of Solar Air Heater	Proceedings of International Conference Recent Advances in Heat transfer, at KITS, Coimbatore, 02 days	J.L. Bhagoria	Arvind Kumar, and R.M. Sarviya	pp-343-349, 21-22 sept. 2006
14	Effect of Auto LPG combustion temperature on SI engine elements	Proceedings of Int. Conference on recent trends in Mechanical engineering, UEC, Ujjain 03 days	J.L. Bhagoria	R K Mandloi, PK Soni	4- 6Oct. 2007
15	Enhancement of Heat Transfer Ratio in Solar Air Duct with Discrete W - Shape Roughned Absorber Plate	Proceedings of Int. Conference on recent trends in Mechanical engineering, UEC, Ujjain, 03 days	J.L. Bhagoria	Arvind Kumar, R.M. Sarviya	4 - 6Oct.2007
16	Investigation of Overall Enhancement Ratio during condensation of R-22 using coiled wire inserts	Proceedings of Int. Conference on recent trends in Mechanical engineering, UEC, Ujjain, 03 days	J.L. Bhagoria	Atul Lanjewar	4 - 6Oct.2007
17	Performance study of a tubular absorber18with linear fresnel reflecting solar devic20	Proceedings of Int. Seminar on clean energy , ISCE 2007, at Central Mechanical Engineering Research Institute, Durgapur- 713209, 02 days	J.L. Bhagoria	Panna Lal Singh, S.Ganesan,R.M. Sarviya	15-16 Oct.2007
18	Prospect of linear concentrator based solar water heating system in the silk reeling units	Proceedings of Int.Conference on Advances in energy research, IIT.,Bombay, 03 days	J L Bhagoria	Panna Lal Singh, R.M. Sarviya	pp 198-203, 12-14 Dec.2007
19	Investigation of thermal efficiency in solar air collector	Proceedings of Int.Conference on Advances in energy research,IIT.,Bombay, 03 days	J.L.Bhagoria	Arvind Kumar, R.M. Sarviya	pp 231-238, 12-14 Dec.2007
20	Sustainable development through efficient Solar Air Heaters	Proceedings of Int. Congress of Environmental Research,ICER-07, Govt. Geetanjali girls P.G College, Bhopal, 01 day	J.L. Bhagoria	Arvind Kumar, and R.M. Sarviya	pp-98,28-30th Dec.2007
21	Investigation of Thermal Performance of Diesel Engine using Blends of Jatropha oil with Diesel	Proceedings of Int. Conference in Mechanical Engineering,S.V. NIT,Surat,Gujarat, 03 days	J.L. Bhagoria	Rajiv Varshney, , C.R. Mehta and A.K. Dubey	pp 187-193, 15-17 Dec 2008
22	Improvement in Thermal performance	Proceedings of the 15 th ISME Internatonal Conference on New	J L Bhagoria	Panna Lal Singh, R.M. Sarviya	pp 252- 255, 18-20 March 2008

	of the Absorber for linear Fresnel solar Concentrating Collector	Horizons of Mechanical Engg,RGTU,Bhopal, 03 days			
23	Study of HT & Friction Characteristics of various Artificial Roughness in Solar Air Heater duct by using Computational Fluid Dynamics (CFD) Software	Proceedings of International Conference on Advances in Renewable Energy,MANIT ,Bhopal	J L Bhagoria	Rajendra S Rajput, Ajeet Kumar Giri and Ashutosh Kumar	Vol-1 Pp 203-209 june 24-26, 2010
24	Computational Fluid Dynamics Simulation of Solar Air Heater	Proceedings of International Conference on Advances in Renewable Energy,MANIT ,Bhopal	J L Bhagoria	Rajendra S Rajput, Ajeet Kumar Giri and Ashutosh Kumar	Vol-1 Pp 393-400 june 24-26, 2010
25	Comparision between Natural and Solar Drying using Cabinet Type Solar Dryer	Proceedings of International Conference on Advances in Renewable Energy,MANIT ,Bhopal	J L Bhagoria	Sanjeev yadav	Vol-2 pp 178-184,june 24-26,20
26	Development and Performance Evalutaion of Cabinet Type Solar Dryer Using Smooth and Roughened Absorber Surface	Proceedings of International Conference on Advances in Renewable Energy,MANIT ,Bhopal	J L Bhagoria	Sanjeev yadav	Vol-2 pp 185-192,june 24-26,20
27	Development and Performance Evalutaion of Mixed Mode Solar Dryer with Forced Convection	Proceedings of International Conference on Advances in Renewable Energy,MANIT ,Bhopal	J L Bhagoria	Chandrakumar Paridhi	Vol-2 pp 555-564,june 24-26,20
28	The Study of Thermal Efficiency and Exergy Analysis of a Rectangular Roughened Duct with Multi V-Shape Geometry of Roughness on Absorber Plate	Proceedings of International Conference on Advances in Renewable Energy,MANIT ,Bhopal	J L Bhagoria	A.K.Shakya, A. Lanejwar	Vol-2 pp 853-859 ,june 24-26,2010
29	The Study of Thermo Hydraulic Performance of Rectangular Roughened Duct with Multi V-Shape Geometry of Roughness on Absorber Plate	Proceedings of International Conference on Advances in Renewable Energy,MANIT ,Bhopal	J L Bhagoria	A.K.Shakya, A. Lanejwar	Vol-2 pp 869-875 ,june 24-26,2010

30	Expert System for Material identification for product design	4 <sup>rd</sup> Inter. Conference on Modelling and Simulation (ICMS2011) held on April 25–27, 2011, at Phuket Island, Thailand.	J. L. Bhagoria	Vandana Somkuwar, H. K. Khaira	April 25–27, 2011
31	The effect of raised temperature on automotive engines combustion material due to long term continuous use of Auto LPG-CNG.	Inter. Con. On Experimental Mechanics(ICEM-2010),Malaysia	J. L. Bhagoria	Mandloi RK,Rehman A	2011
32	Effect of Environmental temperature rise on automotive performance and fuel consumption	SAE 2012,World Congress,Detroit,Michigan,USA	J. L. Bhagoria	Mandloi RK,Rehman A	April,2012
33	A Review: Earth tube heat Exchanger	International conference on Global Scenario in Environment and Energy,14-16 march 2013 at MANIT,BHOPAL	J. L. Bhagoria	M.Tiwari,M K Dubey,A Lanjewar	March 2013
34	A Review on performance evaluation of artificially roughened solar air heater	International conference on Global Scenario in Environment and Energy,14-16 march 2013 at MANIT,BHOPAL	J. L. Bhagoria	Shailesh raghav ,A Lanjewar	March 2013
35	A Review on Air Pollution and Various Dust Models for Opencast mines in India	NSE -17, IIT Kanpur,	Dr.J.L.Bhagoria	Dr.Siraj Ahmed, Dr.G.G.Pandit Sangeeth.M.G	May 13-15, 2010
36	A CFD Analysis of square ribs artificially roughened on solar air heater .	2 <sup>nd</sup> International conference in Mechanical ,Electronics and Mechatronics Engineering in London(UK),17-18,JUNE,2013.	Dr.J.L.Bhagoria		17-18,JUNE,2013
37	A CFD Analysis of solar air heater having triangular rib roughness on the absorber plate	International conference on Global Scenario in Environment and Energy,14-16 march 2013 at MANIT,BHOPAL	J L Bhagoria	Anil s Yadav	March 2013
38	Investigation of heat transfer and flow analysis of an artificially roughened solar air heater having arc roughness with gap	Int.Journal of Engg. Research and Technology	J L Bhagoria	S.Nagpure K.R.Aharwal	Vol. 4,Issue 04,April-2015 pp-1206-1213
39	An Analysis for repowering prospects of jamgodarani wind farm using WAsp	JLU INTERNATIONAL CONFERENCE-2016	Dr.J.L.Bhagoria	Dr.Siraj Ahmed, Manoj Verma	pp-73,28 <sup>th</sup> jan.2016

40	Comparative performance analysis of support vector machine models for predicting THPP of solar parabolic trough receiver with twisted tape inserts.	International journal of Mechanical Dynamics & Analysis.	Mohmad ismail	Jailal prabhakar patel Dr. J.L. Bhagoria	SISTEC,BHOPAL
41	Comparative study of linear regression techniques for analyzing THPP of solar parabolic trough receiver with twisted tape inserts using machine learning.	International journal of Mechanical Dynamics & Analysis	Jailal prabhakar patel	Mohmad ismail Dr. J.L. Bhagoria	SISTEC,BHOPAL
42	Optimization of thermo hydraulic performance parameter of solar parabolic trough receiver with twisted tape inserts using ANN.		Jailal prabhakar patel	Mohmad ismail Dr. J.L. Bhagoria	NIT,Hamirpur
43	Numerical investigation of THPP of solar parabolic trough receiver with twisted tape inserts via neural network using LM, BR, SCG algorithm.		Mohmad ismail	Jailal prabhakar patel Dr. J.L. Bhagoria	NIT,Hamirpur

**(D) Paper Published In National Conference: 42**

Sr no	Title of paper	Conference venue & duration	Author	Name of Co-authors	Page Nos. & year
1	Application of computer graphics in engineering drawing and drafting	8 <sup>th</sup> National convention. of computer engg. Division on information technology in engg. Nov. 28-29, 1992. at MACT, Bhopal.	J L Bhagoria	Siraj Ahmed	1992
2	Use of Audio-Video Aids for Workshop Practice	National seminar on development of lab and workshop of technical institutions. Dec. 11-12, 1993 at MACT, Bhopal	J L Bhagoria		1993
3	Criteria for personnel management in technical institutes	ISTE seminar on problems & issue in Institutional management- 8 <sup>th</sup> April 1995 at MACT, Bhopal.	J L Bhagoria		1995
4	Contingency approach to management in technical institutions	National Seminar on planning and management of technical education.- Aug 19-20, 1995. at Jawaharlal Nehru Tech. Univ. Hyderabad	J L Bhagoria		

5	Statistical analysis & Development in shot peening intensity measurement	40 <sup>th</sup> Annual congress of ISTAM-14-17 Dec. 1995.	J L Bhagoria	M.C.Sharma	1995
6	Society environment and Technology against tides	All India seminar on cogeneration and Non-Conventional energy Sources on 24-25 mar 1996.	J L Bhagoria		1996
7	Classroom management and discipline	National conference on TQM in Technical Education.Dec.21-22,1996,at MACT, Bhopal.	J L Bhagoria	Yogendra Kumar	1996
8	Model of mgmt. to improve the quality of Technical education	National conference on TQM in Technical Education.Dec.21-22,1996,at MACT, Bhopal.	J L Bhagoria	Yogendra Kumar	1996
9	Using a solar photovoltaic DC motor pump without energy storage	All India seminar on efficient use of electric motors, Generators& drives for industries and utilities for the purpose of achieving saving in energy. Feb 16, 1997 at IE, Karnal.	J L Bhagoria	Yogendra Kumar,M.P. Kohle	1997
10	New Challenges on Technical Education due to Globalisation	27 <sup>th</sup> Annual Convention of ISTE & national seminar on Global Interconnectivity for Technical Education in India. Dec.19-21, 1997	J L Bhagoria	S.K. Dwivedi	1997
11	An experimental Investigation of Heat Transfer and friction using wedge shaped transverse Ribbon absorber plate of Solar Air-Heater	Proceedings of the 24 <sup>th</sup> NREC 200. Nov. 30 <sup>th</sup> -Dec. 2, 2000 at IIT, Bombay.	J L Bhagoria	J.S.Saini and S.C.Solanki	page43-48
12	Thermodynamic Performance of a Rectangular duct with wedge transverse ribs on one broad Heated wall	16 <sup>th</sup> National convention on Mech. Engg. Deptt., Roorkee, Feb. 29-30, 2000.	J L Bhagoria	J.S.Saini and S.C.Solanki	Page 926-932,2000
13	Heating of buildings by Efficient Solar Air Collectors	Proceeding of National Workshop, Dec.19-20 <sup>th</sup> 2002 MACT, Bhopal.	J L Bhagoria	R.M. Sarviya	2002
14	An experimental study for modification in cooking pot of solar cooker	Proceeding of the National Conference on Emerging Energy Technologies INCEET-2003, March 28-29, pp. 105-109, Mech. Deptt. NIT, Hamirpur (H.P.)	J L Bhagoria	Kamal Kant Mani,Manoj Nagle,Rajesh Gehlot,Ravishashai kant kureel	

15	Thermal performance solar air heater with porous absorber	Proceeding of the National Conference on Emerging Energy Technologies INCEET-2003, March 28-29, pp. 105-109, Mech. Deptt. NIT, Hamirpur (H.P.)	J L Bhagoria	Atul M, Lanjewar	2003
16	Investigation of Heat Transfer characteristics for Packed Bed Air Heater	National seminar on Energy Solutions, May 15-16, 2004. LNCT, Bhopal (M.P.).	J L Bhagoria	R.M.Sarviya, Gaurav Tiwari	2004
17	Experimental study on boiling heat transfer behaviour of shot peened copper alloy	NCSAME-2004, June 29-30, 2004, Mech. Engg. Deptt. JNTU college of Engg., Katakpally, Hyderabad (A.P.).	J L Bhagoria	V.Warudkar	2004
18	Experimental study of Heat Transfer Coefficient in solar air heater by using artificial rough and absorber plate	Conference on advances in Mech. Engg., Sri Venkateswara University. College of Engg., Tirupati (A.P.).	J L Bhagoria	Amit Jain	20-21, Aug'2004
19	Effect of silicon nitride coating on temperature distribution in CI Engine piston using IDEAS Software	National conference on computational methods in mechanical engineering", Sept.16-17, 2005, MED, Osmania University, Hyderabad	J L Bhagoria	Mahesh Kumar S. Karande	2005
20	Effect of shot peening on boiling heat transfer on copper alloy	Proceeding of the National Conference on Recent developments and future trends in Mechanical Engineering (RDFTME-2006), Mech. Deptt. NIT, Hamirpur (H.P.), 02 days	J L Bhagoria		pp. 50-54, 03-04 Nov 2006
21	Thermal performance of solar air collector by using W-shaped artificial roughness	Proceeding of the National Conference on Recent developments and future trends in Mechanical Engineering (RDFTME-2006), Mech. Deptt. NIT, Hamirpur (H.P.), 02 days	J.L. Bhagoria	Atul M Lanjewar, and R.M. Sarviya	pp. 155-159, 03-04 Nov 2006
22	A study of geometrical and flow parameter on the thermal performance of solar collector	Proceeding of National Seminar on CFD-the New 3 <sup>rd</sup> Dimension in Flow analysis and thermal Design-2007, School of energy and Environment management, RGPV, Bhopal	J.L. Bhagoria	Deepak Paliwal	pp 117-126, 2007

23	Small Wind Turbines- A Review” Proceeding of the	National Conference on Challenges of power sector in 21 <sup>st</sup> Century , Elect. Deptt., Jabalpur (M.P.), 02 days	J.L. Bhagoria	Vandana Arora, and Siraj Ahmed	pp. 1-7, 13-14 Nov 2007
24	Study of Utilization of solar energy throughSolar Pond”	Proceeding of the National Conference on Challenges of power sector in 21 <sup>st</sup> Century, , Elect. Deptt., Jabalpur (M.P.), 02 days	J.L .Bhagoria	A.R.Jaurker, A.K.Jain and Neeraj Sharma	13-14 Nov, 2007
25	Effect of parameters on thermal performance of solar air collector	”” Proceeding of the National Conference on Mechanical and Production Systems in 21 <sup>st</sup> Century, Mech. Deptt., Jabalpur (M.P.), 02 days	J.L. Bhagoria	S.S.Pawar, R.K. Mandloi and P.K.Soni	pp 71-74, 29-30 Nov, 2007
26	Modified Aproach towards energy conservation in industries for productivity enhancement	Proceeding of the National Conference on Mechanical and Production Systems in 21 <sup>st</sup> Century, Mech. Deptt., Jabalpur (M.P. ), 02 days	J.L. Bhagoria	P.K.Soni and R.K. Mandloi	pp 139-143, 29-30 Nov, 2007
27	Heat transfer Enhancement in channel of solar air collector by using Discrete W-Shaped Artificial Roughened Absorber	19 <sup>th</sup> National and 8 <sup>th</sup> ISHMT-ASME Heat and Mass Transfer Conference, JNTU Hyderabad, India, 03 days	J.L. Bhagoria	Arvind Kumar, and R.M. Sarviya	pp-88, January 5, 2008
28	Eco friendly altaernative fuels for compression ignitionengines	National Seminar on Recent advances in chemical engineering operation and process in chemical and allied industries, Department of chemical engineering, Institute of Technology, Guru Ghasidas University,Bilaspur(C.G), 02 days	J.L. Bhagoria	R.K. Mandloi	page No.52, Feb. 06,2008
29	Experimental study of thermohydraulic performance of artificially roughened absorber plate of solar air heater	National Seminar on Recent advances in chemical engineering operation and process in chemical and allied industries, Department of chemical engineering, Institute of Technology, Guru Ghasidas University,Bilaspur (C.G), 02 days	J.L. Bhagoria	Amit Jain	page No.23, Feb.05-06,2008
30	Investigation of heat transfer and fluid flow in rectangular channel of solar air heater by using artificial roughness	National Seminar on Recent advances in chemical engineering operation and process in chemical and allied industries, Department of chemical engineering, Institute of	J.L. Bhagoria	Vishnu Sharma	page No.27, Feb.05-06, 2008

		Technology, Guru Ghasidas University, Bilaspur (C.G), 02 days			
31	Heat transfer and friction analysis in solar air duct”, National conference on Energy efficient systems	Jabalpur Engg College, Jabalpur, 02 days	J.L. Bhagoria		11-12 August 2008
32	Thermal efficiency and energy analysis of a solar air heater”, National conference on Energy efficient systems	Jabalpur Engg College, Jabalpur, 02 days	J.L. Bhagoria		11-12 August 2008
33	Wind resource assessment for for village agar-a case study”. National conference on Energy efficient systems	Jabalpur Engg College, Jabalpur, 02 days	J.L. Bhagoria		11-12 August 2008
34	Augmentation on heat transfer in solar air collector using artificial roughness”: A review	proceedings of national conference on Applied engineering sciences, TECHNOSAGA-2008, at SIRT, Bhopal, 01 day	J.L. Bhagoria	Arvind Kumar, and R.M. Sarviya	pp 4-8, Oct 24, 2008
35	Influence of tool electrode wear in electric discharge machining	Proceeding of All India Seminar on life Cycle Analysis,Measurement and Condition monitoring, Institution of Engineers (India),Bhopal, 02 days	J.L. Bhagoria	Vishal Parashar, A. Rehman, and Yogesh Puri	pp121-132, 25-26 May,2009
36	Enhancement of heat transfer coefficient using square shaped roughness on the absorber plate of solar air heater	National Conference on advances in Renewable energy systems- 2013,JNCT,BHOPAL	J.L. Bhagoria	S S Pawar D A Hindoliya	pp-10,5-6 April,2013
37	A CFD Analysis of an artificially roughened solar air heater having semicircular rib.	National Conference on advances in Renewable energy systems- 2013,JNCT,BHOPAL	J.L. Bhagoria	Anil Singh yadav	pp-13,5-6 April,2013

38	Introduction to Weibull analysis and its use in reliability analysis for boiler equipment	Proceedings of National Conference on Frontiers in Mechanical Engineering(FIME-2013) ISBN:978-93-83083-27-5	J.L. Bhagoria	Hemant Kumar Deshraj	pp-03-07, August 29-31,201 Bhopal
39	Thermal performance of Earth tube heat exchanger in series connection	Proceedings of National Conference on Frontiers in Mechanical Engineering(FIME-2013) ISBN:978-93-83083-27-5	J.L. Bhagoria	Madhur Tiwari	pp-23-26, August 29-31,201 Bhopal
40	A CFD Based performance analysis of a solar air heater	Proceedings of National Conference on Frontiers in Mechanical Engineering(FIME-2013) ISBN:978-93-83083-27-5	J.L. Bhagoria	Anil Singh yadav	pp-27-30, August 29-31,201 Bhopal
41	Thermal performance of Earth tube heat exchanger in parallel connection	Proceedings of National Conference on Frontiers in Mechanical Engineering(FIME-2013) ISBN:978-93-83083-27-5	J.L. Bhagoria	Manoj kumar Dubey	pp-35-37, August 29-31,201 Bhopal
42	Role of Maintenance strategies in Industries for better Efficiency	Proceedings of National Conference on Frontiers in Mechanical Engineering(FIME-2013) ISBN:978-93-83083-27-5	J.L. Bhagoria	Hemant Kumar Deshraj	pp-155-159, August 29-31,201 Bhopal

## 11. Details of Ph. D. candidate Guided : 16

S. No	Name of candidate	Title of Ph.D thesis	Awarded year
1	Arvind kumar	Study of Heat Transfer and Fluid Flow of a solar air duct using discrete W shaped artificial roughness	06.04.09
2	Panna lal singh	Thermal performance studies of trapizodial cavity absorbers for linear Fresnel reflecting solar device	17.09.09
3	Vishal Parashar	Experimentation and optimization of wire cut electro discharge machining process.	23.04.11

4	Atul Lanjewar	Study of Heat Transfer and Friction factor of a solar air duct using W shaped artificial roughness	23.10-11
5	Mukesh Lalji	Performance evaluation of Packed bed solar air heater with wire metrics.	19-12-2011
6	Ms. Vandana Somkuwar	Development of expert system for selection of material using artificial neural network.	02-07-2012
7	R.K.Mandloi	Experimental investigation on spark Ignition Engine temperature using gasoline and LPG.	21-08-2012
8	Rajiv Varshney	Design and Optimization of Biomass based closed top downdraft gasifier	27-12-2012
9	Anil SinghYadav	CFD analysis of heat transfer and fluid flow in a solar air heater duct with different ribs geometry on absorber plate	24-04-2014
10	M M Sahu	Study of Heat Transfer and Friction factor of a solar air duct using arc shaped artificial roughness on absorber plate	12-03-2016
11	Shashikant Nagpure	Investigation of Heat Transfer and fluid flow Phenomenon of artificially roughened duct using liquid crystal thermography system	13-04-2016
12	Manoj Verma	Techno-Economic Analysis of repowering of wind Farm: A Case study in central India	01-11-2017
13	Shyam Sunder Pawar	Investigation of Heat Transfer and fluid flow in Solar Duct by using Diamond Shape roughened absorber Plate.	20-8-2018
14	Yogesh Agarwal	Experimental investigation on Thermo-hydraulic performance of solar air heater by using reversed arc artificial roughness on the absorber plate.	25-08-2020
15	Atul Gautam	Development of novel machine learning technique for improvisation of off shore wind resource assessment	31-07-2023
16	Kapil Chaudhari	Thermal Performance Analysis of Solar Air Heater with Artificial Roughness on the Absorber Plate.	28-05-2025

**12. Details of Ph. D. candidate registered : 03 (Full time),**

**03(Part time)**

**13. Details of M. Tech thesis guided : 83**

S. No.	Candidate Name	Topic	Year	University	Supervisors
1	Neeraj Viashya	Computer Aided Thermal Design and Analysis of Extended Surface Conventional Solar Air Heater.	2002	Barkatullah, Bhopal	Dr.R.M.Sarviya Dr.J.L.Bhagoria
2	K.Venkata Subbaiah	Optimal Design of Artificially Roughned Solar Air Heaters	2002	Barkatullah, Bhopal	Dr.J.L.Bhagoria
3	Arif Khan	Experimental Investigation of Heat Transfer Coefficient of Solar Air Heater by using Artificial Roughness.	2003	MANIT, Bhopal	Dr.J.L.Bhagoria
4	Gaurav Tiwari	Experimental Study on Packed Bed Solar Air Collector.	2004	MANIT, Bhopal	Dr.J.L.Bhagoria
5	ShivKumar Pardhi	Enhancement of Heat transfer Coefficient in shell & tube Heat Exchanger by using Twisted tape.	2003	MANIT, Bhopal	Dr.J.L.Bhagoria
6	MadanMoh an Sahu	Augmentation of Heat Transfer Coefficient of Solar Air Heater by using Artificial Roughness(90° Broken Transverse ribs).	2004	MANIT, Bhopal	Dr.J.L.Bhagoria
7	Amit Jain	Thermal performance ratio of Solar Air Heater By Shot peening Roughned Absorber plate.	2004	MANIT, Bhopal	Dr.J.L.Bhagoria
8.	VishnuDutt Shsrmra	Thermohydraulic performance of solar Air Heater by using V-shased Rib on the absorber plate	Sept 2004	MANIT Bhopal	Dr.J.L.Bhagoria
9	Manish Bhola	Design and Analysis of Heat Recovery Hood for a Rotany Kiln	Sep. 2004	MANIT Bhopal	Dr.R.M.Sarviya Dr.J.L.Bhagoria
10	Devendra Malik	Computer Aided Mult Unit Selective inventory Control	Sept 2004	MANIT Bhopal	Dr.J.L.Bhagoria C.M.Sadiwala
11.	Satyashre Ghodke	An Optimization Technique for Computing the argumentation rate in solar collected using Rough Surface	Oct. 2004	MANIT Bhopal	Dr J.L.Bhagoria
12.	Satish Sharma	Experimental study under solid state Digestion of Modified progress plant	Oct. 2004	MANIT Bhopal	Dr J.L.Bhagoria
13.	Anil Kumar Patil	Role of Macrolayer in Nucleate Pool Boiling Heat Transfer in High Heat flux Region	Jan. 2005	MANIT Bhopal	Dr.R.M.Sarviya Dr J.L.Bhagoria

14	Deepak paliwal	A Study of geometrical and flow parameter on the thermal performance of solar collector.	May 2005	MANIT Bhopal	Dr.J.L.Bhagoria
15.	T.Murli Mohan	Energy Audit for coal Handling Plant at TPPS	June 2005	MANIT Bhopal	B.S.Bhatia Dr.J.L.Bhagoria
16.	Akash Jain	Investigation of Heat Transfer and Pressure Drop During Condensation of R22 in a Horizontal Tube Using Twisted Tape	July 2005	MANIT Bhopal	Dr.J.L.Bhagoria Atul Lanjewar
17.	Sunil Tailor	Investigation of Thermal Hydraulic performance During Condensation of R22 in a Horizontal Tube Using Coil Wire insert.	July 2005	MANIT Bhopal	Dr.J.L.Bhagoria Atul Lanjewar
18	Ajay Pandey	Experimental study of Natural convective Solar Dryer.	July 2005	MANIT Bhopal	Dr.J.L.Bhagoria
19	Vijay Chouhan	Exergy Based performance analysis of solar air Heater.	Dec. 2005	MANIT Bhopal	Dr.J.L.Bhagoria
20	Robinson Fernendes	Experimental investigation of heat transfer and pressure drop in air cooled heat exchanger by using tube insert.	Dec. 2005	MANIT Bhopal	Dr.J.L.Bhagoria
21	Jackson Fernendes	Study of over all enhancement Ratio of air cooled heat exchanger by using turbulator.	Dec. 2005	MANIT Bhopal	Dr.J.L.Bhagoria
22	Manish Diwan	Effect of Duct shape on Heat Transfer and fluid flow in a cross flow Heat Exchanger.	June 2006	MANIT Bhopal	Dr.J.L.Bhagoria
23	Irshad Ahmed	Experimental Investigation of Heat transfer Characteristics of Brass alloy tube with corrugated copper fins.	June 2006	MANIT Bhopal	Dr.J.L.Bhagoria Dr.R.M.Sarviya
24	Vilas Warudkar	Experimental Investigation on Austintic stainless steel analysis stress corrosion cracking after Shot peening.	July 2006	MANIT Bhopal	Dr.J.L.Bhagoria Dr.Siraj Ahmed
25	Shaik Bhalim	Effect of modified fumigation system on C.I. Engine performance Using methanol as a fuel.	July 2006	MANIT Bhopal	Dr.J.L.Bhagoria Dr. A.Rehman
26	S.S.Pawar	Effect of Diamond shaped Roughened absorber plate of Solar Duct	July 2006	MANIT Bhopal	Dr.J.L.Bhagoria

27	Praveen Sharma	Experimental study and performance analysis of heating chamber for utilization of exhaust gases of stationary Diesel Engine.	July 2006	MANIT Bhopal	Dr.J.L.Bhagoria
28	Vimal Chand Sontake	Comparison of stream function vorticity method and primitive variable approach method to predict flow field in a lid driven cavity	July 2006	MANIT, Bhopal	Dr.J.L.Bhagoria Rajesh Gupta
29	Sunay K Gaur	Investigation of Heat Transfer Coefficient of Porous Matrices in Solar Air Heater	June 2007	MANIT, Bhopal	Dr.J.L.Bhagoria
30	Uday P.Singh	Development of Correlations and Exergy Analysis in a Artificial Roughened Solar collectors	June 2007	MANIT, Bhopal	Dr.J.L.Bhagoria A.Lanjewar
31	Neelkanth chopade	CFD Analysis for voptimization of ACC in thermal power plant.	June 2007	MANIT, Bhopal	Dr.J.L.Bhagoria
32	Arun Raj. R	Enhancement of HTC in air cooled heat exchanger.	June 2007	MANIT, Bhopal	Dr.J.L.Bhagoria
33	Alok Kumar Rohit	Enhancement of outlet temperature of solar air collector by multi-focus glass paraboloidal	June 2008	MANIT, Bhopal	Dr.J.L.Bhagoria
34	Abhimanyu Singh	Exp investigation of heat transfer and pressure drop augmentation for heat exchanger by inserting coiled wire	June 2008	MANIT, Bhopal	Dr.J.L.Bhagoria A Lanjewar
35	Pavan Kumar	Analysis of heat transfer coefficient in solar air heater by Neural Network	June 2008	MANIT, Bhopal	Dr.J.L.Bhagoria
36	Praveen Wanjari	Enhancement of HT in solar air rectangular duct	June 2008	MANIT, Bhopal	Dr.J.L.Bhagoria A Lanjewar
37	Shashikant Nagpure	Thermal efficiency and Exergy analysis of solar collectors by using roughened absorber plate	June 2008	MANIT, Bhopal	Dr.J.L.Bhagoria A Lanjewar
38	B. P. Agarwal	Performance evaluations and efficiency improvements in exixting power plants	June 2008	MANIT, Bhopal	Dr.J.L.Bhagoria
39	Vandana Arora	A hybrid wind solar electricity generation system for an educational institute in a village in India- feasible study	June 2008	MANIT, Bhopal	Dr.J.L.Bhagoria S. Ahmed

40	Sanjeev Yadav	Development and performance evaluation of cabinet type solar dryer using roughned absorber collector	June 2009	MANIT, Bhopal	Dr.J.L.Bhagoria
41	Ashish Muchrikar	Optimaization of geometric parameters of single pass solar air heater	June 2009	MANIT, Bhopal	Dr.J.L.Bhagoria
42	Vineet Ku Yadav	Improvement in heat transferr coefficient by using various combination of helical ribs in tubes	June 2009	MANIT, Bhopal	Dr.J.L.Bhagoria
43	Awadhesh ku Tiwari	An approach for improvement in exergy efficient solar water heating system	Jan 2009	MANIT, Bhopal	Dr.J.L.Bhagoria RK Mandloi
44	Shailendra Chouhan	Enhancement of heat transfer coefficient in double pipe counter flow heat exchanger by using helical ribs	June 2009	MANIT, Bhopal	Dr.J.L.Bhagoria
45	Anil ku Shakya	Thermo hydraulic performance of rectangular duct with multi- V shaped roughened absorber plate	June 2009	MANIT, Bhopal	Dr.J.L.Bhagoria Atul Lanjewar
46	Mujawar ImranIbrahim	CFD analysis of heat transfer and fluid flow in a solar air heater duct with different ribs geometry on absorber plate	June 2009	MANIT, Bhopal	Dr.J.L.Bhagoria
47	Tikendra N Verma	Experimental investigation of heat transfer coefficient in parallel flow heat exchanger by using helical ribs	June 2009	MANIT, Bhopal	Dr.J.L.Bhagoria
48	Yogesh Agarwal	Experimantal analysis of heat transfer co-efficient and pressure drop for cross flow fin tube heat exchanger	June 2009	MANIT, Bhopal	Dr.J.L.Bhagoria
49.	Chandrakumar Pardhi	Development and performance evalution of mixed mode solar dryer with forced convection	June 2009	MANIT, Bhopal	Dr.J.L.Bhagoria
50	Rohit Ku Choudhary	Investigation of heat transfer and friction factor in rectangular duct using discrete arc shape ribs on Absorber plate	June 2009	MANIT, Bhopal	Dr.J.L.Bhagoria Atul Lanjewar
51	Jitendra Ku Dewal	Thermal efficiency and exergy analysis of a solar air heater using multi-V shaped roughned absorber plate	June 2009	MANIT, Bhopal	Dr.J.L.Bhagoria Atul Lanjewar
52	Dheeraj Golait	Performance and cost analysis of single pass solar air heater	June 2009	MANIT, Bhopal	Dr.J.L.Bhagoria Atul Lanjewar
53	R.S.Rajput	Heat transfer and fluid flow analysis of inverted u-type turbulators in solar air heater duct by CFD	July 2010	MANIT, Bhopal	Dr.J.L.Bhagoria

54	Pankaj sakalle	Effect of geometrical parameter on heat transfer and friction characteristics of packed bed solar air heater	June 2010	MANIT, Bhopal	Dr.J.L.Bhagoria Atul Lanjewar
55	Jitendra .k.diwakar	Efficiency and exergy analysis packed bed solar air heater	July 2010	MANIT, Bhopal	Dr.J.L.Bhagoria Atul Lanjewar
56	Ashutosh kumar	Thermal performance analysis of solar air heater using different roughness geometry by CFD	July 2010	MANIT, Bhopal	Dr.J.L.Bhagoria
57	Ajeet k Giri	CFD analysis of reattachment point ,Heat transfer and fluid flow of solar air heater duct by provided with artificial roughness.	July 2010	MANIT, Bhopal	Dr.J.L.Bhagoria
58	Mukul gupta	Comparative energy and exergy analysis of two partially shaded photo-voltaic water collector for four different climatic conditions of Delhi, Mumbai, Jodhpur and Banglore.	June 2010	MANIT, Bhopal	Dr.J.L.Bhagoria
59	Piyush kumar jain	Thermo hydraulic evaluation of solar air heater with double discrete arc roughness	June 2012	MANIT, Bhopal	Dr.J.L.Bhagoria Atul Lanjewar
60	Monesh kumar Agrawal	Investigation of Heat transfer enhancement in rectangular duct with double arc ribs on absorber plate of solar air heater	June 2012	MANIT, Bhopal	Dr.J.L.Bhagoria Atul Lanjewar
61	Mohammed Naushad	Repowering of wind farm: A case study	July 2012	MANIT, Bhopal	Dr.J.L.Bhagoria S. Ahmed
62	Manoj kumar Dubey	Thermal performance of Earth heat Exchanger in parallel connection.	July 2013	MANIT, Bhopal	Dr.J.L.Bhagoria Atul Lanjewar
63	Madhur Tiwari	Thermal performance of Earth heat Exchanger in series connection.	July 2013	MANIT, Bhopal	Dr.J.L.Bhagoria Atul Lanjewar
64	Sukritindra soni	Study of flow mechanism in a duct by using rectangular and chamfered rib roughnes	July 2014	MANIT, Bhopal	Dr.J.L.Bhagoria
65	Govind sharma	Study of reattachment point in a rectangular duct by using artificial roughness through smoke generation technique	July 2014	MANIT, Bhopal	Dr.J.L.Bhagoria

66	Akhilesh kumar	Study on Solar drier by using artificial roughened solar collectors	July 2014	MANIT, Bhopal	Dr.J.L.Bhagoria
67	Shailesh Raghav	Thermo hydraulic performance of Rectangular duct with multi arc ribs on absorber plate of solar air heater.	July 2013	MANIT, Bhopal	Dr.J.L.Bhagoria Atul Lanjewar
68	Hemant kumar Deshraj	Maintenance strategies of Energy Pack Boiler using wiebull reliability analysis.	July 2013	MANIT, Bhopal	Dr.J.L.Bhagoria Atul Lanjewar
69	Pankaj kumar Tiwari	CFD based thermo-hydraulic performance analysis of solar air heater having diamond shaped ribs on the absorber plate	June 2015	MANIT, Bhopal	Dr.J.L.Bhagoria
70	Amit kumar Ahuja	CFD based thermo-hydraulic performance analysis of solar air heater having circular ribs on the absorber plate	June 2015	MANIT, Bhopal	Dr.J.L.Bhagoria
71	Amit kumar Gautam	Performance analysis of solar air heater roughened duct with double inclination ribs	June 2016	MANIT, Bhopal	Dr.J.L.Bhagoria
72	Abhishek kumar	Enhancement of heat transfer in solar air heater by using double inclination ribs with gap	June 2016	MANIT, Bhopal	Dr.J.L.Bhagoria
73	Rohit Singh	Thermo hydraulic performance of rectangular duct with artificial roughness on one broad heated wall	June 2017	MANIT BHOPAL	Dr.J.L.Bhagoria
74	Rohit Yadav	Experimental investigation of thermal hydraulic performance of rectangular duct using artificial roughness on absorber plate	June 2017	MANIT BHOPAL	Dr.J.L.Bhagoria
75	Pulkit Kumar	Thermal performance characteristics of rectangular duct by using artificial roughness on the absorber plate	June 2017	MANIT BHOPAL	Dr.J.L.Bhagoria
76	Gaurav Samadhiya	Experimental investigation of heat transfer and friction by artificial roughness on absorber plate of solar air heater	May 2018	MANIT BHOPAL	Dr.J.L.Bhagoria
77	Jailal Prabhakar patel	Improvement of thermal efficiency in solar air collector having mesh roughness of different shapes on absorber plate	April 2019	MANIT BHOPAL	Dr.J.L.Bhagoria
78	Rajesh Maithy	CFD analysis on SAH	June 2021	MANIT BHOPAL	JL BHAGORIA

79	Priya Dongre	CFD analysis on Solar Dryer	June 2021	MANIT Bhopal	Dr J L Bhagoria
80	Abhishek Mishra	Experimental and Numerical study of heat transfer and flow friction in solar air heater by using artificial roughness	April 2022	MANIT Bhopal	Dr J L Bhagoria
81	Mohmadis mail	Numerical simulation and optimization of aerofoil shaped artificial roughness in absorber plate of solar air heater using computation fluid dynamics and machine learning techniques	May 2023	MANIT Bhopal	Dr J L Bhagoria
82	Shravan kurmi	Thermal Analysis and optimization of parallel plate type of heat sink inside the collimator of digital radiography machine	April 2023	MANIT Bhopal	Dr J L Bhagoria
83	Mayank Tripathi	Numerical Analysis of thermal hydraulic performance in solar air heater provided with artificial roughness on absorber plate	June 2025	MANIT Bhopal	Dr J L Bhagoria

**14. No. of UG thesis guided : 19**

S .No.	Name of the Candidate	Topic	Year	Supervisors
1	Someshwar Verma,Jay Wadhwa,Nitin Dubey	Study of Maintenance of Wind Power	2006-07	Dr.R.L.Gupta Dr.J.L.Bhagoria
2	Abhishek K Sudhakaran, Appulal Thampi, Shishir Shrivastava, Suprakash Naskar	Design and Fabrication of Solar Dryer with Electronics Control	2003-04	Dr.J.L.Bhagoria
3	Manish Ranjan, Sandeep Bhuyan, Somujjwal Dutta Saikia,	Enhancement of Heat Transfer in Double Tube Heat Exanger Using Turbulators	2004-05	Dr.J.L.Bhagoria
4	Arun Kumar Roy, Ankit Jain, Virendra kr. Singh, Shivam Verma	Application of Artificial Neural Network in Solar Air Collectors.	2006-07	Dr.J.L.Bhagoria
5	Saurabh Din ,Brajesh Nimore, Ravindra Prasad Khoar, Basant kr. Meena	Performance Prediction of Artificial Roughnenend Solar Air Heater.	2002-03	Dr.J.L.Bhagoria

6	Bijitesh Kundu , Nilutpol Borah, Sourav Dey, Yashpal Singh	A Case Study of Graphitizing Furnace.	2002-03	Dr.J.L.Bhagoria
7	Jyoti Kumar, Naredra Singh Pangtey, Varsha Raut	Investigation of Heat Transfer Coefficient By Using Wire Mesh in Solar Duct Design	2003-04	Dr.J.L.Bhagoria
8	Anup Tripathi, Sudhir Kr. Nagle, Ashish Ranjan Gupta	Optimization of Heat Transfer in a Rectangular Duct using Artificial Roughness with CFX software	2004-05	Dr.J.L.Bhagoria
9.	L.N.Meena, J.K.Minj, M.S.Ajad,	Stydy of heat & fluid flow in packed bed solar collector	2003-04	Dr.J.L.Bhagoria
10.	H. Warudkar,L.k.Ahirwar ,NeerajParate,J.Diwickar  Sudeep Saha	Enhancement of collector efficiency in solar air Heater by air flow over and under absorber plate.	2004-05	Dr.J.L.Bhagoria
11.	Sachin Kumar, Sandeep Gupta, Sushil Warudkar	Comperative study of box type solar cooker with Different number of Reflectors	2005-06	Dr.J.L.Bhagoria
12.	Naveen Divakaran, Neha Patel, Rajkumar , Srikant Singh,	Design & Fabrication of experimental Set-up for heat transfer enhancement  Using Coiled Wires	2004-05	Dr.J.L.Bhagoria Prof Atul Lanjewar
13.	Akhil Surange, Anupam Mishra, Kunal Dhoke, Ranjeet Karm,	Determination of heat transfer coefficient in solar air heaters using artificial roughness	2004-05	Dr.J.L.Bhagoria
14.	Abhishek Awasthi, Avinash Parashar , Jaspal S Sahuja, M Kumar Meena,	Enhancement of Heat transfer coefficient in packed bed solar Air Heater.	2001-02	Dr.J.L.Bhagoria Dr. R.M. Sarviya

	Najmus.S.Khan,			
15	Jai Sharda, Jeevan Joshi, Tarun kumar Parkhe,	Analysis of fluid flow & Heat Transfer in Cross flow Heat Exchanger	2005-06	Dr.J.L.Bhagoria
16	Bidesh kr. Hembram, Siddharth khare, Brajendra Bagri, Hemant Bandhewal	Design and study of Impulse turbine and its utilization to energize liquid crystal display	2010	Dr.J.L.Bhagoria
17	Deepak Palecha, Harish Bansal, Pankaj Singhania, Diwakar Tiwari, Ganeshram Dubey	Economic analysis of solar heating system	2011	Dr.J.L.Bhagoria
18	Ankit Lalwani, Hitendra yadav, Arvind Rajpoot, Sumit Modi	Enhancement of heat transfer coefficient in solar air heater by introducing artificial roughness	2013	Dr.J.L.Bhagoria
19	Suresh, Sushant panda, Ravishankar Mishra, Arpit Kushwah	Solar powered quadcopter	2017	Dr.J.L.Bhagoria

**15. Membership of professional bodies:**

Sr. No.	Name of Association/ Society	Category	Membership No.
1.	Institute of Engineers	Member	M-122588-4
2.	Indian Society of Technical Education	Life Member	LM-23926
3.	Institute of Engineers	Chartered Engineer	

**16. Sponsored Research projects:**

Sr. No	Title	Sponsoring agency	Project Investigator	Co-Investigator	Fund sanctioned in Lakhs (Rs.)	Duration	Status
1.	Dust Emission and Dispersion Modeling for Open Cast Uranium Mine	Dept. of Atomic Energy, GOI	Siraj Ahmed	JL Bhagoria	35	03 years	completed
2.	Investigation of heat transfer and Fluid flow phenomenon in artificially roughened duct of solar air heater	MANIT, Bhopal	KR Aharwal	JL Bhagoria	23	03 years	completed
3.	Investigation of Heat transfer in Solar air collectors	MHRD	RM Sarviya	JL Bhagoria	04	03 years	completed

### 17. Consultancy Projects:

Sr. No.	Title	Client	Month and year of completion	Amount
1.	Testing of Solar Air Collector	Barkatullah University, Bhopal	05-05-09	Rs. 11,250/
2.	Testing of Heat Exchangers	Patel Engg. Company, Bhopal	18-07-09	Rs. 22,500/
3.	Project Work on Solar Collector	RKDF Institute of Science and Technology, Bhopal	25-02-10	Rs. 11,250/
4.	Project Work on Solar Collector	RKDF Institute of Science and Technology, Bhopal	Feb.-2013	Rs. 11,250/
5.	Project Work on Solar Collector	RKDF Institute of Science and Technology, Bhopal	Feb.-2013	Rs. 11,250/
6.	Experimental evaluation of performance characteristics of	M/s Narbada electro engineering Bhopal	2018-19	Rs. 75,000/

	crimped finned tube heat exchanger			
7.	Testing of Solar Air Collector	NIT, Patna	2021-22	Rs. 85,000/
8.	Testing of Solar Air Collector	R G P V Bhopal	2024	Rs. 01 Lakhs

**18. Short-term courses/workshop attended:**

<b>S. No.</b>	<b>Course Duration</b>	<b>Topic</b>	<b>Date of Course/Institute</b>
1.	2 Weeks	Heat Treatment – Principles, Processes & Problems.	5 <sup>th</sup> July to 18 <sup>th</sup> July, 1993, M.A.C.T., Bhopal
2.	--- do ---	Polymer Blends and Alloys (PBA – 94)	13 <sup>th</sup> June to 25 <sup>th</sup> June, 1994, IIT Kharagpur.
3.	--- do ---	Characterization and Testing of Materials.	10 <sup>th</sup> July to 23th July, 1995, M.A.C.T., Bhopal
4.	--- do ---	Total Quality management in Technical Education	16 <sup>th</sup> Dec. to 29 <sup>th</sup> Dec. 1996, G.E.C., Bhopal
5.	--- do ---	Auto CAD Computer Course	July – Sept., 1996 at M.A.C.T., Bhopal
6.	--- do ---	Modern Manufacturing Techniques	7 <sup>th</sup> July to 20 <sup>th</sup> July, 1997, M.A.C.T., Bhopal
7.	--- do ---	Solar Energy Utilization	11 <sup>th</sup> June to 25 <sup>th</sup> June 1998, U.O.R., Roorkee.
8.	4 Weeks	C++ Computer Course	18-3-99 to 14-4-99 U.O.R., Roorkee.
9.	2 Weeks	Enhancing Professional Excellence	15 <sup>th</sup> Dec. to 29 <sup>th</sup> Dec. 1999, U.O.R., Roorkee.
10.	2 Weeks	Discrete Mathematical Structures	7 <sup>th</sup> -18 <sup>th</sup> June 2004, MANIT,Bhopal
11.	1 Week	Advances in solar energy	18 <sup>th</sup> - 22 <sup>nd</sup> Dec.2006 at Nirma Univ.,Ahmedabad

12.	1 Week	Product Design and development through software packages	26 <sup>th</sup> Dec. to 30 <sup>th</sup> Dec.2006 at CIPET,Bhopal
13	1 Week	Modelling and Simulation by using MATLAB.	12 <sup>th</sup> to 16 <sup>th</sup> March 2007 at NITTTR Chandigarh.
14	3days	Recent advances in I CEngines	28 <sup>th</sup> to 30 <sup>th</sup> March2008 at NIT.,Warangal(A.P)
15	2 Weeks	Advances in production technology and Ind.Engg.	Feb.02-14,2009 at MANIT,Bhopal

**19. Workshops Organized:**

S r n o	Title	Organized as	Venue	Duration			Regional/ Local/ National/ International	Target Group
				From	To	Total Days		
1 .	IC Engine Research and Development	Co-coordinator	MANIT, Bhopal	13-11-2007	15-11-2007	03	National	Scientist, Academicians and Industrialists
2	Challenges before Indian IT Industry in current scenario	Joint organizing secretaries	MANIT, Bhopal	26-02-2011	27-02-2011	02	National	Scientist, Academicians and Industrialists
3	Recent trends in renewable energy	Organizing member	MANIT, Bhopal	09-11-2012	10-11-2012	02	National	Scientist, Academicians and Industrialists
4	Modelling and Analysis of Turbomachinery	Chairman	MANIT, Bhopal	21-9-16	25-9-16	05	National	Scientist, Academicians and Industrialists

**20. Seminars Organized:**

	Title		Venue	Duration	Regional/	Target Group

Sr no		Organized as		From	To	Total Days	Local/ National/ International	
1	Life cycle Analysis ,Measurement &Conditioning Monitoring	Organizing member	MANIT	25-05-09	26-05-09	02	Natioanal	Scientist, Academicians and Industrialists
2	Challenges before Indian IT industry in Current Scenario	Joint organizing secretaries	MANIT	26-2-2011	27-2-2011	02	National	Scientist, Academicians and Industrialists

**21. International Conferences Organized:**

Sr no	Title	Organized as	Venue	Duration			Regional/ Local/ National/ International	Target Group
				From	To	Total Days		
1	International conference on Recent Advances in Solar Energy and Conversion Systems	Coordinator	MACT., REC Bhopal	28 Sept. 2002	29 Sept. 2002	02	International	Scientist, Academicians and Industrialists
2.	International Conference on Advance in Renewable Energy	Coordinator	MANIT, Bhopal	24 June 2010	26 June 2010	03	International	Scientist, Academicians and Industrialists
3	International Conference on Mech.engg. emerging trends and sustainability	Co-chairman	MANIT, Bhopal	29 Jan 2014	31 Jan 2014	03	International	Scientist, Academicians and Industrialists

**22. Workshop Attended:**

Sr no	Title	Institute/Organization	Attended as	Duration		
				From	To	No. of Days
1.	Recent Advances in IC Engines – RAICE 2008	NIT, Warangal	Participant	28-03-2008	30-03-2008	03

**23. Seminars Attended:**

Sr no	Title	Institute/ Organization	Attended as	Duration		
				From	To	No. of Days
1.	Recent Advances in Chemical Engg.	Institute of Tech., Guru Ghasidas University, Bilaspur	Participant	05-02-08	06-02-08	02

**24. Short Term Courses Organized:**

Sr no	Title	Institute/ Organization	Organized as	Duration		
				From	To	No. of Days
1.	Technical Know-How to use Automotives with Minimum Maintenance and fuel Economy	MANIT, Bhopal	Co-Coordinator	26-May 2008	28 May 2008	03
2.	Recent Developments in Solar and Wind Energy Systems	MANIT, Bhopal	Coordinator	09 June 2008	13 June 2008	07
3.	Recent Trends in Industrial and Production Engg.	MANIT, Bhopal	Organizing Committee Member	30 June 2008	12 July 2008	14
4.	Solar and Wind Energy- Theory and Practice, Sponsored by MHRD- AICTE	MANIT, Bhopal	Coordinator	27 Feb 2009	12 Mar 2009	14

5	Advances in Renewable energy and alternative fuels	Daman and diu	Organizing member	26/11/1 1	01/12/ 11	05
6	Bio energy conversion Technology	MANIT, Bhopal	Chief Coordinator	24-12- 13	28-12- 13	05
7	Emerging trends in electric power and energy systems( <b>self-finance</b> )	MANIT, Bhopal	Coordinator	01-01- 14	05-01- 14	05
8	Recent trends in solar and wind energy	MANIT, Bhopal	Coordinator	07- 02014	11-02- 14	05
9	Advances in Energy Efficient Technologies(AEET)-2016	MANIT, Bhopal	Chairman	26-09- 16	30-09- 16	05
10	Advances in Product Design and Manufacturing(APDM)	MANIT, Bhopal	Chairman	03-01- 17	08-01- 17	06
11	Nano, Micro and Bulk Material processing and Nanotechnology	Gokaraju Rangaraju Institute of Engg. and Tech., Hyderabad	Chairman	20-03- 17	26-03- 17	07

## 25. Conferences Attended:

Sr no	Title	Institute/Organizati on	Attended as	Duration		
				From	To	No. of Days
1.	International conference on shot peening	Paris,France	Participant	Sept.20 05	Sept.2 005	02
1.	National Conference on Recent Developments and Future Trends in Mech. Engg.	NIT, Hamirpur	Participant	03-11- 06	04-11- 06	02
2.	International Conference on Recent Trends in Mech. Engg.	Ujjain Engg. College,Ujjain	Participant	04-10- 07	06-10- 07	03
3.	15 <sup>th</sup> ISME International Conference on New Horizons on Mech. Engg.	RGTU, Bhopal	Participant	18-03- 08	20-03- 08	03
4.	Recent Innovative Techniques in Engg. and Management	HCET, Jabalpur	Participant	04-10- 08	05-10- 08	02
5.	3 <sup>rd</sup> India-Japan Energy forum-conference	TERI, New Delhi	Participant	15-02- 10	16-02- 10	02
6	International Congress of Environmental Research	Mauritius	Participant	16-09- 10	18-09- 10	03

7	International conference in Mechanical Engineering	Bangkok	Participant	08-12-12	09-12-12	02
8	2 <sup>nd</sup> International conference in Mechanical ,Electronics and Mechatronics Engineering	London(UK)	Keynote speaker, Session chairman, Participant	17-06-13	18-06-13	02

**26. Expert Lectures Delivered:**

Sr. No.	Topic	Number of Lectures	Dates	Venue
1.	Overview of Solar Energy	02	15-02-2007	Government Engg. College, Jabalpur
2.	Renewable Energy	01	22-12-2008	JNCT, Bhopal
3.	Application of MS-Office	02	13-03-2009	Government Engg. College, Jabalpur
4.	Principle of Solar Energy, Solar Resource Assessment	01	30-09-2009	Indian Institute of Forest Management
5.	Solar Thermal Technology	01	01-10-2009	Indian Institute of Forest Management
6.	Solar Thermal Technology	01	05-10-2009	Indian Institute of Forest Management
7.	Solar Photovoltaic Technology and Application	01	06-10-2009	Indian Institute of Forest Management
8.	Solar Photovoltaic Technology and Application	01	08-10-2009	Indian Institute of Forest Management
9.	Solar dryers for Rural and Agriculture Applications	02	19-03-2010	SV Polytechnic, Bhopal
10	Overview of Renewable Energy	02	13-03-2013	SV Polytechnic, Bhopal
11	Advances in solar energy	02	30-03-2013	Ujjain Engineering college, Ujjain

12	Heat transfer in solar air collectors	02	05-04-2013	JNCT, Bhopal
13	Recent advances in solar energy in India	01	18-06-2013	Psrc, London(UK)
14	Solar collectors	02	25-06-2013	STTP on “Solar Energy and its applications”,24-28 june 2013
15	R & D in Renewable Energy sources	01	30-08-2013	National Conference in Frontiers of Mechanical Engineering,29-31 Aug.2013,MANIT,Bhopal
16	R & D in solar and wind energy systems	02	10-01-2017	SGGS Institute of Engg. and Tech.,Nanded(MS)

**27. Awards And Achievements :**

- a. Chairman UG, AIEEE, Admission 2009-10, MANIT, Bhopal.
- b. BOS Chairman, Mechanical ,Barkatullah University,Bhopal,2009-11
- c. International Steering Committee Member of 3<sup>rd</sup> international workshop on Renewable Energy for sustainable Development in Africa-5<sup>th</sup>-6<sup>th</sup> Nov.2012 at National center for energy research and development, University of Nigeria, NSUKKA .
- d. Advisory Committee Member in National conference on Emerging Trends in Mechanical Engineering, ETME-2012, Nov-29-30, 2012, TIT., Bhopal.
- e. Best paper award in International conference in Mechanical Engineering in Bangkok, Dec.8-9, 2012.
- f. Chairman of Technical session in ICGSEE-2013,14 -16 March 2013 at MANIT, Bhopal
- g. Best paper award in 2<sup>nd</sup> International conference in Mechanical, Electronics and Mechatronics Engineering in London (UK), 17-18, JUNE, 2013.
- h. Key Note speech on “Recent advances in solar energy in India” 2<sup>nd</sup> International conference in Mechanical, Electronics and Mechatronics Engineering in London (UK), 17-18, JUNE, 2013.
- i. Chairman of Technical session in 2<sup>nd</sup> International conference in Mechanical, Electronics and Mechatronics Engineering in London (UK), 17-18, JUNE, 2013.
- j. Chairman of Technical session in “National Conference in Frontiers of Mechanical Engineering”,29-31 Aug.2013,MANIT,Bhopal

- k.** Best paper award in 4<sup>TH</sup> International conference in Mechanical, Electronics and Mechatronics Engineering in Bangkok (Pattaya), Dec.15-16,2015
- l.** Subject Expert Member in Uttrakhand Public Service Commission, Haridwar
- m.** 13. Subject Expert Member in the selection committee for appointment of Asstt. Professor on contract basis at RGPV, 19-07-2016
- n.** BOS Member, Mechanical Department, SATI. Vidisha, 2017
- o.** Selection committee member for appointment of Professor Scale (AGP) in Rs 10,000 in Director technical Education, MP, Bhopal-2017.
- p.** Selection committee member for appointment of Assistant Professor, Associate Professor & Professor at NIT Jalandhar in 2018.
- q.** Two Books published (Thermodynamics and A hand book of copper finned tube heat exchanger)
- r.** I have successfully completed the leadership for Academicians Program (LEAP) Training of MHRD at IIT (BHU) and Penn state Univ.(USA) from 25<sup>th</sup> Feb.2019 to 15<sup>th</sup> March 2019.