RESUME

Name	**: Dr. Manoj Kumar Gaur**		
Date of Birth	: 30.05.1976	**M.Tech Dissertations**	: 35
Designation	: Professor & Head	**Ph.D. Guided**	: 01 Awarded, 03 Submitted & 03 ongoing
Experience	: 18 years	**Book Chapters**	: 03 Books & 10 Chapters
International Journals	: 110	**International Conferences**	: 15

Sponsored Reserach Project: 05

Life Member of ISTE, Member of SAE INDIA (Western), Member of IET, Member of IAEng

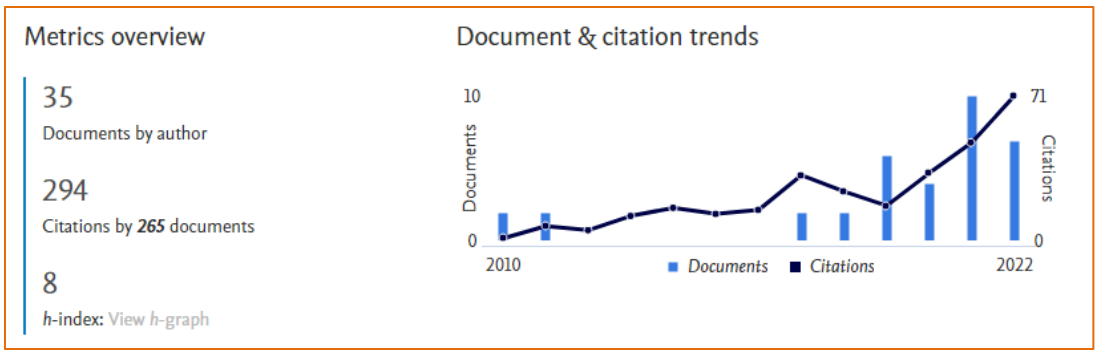
Scopus h-Index: 8; No. of Scopus Papers: 35; Citations: 294

Google Scholar: h-Index: 11 ; Citations: 540 ; i10 Index: 12

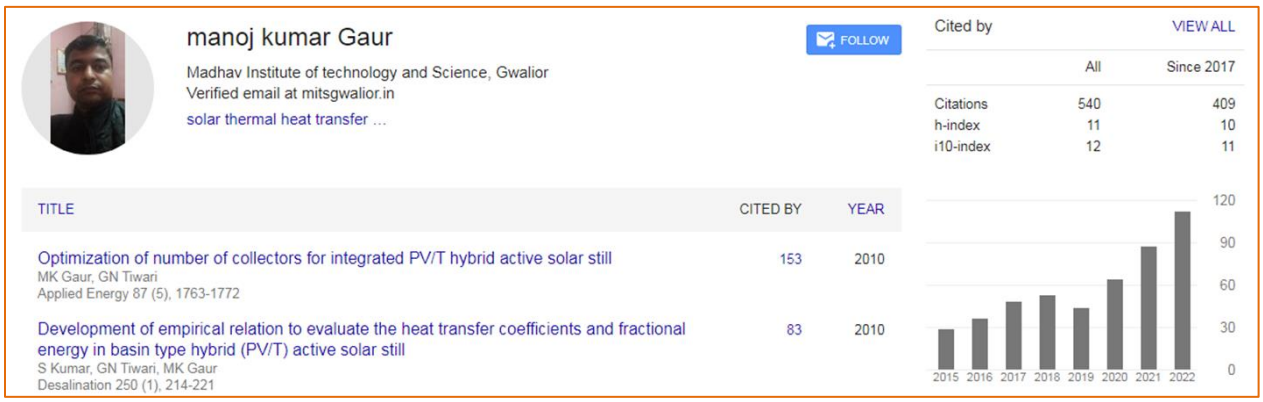
Academic Identity

Orcid Id	Scopus Author ID	Resercher ID	Google Scholar ID
0000-0002-4832-6953	36888214500	AAE-6492-2021	n_hB4cQAAAAJ

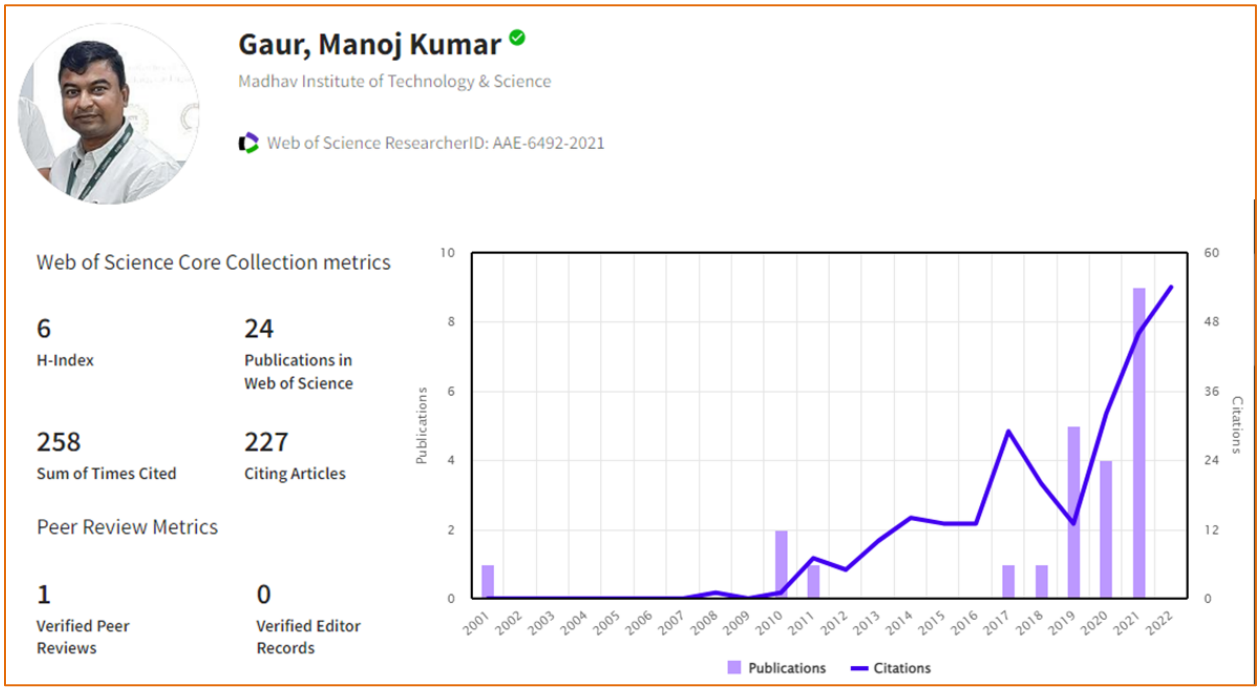
Scopus Index on 13/09/2022



Google Scholar Citation on 13/09/2022



Web of Science Profile on 13/09/2022



Educational Qualification

S. No.	Qualification	Specialization	Date of Passing/Award	Institute/ University	Percentage Marks
1.	B.E.	Mechanical	1999	BUV Bhopal	81.23 %
2.	M. Tech	Engineering Materials	2002	MANIT Bhopal	80.8 %
3.	Ph.D.	**Title: Development of Heat and Mass Transfer Coefficients/ Correlations for High Performance Solar Distillation Systems**	March, 2011	IIT Delhi	Awarded
4.	Charted Management (CMI, Certificate Course)	**First Line Management**	21/02/2018	UKIERI	Awarded

Experience

S. No.	Name of Post Held	Name of Employer	Date of Joining	Date of Leaving	Total Experience
1.	**Professor**	Madhav Institute of Technology & Science, Gwalior	22/12/2015	**Till Date**	6 Yrs & 8 Months
2.	Associate Professor	Madhav Institute of Technology & Science, Gwalior	22/12/2012	21/12/2015	3 Yrs
3.	Assistant Professor	Madhav Institute of Technology & Science, Gwalior	01/10/2010	21/12/2012	2 year 2 month
4.	Sr. Lecturer	Madhav Institute of Technology & Science, Gwalior	23/09/2008	30/09/2010	2 yrs
5.	Lecturer	Madhav Institute of Technology & Science, Gwalior	23/03/2003	22/09/2008	5 Years
6.	Lecturer	OIST Bhopal	6/08/2001	20/09/2003	2 years one month

Foreign Visit: One

1. Attended UKERC summer school, July 5-10, 2009 at University of Sussex Brighton (UK)

Publications

International Journal

A. Referred Journal

1. Singh P., **Gaur M.K.,** Tiwari G.N., Kumar A. (2022) Thermal Modeling of Water-in-Tube Type Evacuated Tube Solar Collectors to Predict Outlet Water Temperature: An Experimental Validation, Journal of Solar Energy Engineering (Transaction of ASME), 145(2), 021004 https://doi.org/10.1115/1.4055075 **(SCIE)**

2. Kushwah A., Kumar A., **Gaur M.K.**, Pal A. (2022) Performance analysis of heat exchanger-evacuated tube assisted drying system (HE-ETADS) under unload condition, Sustainable Energy Technologies and Assessments 53(2), 102589. https://doi.org/10.1016/j.seta.2022.102589 **(SCIE)**

3. Singh P., **Gaur M.K**. (2022) Novel Hybrid Active Greenhouse Solar Dryer with Evacuated Tube Solar Collector: Energy and Exergy Analysis, International Journal of Exergy, **Accepted (In Production). (SCIE)**

4. Thakur V.K., **Gaur M.K**. (2022) Energy and Exergy Analyses of Passive Solar Still Augmented with Nanoparticles, International Journal of Exergy, **Accepted (In Production). (SCIE)**

5. **Gaur M.K.,** Thakur V.K. (2022) Experimental Analysis of Sustainability of Passive Solar

Still with Nanoparticles Operating at Various Angles of Glass Cover, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 44(2), 5227-5245. https://doi.org/10.1080/15567036.2022.2082600 **(SCI)**

6. Shah R., Pandit R.K., **Gaur M.K.** (2022) Urban physics and outdoor thermal comfort for sustainable street canyons using ANN models for composite climate, Alexandria Engineering Journal, 61(12), 10871-10896. https://doi.org/10.1016/j.aej.2022.04.024 **(SCIE)**
7. **Singh P.,** Gaur M.K, Malvi C.S. (2022) Effect of Drying Area on Heat Transfer Coefficient and Drying Kinetics of High Moisture Crop Dried in Hybrid Active Greenhouse Solar Dryer, Heat Transfer Research, 53(11), 79–97. https://doi.org/10.1615/HeatTransRes.2022040797 **(SCIE)**
8. Shrivastava A, **Gaur M.K.**, Singh P. (2022), Mango leather (Aam Papad) drying in hybrid greenhouse solar dryer with evacuated tube collector and finned drying tray: drying behavior and economic analysis, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects. https://doi.org/10.1080/15567036.2022.2029974 **(SCI)**
9. Kushwah A., Kumar A., and **Gaur M.K.** (2022), Drying kinetics, performance, and quality assessment for banana slices using heat pump–assisted drying system (HPADS), Journal of Food Process Engineering, 1-10. https://doi.org/10.1111/jfpe.13964 **(SCIE)**
10. Kushwah A, Gaur M.K., Kumar A., **Singh P.,** (2022) Application of ANN and prediction of drying behavior of Mushroom drying in side hybrid greenhouse solar dryer: An experimental validation, Journal of Thermal Engineering, 8(2), 221-234. https://doi.org/10.14744/jten.2021.0006 **(Scopus, ESCI)**
11. Singh P., **Gaur M.K**, (2022) A Review on thermal analysis of hybrid greenhouse solar dryer (HGSD). Journal of Thermal Engineering, 8(1), 103-119. https://doi.org/10.18186/thermal.1067047 **(Scopus, ESCI)**.
12. Thakur V.K., **Gaur M.K.**, Dhamneya A.K. (2021) Validation of Thermal Models to Predict the Productivity and Heat Transfer Coefficients for Passive Solar Still with different Nanoparticles, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 1-21. https://doi.org/10.1080/15567036.2021.1971338 **(SCI)**
13. Thakur V.K., **Gaur M.K.,** (2021) Heat and Mass Transfer Analysis of Passive Solar Still with Nanoparticles, Operating at Different Water Depth and Various Slope of Glass Cover, Desalination and Water Treatment, 1-25. doi:10.5004/dwt.2021.27627 **(SCI)**
14. Singh P., **Gaur M.K,** (2021) Sustainability Assessment of Hybrid Active Greenhouse Solar Dryer integrated with Evacuated Solar Collector, Current Research in Food Science, 4, 684-691. https://doi.org/10.1016/j.crfs.2021.09.011 **(SCIE)**
15. Singh P., **Gaur M.K**, (2021) Environmental and economic analysis of novel hybrid active greenhouse solar dryer with evacuated tube solar collector, Sustainable Energy Technologies and Assessments, 47 (2021), 101428. https://doi.org/10.1016/j.seta.2021.101428 **(SCIE)**
16. Singh P., **Gaur M.K**, (2021), Heat Transfer analysis of Hybrid active Greenhouse Solar dryer attached with evacuated tube solar collector. Solar Energy, 224, August 2021, 1178-1192. https://doi.org/10.1016/j.solener.2021.06.050 **(SCIE)**
17. Kushwah A., Kumar A., **Gaur M.K.**, and Pal A. (2021) Garlic dehydration inside heat exchanger-evacuated tube assisted drying system: Thermal performance, drying kinetic and

color index. Journal of Stored Products Research, 93, September 2021, 101852. https://doi.org/10.1016/j.jspr.2021.101852 **(SCIE)**

18. Singh P., Pandey B.K., **Gaur M.K**, (2021) Performance evaluation of evacuated solar collector assisted hybrid greenhouse solar dryer under active and passive mode, Materials Today: Proceedings, https://doi.org/10.1016/j.matpr.2021.10.461 **(Scopus)**
19. Thakur V.K., **Gaur M.K**, (2021) Study the effect of CuO nanoparticles on the performance of passive solar still in winter and summer season, Materials Today: Proceedings, https://doi.org/10.1016/j.matpr.2021.11.119 **(Scopus)**
20. Shah R., Pandit R.K., **Gaur M.K**, (2021) Thermal comfort analysis through development of artificial neural network models: An experimental study in Cwa climate, Materials Today: Proceedings, https://doi.org/10.1016/j.matpr.2021.11.139 **(Scopus)**
21. Sharma N.K., **Gaur M.K.** and Malvi C.S. (2021) Application of phase change materials for cooling of solar photovoltaic panels: A review. Materials Today: Proceedings, https://doi.org/10.1016/j.matpr.2021.05.127 **(Scopus)**
22. Thakur V.K., **Gaur M.K.**, Dhamneya A.K. and Sagar M.K. (2021) Performance Analysis of Passive Solar Still with and without nanoparticle. Materials Today: Proceedings, https://doi.org/10.1016/j.matpr.2021.05.539 **(Scopus)**
23. Kushwah A., Kumar A., Pal A., and **Gaur M.K.** (2021) Experimental analysis and thermal performance of evacuated tube solar collector assisted solar dryer. Materials Today: Proceedings, https://doi.org/10.1016/j.matpr.2021.04.243 **(Scopus)**
24. Singh P, **Gaur M.K.** (2020). Review on development, recent advancement and applications of various types of solar dryers, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, pp. 1–21, 2020. https://doi.org/10.1080/15567036.2020.1806951 **(SCIE)**
25. Thakur V.K, **Gaur M.K**, Sagar M.K, Tiwari G.N. (2021) A Study on Heat and Mass Transfer Analysis of Solar Distillation Systems, Journal of Thermal Engineering, Vol. 7, No. 5. pp. 1184–1205. **(Scopus, ESCI)**
26. **Gaur M. K.,** Tiwari G.N., Singh P., Kushwah A (2021), Heat Transfer Analysis of Hybrid Active Solar Still with Water Flowing over Glass Cover, Journal of Thermal Engineering, 7(6), 1329-1343. **(Scopus, ESCI)**
27. Saxena G., **Gaur M.K.** (2020) Performance Evaluation and Drying Kinetics for Solar Drying of Hygroscopic Crops in Vacuum Tube Assisted Hybrid Dryer, Journal of Solar Energy Engineering, 2020, 142(5):1-21. **(SCI)**
28. Saxena G., **Gaur M.K.** (2020) Energy, exergy and economic analysis of evacuated tube solar water heating system integrated with heat exchanger, Materials today: proceedings, 28(Part 4): 2452-2462. https://doi:10.1016/j.matpr.2020.04.793 **(Scopus)**
29. Kushwah A., **Gaur M.K.**, Pandit R.K., Singh P. (2020) Material Thermal Performance Comparison Between The Tomb Of Mohammad Ghaus Heritage Building And A Modern Style Dwelling In Madhya Pradesh, International Journal of Built Environment and Sustainability. Vol. 7(2), 33-44. **(ESCI)**

30. Kushwah A., **Gaur M.K.**, Pandit R.K. (2020) The Role of Phase Change Materials for Lifetime Heating of Buildings in Cold Climatic Conditions. International Journal of Built Environment and Sustainability. Vol. 7(33), 81-96. **(ESCI)**
31. Singh P. and **Gaur M.K.,** Kushwah A., Tiwari G.N. **(2019)** Progress in hybrid greenhouse solar dryer (HGSD): A review, **Advances in Energy Research**, Vol. 6(2), 145-160, DOI: http://doi.org/10.12989/eri.2019.6.2.000 **(ESCI)**
32. **Gaur, M.K.**, Tiwari, G.N., Singh. P., Kushwah, A. (2019) Development of Empirical Relations to Compute the Heat Transfer Coefficients for Distiller Operating in Different Operating Modes, Desalination and Water Treatment, Vol 158, 1-10. **(SCI)**
33. Pandit R.K., **Gaur M.K.,** Kushwah A., Singh P., (2019) Comparing the thermal performance of ancient buildings and modern style housing constructed from local and modern construction materials, Nanotechnology Perceptions, 15, 174-182. doi: 10.4024/N12PA19L.ntp.15.02. **(Scopus)**
34. Saxena G. and **Gaur M.K.** (2018) Exergy analysis of evacuated tube solar collectors: a review, International Journal of Exergy, Vol. 25 (1), pp.54-74. **(SCI)**
35. Malvi **C.S.** , Gupta A. , **Gaur M.K.**, Crook R. and Dixon-Hardy D.W. (2017) Experimental investigation of heat removal factor in solar flat plate collector for various flow configurations, International Journal of Green Energy, Vol. 14 (4), 442-448. **(SCI)**
36. Singh A.P., **Gaur, M.K**., Kasdekar D., and Agrawal S. (2015) A Study of Time Series Model for Forecasting of Boot in Shoe Industry, International Journal of Hybrid Information Technology, Vol. 8(8), 143-152, DOI: 10.14257/ijhit.2015.8.8.13, ISSN:1738-9968 **(Scopus: 2014 -2016)**
37. **Gaur, M. K**., Tiwari, G.N. and Kumar S., (2011) Validation of thermal models to predict the heat and mass transfer coefficients for indoor simulation. Desalination and Water Treatment, 26, 201 – 210. **(SCI)**
38. **Gaur, M. K**. Tiwari, G.N., (2010). Optimization of number of collectors for hybrid active solar still, Applied Energy, 87, 1763-1772. **(SCI)**
39. Kumar, S. Tiwari, G.N., **Gaur, M.K.** (2010) Development of Empirical Relation to Evaluate the Heat Transfer Coefficients and Fractional Energy in Basin Type Hybrid (PV/T) Active Solar Still, Desalination, 250 (1), 214-221. **(SCI)**

B. Non Refereed but Recognized Journals having ISBN/ISSN Number/UGC

1. Singh P., **Gaur M.K.** Environmental and Economic analysis of hybrid greenhouse solar dryer: A Review, International Journal of energy Technology, 2(1). 55-69.
2. Thakur V.K., **Gaur M.K.** A study on passive solar still with nanoparticles, International Journal of energy Technology, 2(1), 26-38.
3. Etondia H.V., **Gaur M.K.**, Kushwah A. (2020) "A Study on Response Parameters of Injection Moulding Process in Polypropylene Plastic using Grey Relational Analysis" Journal of Experimental & Applied Mechanics. Vol. 10(3), 30-39.

4. Sharma A, **Gaur M.K**., Agrawal S (2018) "Effect of Varying Surface Grinding Parameters for AISI 1018 Mild Steel by Taguchi based PCA" Journal of Catalyst & Catalysis Vol 5, (2), pp. 5-14.
5. Mishra S, Kushwah A, **Gaur M.K**. and Singh P (2018) "Scrap Preheating using Waste Heat in Metal Casting" Journal of Thermal Energy Systems Vol 3, (3), pp. 36-43.
6. Bharadwaj R, **Gaur M.K.**, Agrawal S and Chaturvedi V (2018) "Simultaneous Optimization of Multiple Performance Characteristics in MIG Welding for Machining AISI-304 Stainless Steel by Weighted Principle Component Analysis" Journal of Experimental & Applied Mechanics Vol 9, (3), pp. 77-85.
7. Arya G, **Gaur M.K.** and Agrawal S (2018) "Analysis and Optimization of End Milling Machining Parameters for Polypropylene composite using Taguchi based GRA" International Journal of Trends in Mechanical Engineering & Technology Vol 8, (3), pp. 91 - 100.
8. Bhardwaj V., **Gaur, M.K..**, Chaturvedi, V. and Agrawal, S. (2018) "Optimization of Machining Parameters for Nylon 6 Composite in CNC Lathe Using PCA-Based TOPSIS" International Journal of Manufacturing and Materials Processing Vol 4, (1), pp. 36 -47.
9. Agrawal S., **Gaur, M.K**., Kasdekar D., and Agrawal S. (2018). "Optimization of machining parameters of hard porcelain on a CNC machine by Taguchi-and RSM method" International Journal of Engineering, Science and Technology, Vol. 10(1), pp: 13 – 22.
10. Sharma B. M., **Gaur, M.K**. and Agrawal S. (2017). Response Surface Approach of Optimization to study the Effects of Drilling Parameters in AISI-304 Stainless Steel. Journal of Mechatronics and Automation Vol. 4 (2), pp.21-32.
11. Yadav D S., **Gaur, M.K**, Jayaswal P. and Agrawal S. (2017). "Parametric Optimization of TIG Welding on AISI-304 Stainless Steel Plate by Taguchi based RSM Method**"** Trends in Machine Design Vol. 4 (2), pp.30-40.
12. Motwani A., **Gaur, M.K**. and Agrawal S. (2017). "Analysis of Machining Parameters in Wire EDM with Aluminum Alloy Using PCA and TOPSIS Approach**"** Journal of Mechatronics and Automation Vol. 4 (2), pp.1-11.
13. Singh K. P., Singh B. K. and **Gaur, M.K**. (2017). "Multi-variable Analysis and Optimization of Electrical Discharge Machining Process Using a PCA-ANN based Approach" Trends in Opto Electro & Optical Communications, Vol. 6(3) pp.1-7.
14. Kain R., **Gaur M.K.** and Agrawal S (2016) "Optimization of Machining Parameters for End Milling of 1018 Mild Steel using Taguchi based Grey Relational Analysis" Journal of Mechatronics and Automation, Vol. 3, (2), pp. 36-47.
15. Pathak M. and **Gaur, M.K**. (2016) "Parameters Optimization of EDM of AISI 316 Stainless Steel Material using RSM" Journal of Industrial Safety Engineering, Vol. 3(2) pp.1-7.
16. Yadav S. and **Gaur, M.K**. (2016). "Parametric Optimization of MRR and TWR on Electro Discharge Machining Using Taguchi's Methods and ANOVA", International Journal of Electronics, Electrical and Computational System, Vol. 5 (4), pp: 105 – 110.

17. Sahu A., **Gaur, M.K**. and Shrivastava P. (2016). "Analysis of Material Handeling Management in Small Scale Industry". European Journal of Advances in Engineering and Technology, Vol. 3(2), pp: 39 – 44.

18. Kumar A., Dubey A., **Gaur, M.K**. and Samadhiya V. (2015). "Analysis of Injection Moulding Process Parameters on PVC Material via Taguchi-ANOVA" Journal of Experimental & Applied Mechanics, Vol. 6(2), pp: 1 – 9.

19. Sharma A., Chaturvedi V. and **Gaur M.K.** (2015). "Optimization of Process Parameters of Two Way Abrasive Flow Machining by Grey Relational Analysis Coupled with Principle Component Analysis" Journal of Experimental & Applied Mechanics, Vol. 6(2), pp: 1 – 13.

20. Kumar A., **Gaur, M.K**., Kasdekar D. and Agrawal S. (2015). "Time-Based Optimization of Injection Moulding Process Using Response Surface Methodology" European Journal of Advances in Engineering and Technology, Vol. 2(5), pp: 97 – 102.

21. Agrawal S., **Gaur, M.K**., Kasdekar D., Agrawal S. and Malvi C. S (2015). "Optimal Machining Condition for Turning of Hard Porcelain using Response Surface Methodology" European Journal of Advances in Engineering and Technology, Vol. 2(5), pp: 1 – 5.

22. Agrawal S., **Gaur, M.K**., Kasdekar D., and Agrawal S. (2015). "Application of RSM on Performance Characteristics in turning of Hard Porcelain Material" Trends in Mechanical Engineering and Technology, (STM Journal) Vol. 2(2), pp: 40 – 49

23. Gaur L., **Gaur, M.K**. and Malvi C. S. (2015). "Scram Jet Combustor With Pylon Injector By Computational Fluid Dynamics Analysis" International Journal of Advanced Technology in Engineering and Science, Vol. 3(3), pp: 81 – 92**.**

24. Srivastav P. and **Gaur, M.K**. (2015). "Barriers to Implement Green Supply Chain Management in Small Scale Industry using Interpretive Structural Modeling Technique - A North Indian Perspective" European Journal of Advances in Engineering and Technology, Vol. 2(2), pp: 6 – 13.

25. Srivastav P. and **Gaur, M.K**. (2015). "Scope of Green Supply Chain Management In North Indian Construction Industries" International Journal of Advanced Research in Engineering and Applied Science, Vol. 4(4), pp: 53 – 73. ISSN: 2278-6252 (I.F = 5.795)

26. Srivastav P., **Gaur M.K.** and Singh A.P. (2015). "LPG Conservation in Biscuit Industry: A Technical Modification of Oven" Trends in Mechanical Engineering and Technology, (STM Journal) Vol. 5(1), pp: 1 – 5.

27. Kasdekar D. K., Parashar V., Singh J. and **Gaur, M.K.** (2014). "Optimization of EDM Process Based on the Orthogonal Array with Taguchi Method" Int. Research J. of Engineering and Applied Science, Vol 2 (2), pp 16 - 28.

28. Kasdekar D. K., Parashar V., Singh J. and **Gaur, M.K.** (2014). "Taguchi Method and ANOVA: An Approach for Selection of Process Parameters of EDM of EN – 353 Steel" ". Int. J. Emerging Tech. and Adv. Engineering, 4(6), 313-321.

29. Chouhan R., **Gaur, M.K.** and Tripathi R. (2013). "A Survey of Preventive Maintenance Planning Models, Techniques and Policies for an Ageing and Deteriorating Production Systems" HCTL Open Int. J. of Technology Innovations and Research**,** Vol. 3, pp: 1-19.

30. Chouhan R., **Gaur, M.K.** and Tripathi R. (2013). "Implementing a Preventive Maintenance Planning Model on an Ageing and Deteriorating Production System" HCTL Open Int. J. of Technology Innovations and Research, Vol. 4, pp: 1-24.

31. Ahirwar, A.K., **Gaur, M.K.,** Khare, A., (2013). "Strategic Analysis for Reliability of Diesel Locomotive of Indian Railway". Int. J. Emerging Trends in Engineering and Development, 3(1), 491 – 505. (I.F=2.87)

32. Ahirwar, A.K., **Gaur, M.K.**, Sirohiya, V. K., (2013). Case Study of Managerial Approaches for Maintenance of Diesel Locomotives in Indian Railways". Corona Journal of Science and Technology, 2(1), 28 – 34.

33. Singh R., **Gaur, M.K.,** Malvi, C.S. (2013). "A Study and Design Based Simulation of Hybrid Solar Car". Int. J. Emerging Tech. and Adv. Engineering, 3(1), 685-691. (IF = 1)

34. Mishra O. P., **Gaur, M.K**., (2012). "Evaluate effectiveness of RO system for thermal Power plant-a case study of Rayru filtration plant" IJESS, 2(11), 87- 97.

35. Kumra, A., **Gaur, M.K.,** Malvi, C.S., Gupta R.B., (2012). "Sizing of Standalone Photovoltaic System for Cottage Industry in a Remote Rural Area In India". Int. J. of Research in Economics & Social Sciences, 2(11), 1 – 12.

36. Pandey, R, **Gaur, M.K.**, Malvi, C.S. (2012). "Estimation of Cost Analysis for 4 kW Grids Connected Solar Photovoltaic Plant". Int. J. of Modern Engineering Research, 2(6), 4292-4294. (I.F =1.227)

37. Singh R., **Gaur, M.K.,** Malvi, C.S. (2012).Study of solar energy operated hybrid mild cars: a Review, Int. J. of Scientific Engineering and Technology, 1(4), 139 – 148. (I.F =0.489)

38. Pandey, R, **Gaur, M.K.**, Malvi, C.S. (2012). "Review of Practices of Grid Connected Solar Photovoltaic Potential". Int. J. of Research in Engineering and Applied Sciences, 1(10), 8 - 18.

39. Kumra, A., **Gaur, M.K**., Malvi, C.S., (2012). Sizing of a standalone photovoltaic system for small scale industry. Int. J. Emerging Tech. and Adv. Engineering, 8(20),65-69.

40. Gaur, M. K., Mishra O. P., Pachoriya, R. (2012). "Two Stage Filtration System in Full Scale Boiling Water for Thermal Power Plant". Int. J. Emerging Trends in Engineering and Development, 2(5), 81 – 86. (I. F =2.87)

41. Gond, B.K., **Gaur, M.K.**, Malvi, C.S., (2012). "Manufacturing and performance analysis of solar flat plate collector with phase change material". Int. J. Emerging Tech. and Adv. Engineering, 2(3), 456-459. (IF = 1)

42. Bhadouriya, B.S., **Gaur, M.K**., Malvi, C.S., (2012). "Manufacturing and Performance evaluation of Corrugated Polycarbonate Hybrid Solar Water Flat Plate Collector". Int. J. Emerging Tech. and Adv. Engineering, 2(3), 445-448. (IF =1)

National Journal

1. Gupta, R.D., **Gaur, M.K.,** Ghai, S., (2007). Energy Efficiency Improvement Strategies for Industrial Boiler- a Case Study. **Renewable Energy potential and Sustainable development,** 42(a), (7), MITS Special, 242-247.

International Conference

1. Shah R., Pandit R.K., **Gaur M.K.,** Assessing energy efficiency of built environment for future cities: A review, Proceedings of International Conference on Future Cities-2019, Chapter-159, 597-600.
2. Bhatia P., Pachauri A., Sood A, **Gaur M.K.** (2019) "A mini review: Polymer-matrix nanocomposites and its synthesis techniques" AIP Conference Proceedings 2142(1):150011, doi:10.1063/1.5122560.
3. Sharma, A.K., **Gaur, M.K** and Dwivedi, R.K. (2018), "Parametric study on vibration and harmonic analysis of moderately thick functionally graded plates using FEM" MATEC Web of Conferences 237(12-16):01007. doi:10.1051/matecconf/201823701007
4. Gaur M.K, Saxena G, Kushwah A, Gupta A, Pandey K.D., Malvi C.S. (2017)."Recent development and applications of evacuated tube solar collectors" Smart Technologies for Green and Sustainable Future (STGSF-2017) Maulana Azad National Institute of Technology, Bhopal (M.P.) pp.83-89
5. **Gaur M.K**, Saxena.G, Kushwah.A, Gupta. A, Bachoolal (2017)."Recent Advancement , Applications And Performance Study Of Various Types Of Solar Dryers Smart Technologies for Green and Sustainable Future (STGSF-2017) Maulana Azad National Institute of Technology, Bhopal (M.P.),pp.92-100
6. **Gaur, M. K**.,Tiwari, D., Goyal, K., Solanki, S. C., (2012). A Review on Solar Assist Vapor Absorption Refrigeration System. Abs. (ST - 01), pp01, International conference on Energy Security, Global Warning and Sustainable Climate, SOLARIS, 7 – 9 February, 2012.
7. Bhartiya, J.K., Gond, B.K., Bhadouriya, B., **Gaur M.K.,** Patra, A., Malvi, C.S., (2012). "Development and demonstration of a cost effective process to fabricate a solar photovoltaic panel at local level" Abs. (PV - 10), pp43, International conference on Energy Security, Global Warning and Sustainable Climate, SOLARIS, 7 – 9 February, 2012.
8. **Gaur, M.K.,** Tiwari, G.N., Kumar, Shiv and Malvi, C.S. (2012). Heat and Mass Transfer Analysis of High Performance Solar Distillation Systems: Review, Abs. (ST - 11), pp07, International conference on Energy Security, Global Warning and Sustainable Climate, SOLARIS, 7 – 9 February, 2012.
9. Jain Sanjeev, **Gaur M.K.,** Tiwari, D., Goyal, K. Solanki, S.C., Agrawal, S., (2012) "A Study on Amorphous silicon based Photovoltaic power systems, and the Future prospects" Review, Abs. (PV - 27), pp53, International conference on Energy Security, Global Warning and Sustainable Climate, SOLARIS, 7 – 9 February,2012.
10. Hardy K. P., Malvi C.S., **Gaur M.K.,** Dixon-Hardy D. W. and Crook R. (2011)"A Low Cost PV Panel Assembly Targeted At Rural Energy Supply In Developing Nations" *ISES conference in Kassel, Germany* .pp 1086-1093 August *(2011).* doi:10.18086/swc.2011.07.04
11. Malvi C.S**.,** Tripathi A.K.,**Gaur M.K**., (2007). Reliable solar water pasteurizer: an approach to purify the drinking water. pp 229-234 proc. of 3rd International Conference Solaris at IIT Delhi.

12. **Gaur, M.K.,** Malvi, C.S**.,** Gupta, P., (2007).Energy Saving By the Application of Domestic Solar Heating Systems. pp. 148-151, Proc. of 3rd International Conference Solaris at IIT Delhi.
13. **Gaur, M.K.,** Sharma, A., Gupta, P., (2004). Energy Recovery from Municipal Solid Waste: A Case Study for Gwalior Town" pp843-849, Proc. of 14th ISME International Conference at Delhi College of engineering Delhi.
14. Malvi, C.S., **Gaur, M.K.** (2005). Development and Fabrication of Domestic Wind Mill. pp. 311, ICORE-, Pune.
15. **Gaur, M.K.,** Malvi, C.S. (2004). Effect of Reinforcement Volume Fraction and Heat Treatment on Mechanical Properties of AA2014 Al alloy–SiCp composites. Proc. of International Conference at BHU Varanasi, Recent Advances in Composite Materials, pp 452-458.

National Conference

1. Singh, P.,**Gaur, M.K.,** Thakur, V.K., Kushwah, A. (2019)."Modern Trends in Solar Drying: A Short Review". Abs 18, Book on Modern Tools in Engineering, ISBN No. 978-93-82346-25-8.
2. Thakur, V.K.,**Gaur, M.K..,** Sagar, M.K., Singh, P., Kushwah, A. (2019). "A Review on Modern Trends in Solar Thermal Technologies". Abs 19, Book on Modern Tools in Engineering, ISBN No. 978-93-82346-25-8.
3. Shah, R., Pandit, R.K., **Gaur, M.K.,** Kushwah, A. (2019). "Advances in Building Thermal Comfort using Solar Energy: A State of Art Review". Abs 22, Book on Modern Tools in Engineering, ISBN No. 978-93-82346-25-8.
4. Malvi, C.S., **Gaur, M.K.,** Tripathi, A., Agarwal, B., (2006).A Conceptual Framework and Approaches for Rapid Design And Development Process Through Cad/Cam". pp 14-19, proc. of national seminar on ETTCME, India.
5. Gaur, M. K., Tripathi A., Jain, V., Agarwal, B. (2006). Energy Saving by using solar water heating system. pp 62 - 66, proc. of national seminar on ETTCME, India.
6. **Gaur, M.K.,** (2006).Municipal Solid Waste: An Alternative Fuel for Power Generation"- A Case Study for Gwalior City. Abs. pp72 Young Scientist Congress2006 at Rewa
7. Malvi, C.S**., Gaur, M.K.,** Tripathi, A. Building Augmented Wind turbine. pp 206-211 National conference at MITS Gwalior
8. **Gaur, M. K., (2007).** Energy Saving By the Application of Domestic Solar Heating Systems. Abs. pp64-65 at 22ndYoung Scientist Congress 2007 at SATI Vidisha.
9. Goyal K., Tiwari D., Valecha J., **Gaur M.K.** (2011) Evaluation of Solar Absorption Cooling System, Abs B2 National Conference on Refrigeration and Air Conditioning (NCRAC-2011), IIT Madras, Chennai, 7-9 July 2011

Book Chapters

1. Singh P, **Gaur M.K.**, A Review on Role of Solar Drying Technology in Sustainable Development, Proceedings in Adaptation, Learning and Optimization, ICSISCET 2019, Springer PALO 13, pp. 18–27, 2020. https://doi.org/10.1007/978-3-030-44758-8_3.
2. Thakur V.K., **Gaur M.K.**, Sagar M.K., Role of Advance Solar Desalination Techniques for Sustainable development, Proceedings in Adaptation, Learning and Optimization, ICSISCET 2019, Springer PALO 13, pp. 28–38, 2020. https://doi.org/10.1007/978-3-030-44758-8_4.
3. Shah R., Pandit R.K., **Gaur M.K.**, Role of Computational Fluid Dynamics in Sustainable Urban Built Environment: A Review, Proceedings in Adaptation, Learning and Optimization, ICSISCET 2019, Springer PALO 13, pp. 399–411, 2020. https://doi.org/10.1007/978-3-030-44758-8_37.
4. **Gaur M.K.,** Tiwari G.N., Kushwah A, Kumar A. and Saxena G. Integrated PVT Hybrid Active Solar Still (HASS) with an optimized Number of Collectors. Solar Desalination Technology, Green Energy Technology, Springer, PP. 219. https://doi.org/10.10O7/978-981-13-6887-5
5. **Gaur M.K.,** Singh, S.K., Sood A. and Chauhan D.S. Experimental Investigation of Physical and Tribological Properties of Engine Oil with Nano-particles Additives. Springer International Publishing AG, DSMIE 2018, LNME, pp. 255-268, 2019. https://doi.org/10.1007/978-3-319-93587-4_27
6. Shah R., Pandit R.K., **Gaur M.K.,** Role of Building Design in Sustainable Green Development: A Review, Proceedings of Second International Symposium on Sustainable Development Research in the Asia-Pacific 2019. Springer, Cham, 55-74. https://doi.org/10.1007/978-3-030-61891-9
7. Singh P., **Gaur M.K,** (2021) Enviro-Economic Analysis of Ginger Drying in Hybrid Active Greenhouse Solar Dryer, Springer Nature Singapore, Artificial Intelligence and Sustainable Computing, Algorithms for Intelligent Systems, 117-128, https://doi.org/10.1007/978-981-16-1220-6_11
8. Thakur V.K., **Gaur M.K,** Sagar M.K. (2021) Performance analysis of different tilt angles based solar still, Springer Nature Singapore, Artificial Intelligence and Sustainable Computing, Algorithms for Intelligent Systems, 189-200, https://doi.org/10.1007/978-981-16-1220-6_17
9. Saxena G., **Gaur M.K,** Kushwah A. (2021) Performance analysis and ANN Modelling of Apple drying in ETSC-Assisted Hybrid Active Dryer, Springer Nature Singapore, Artificial Intelligence and Sustainable Computing, Algorithms for Intelligent Systems, 275-294, https://doi.org/10.1007/978-981-16-1220-6_24
10. Shah R., Pandit R.K., **Gaur M.K.,** (2021) Artificial Neural Networks as a Tool for Thermal Comfort Prediction in Built Environment, Springer Nature Singapore, Artificial Intelligence and Sustainable Computing, Algorithms for Intelligent Systems, 155-165, https://doi.org/10.1007/978-981-16-1220-6_14

Books Publication

1. Tiwari, G. N., Barnwal, P., Solanki, S. C., **Gaur, M.K.**, (2008). **Solar Energy: Problems Solutions and Experiments.** ISBN 13978-81-88342-64-8; Anamaya Publishers, New Delhi, India**.**
2. Agrawal S., **Gaur, M.K**., Kasdekar D., "**Optimization of machining parameters of hard porcelain on CNC machine**" (2015); 978-3-659-77788-2; Lap Lambert Academic Publishing House Germany
3. Gaur M.K., Norton B., Tiwari G.N., (2021) **"Solar Thermal Systems: Thermal Analysis and its Applications"**, Bentham Publications (Accepted, In Press)

International Training Programme: (Two)

1. Training and Awareness programme on "Implementation strategies for the transfer of hybrid photovoltaic thermal (HPVT) technology from research laboratory to field", August 25 to 28, 2009 at Indian Institute of Technology Delhi, New Delhi, organized by BAG energy research society Varanasi, IIT Delhi and Vaxjo University Sweden.
2. UKERC summer school, July 5-10, 2009 at University of Sussex Brighton (UK)

Expert Lectures

S. No.	Details of event	Class/ Talk	International /National /Regional
1.	Delivered an Expert Talk on Two weeks STTP on "Alternative Energy Sources For Sustainable Development" at DTU Delhi on January 3-14, 2022.	**Expert lecture**	International
2.	Delivered an Expert lecture in Faculty Development Program (FDP) on "Recent Trends & Issues in Mechanical Engineering" at GJUS&T, Hisar on Jan. 10-15, 2022.	**Expert lecture**	National
3.	Delivered an Expert lecture in an International Conference on Innovation in Science and Technology (ICIAST 2021) organized at Galgotias College of Engineering & Technology, Noida, U.P. on December 21-23, 2022.	**Invited Talk**	International
4.	Talk on **"Effective Teaching Learning through Students Centric Teaching"** in Phase-III AICTE-ISTE refresher program on "Learner Oriented Teaching Methods" organized by IPS College of Technology & Management, Gwalior held on May 19-25, 2021.	**Invited Talk**	National
5.	Expert Lecture on **"Application of Solar Energy Systems in Sustainable Development"** in five days FDP on "Smart City Development & Green Energy"	**Expert Lecture**	National

	held during 27/01/2021 to 31/01/2021 at Jaipur Engineering College, kukas, Jaipur.		
6.	Delivered an **Invited Talk** on February 07, 2020 in "**Solaris-2020**" **A National Conference on Sustainable Environment and Climate (SOLARIS 2020)** held at SRMU, Barabanki (U.P.) during February 07-09, 2020.	**Invited Talk**	National
7.	Delivered a lecture entitling "**Solar Still: A solution to get pure water**" on June 11, 2020 in Five days Online FDP on **Energy Conservation and Renewable Energy** held at IGNOU New Delhi during June 08 - 12, 2020	**Expert Lecture**	National
8.	Delivered an expert lecture in STTP on **"Futuristic Innovation in Solar Energy"** at Gyan Sagar College of Engineering, Sagar from July 14-16, 2020.	**Expert Lecture**	National
9.	Keynote lecture on "Heat and Mass transfer analysis of solar distillation system" in ICRAM-2020 at IITRM Ahmedabad from August 21-23, 2020.	**Keynote Speaker**	International
10.	Delivered an Expert talk in an one week TEQIP-III sponsored FDP on **"Alternative Fuel for IC Engine"** organized by Oriental Institute of Technology, Bhopal in association with RGPV, Bhopal from January 20-24, 2020.	**Expert Lecture**	National
11.	**Lecture** on **"Kyoto Protocol"** during short term course on "Sustainable Development: Methods & Practices" held at MITS Gwalior during 21st to 25th Feb, 2019	**Expert Lecture**	National
12.	An International Conference on Renewable Energy Sustainable Climate **"Solaris-2019"** held at Jamia Millia Islamia (JMI), New Delhi, during 7th-9th February 2019.	**Keynote Lecture**	International
13.	Delivered a in an **International Seminar on Advances in Solar Energy System** held on March 02, 2019. at IPS College of Technology & Management	**Keynote Lecture**	International
14.	Delivered an **Expert Lecture** in one day workshop on **"Hybrid Photovoltaic thermal Systems and Solar Stills"** held at Shri Shankaracharya Institute of Professional Management & Technology, Raipur on July 11, 2019.	**Expert Lecture**	National
15.	Delivered an **Expert Lecture** in the **3rd International Conference on "Renewable Energy Innovation Research and Applications"** held at UTD, RGPV, Bhopal from December 27-28, 2019.	**Expert Lecture**	National
16.	Delivered an **Expert Lecture** at Commission for Scientific and Technical Terminology, New Delhi from	**Expert Lecture**	National

November 25-26, 2019.

17.	Delivered a **Keynote Lecture** in one day seminar on "**Smart Materials**" organized by The Institution of Engineers, Local Centre Gwalior on August 11, 2019.	**Keynote Lecture**	National
18.	Delivered an **Expert Lecture** on **3rd International Conference on Renewable Energy Innovation Research and Applications (IC-REIRA 2019)** held at RGPV, Bhopal during December 27-28, 2019.	**Expert Lecture**	National
19.	Five days short term course on **Renewable Energy and Applications (REA-2018)** held at during 19th-23rd December at 2018 NIT-Patna	**Expert Lecture**	National
20.	Four days National Workshop on "Recent Advancements in Energy Sciences (RAES)" sponsored by M**.P. Council of Science & Technology (MPCOST)** 30th Aug. to 2nd Sep, 2018 at SISTech, Gandhinagar Bhopal	**Expert Lecture**	National
21.	One day Workshop on renewable energy MITS 2004	Talk	National
22.	FDP IIT Delhi Dec 12, 2011	Talk	National
23.	FDP MANIT Bhopal February 8, 2014	Talk	National
24.	Workshop at MITS Jan. 15, 2014	Talk	National
25.	FDP (RCTCE) SATI Vidisha April 3, 2014 (Two Lectures)	Talk	National
26.	HEG Mandideep Jan 2015 (Industry)	Talk	National
27.	FDP IIT Delhi June 2015	Talk	National
28.	Workshop at SINGAD Institute 17 Feb. 2016	Talk	National
29.	FDP at MITS March 17, 2016	Talk	National
30.	Workshop at RJIT Takenpur May 5, 2016	Talk	National
31.	MITS (Workshop) Electrical Engg. 06 Sep, 2016	Talk	National

Chaired Technical Sessions

1. **Chaired a Technical Session** in an **International Conference on Innovation in Science and Technology (ICIAST 2021)** organized at Galgotias College of Engineering & Technology, Noida, U.P. on December 21-23, 2022.
2. **Chaired a Technical Session** titled **Computational intelligence and Machine learning** in an **1st International Conference on Materials, Manufacturing and Energy (ICMME-2021)** at Rajkiya Engineering College Mainpuri, U.P. from December 17-18, 2021.

3. **Chaired a Technical Session** titled **Computational intelligence and Machine learning** in an **International conference on Sustainable and Innovative solutions for Current challenges in Engineering and Technology (ICSISCET-2021)** at MITS Gwalior from November 13-14, 2021.
4. **Chaired a Keynote talk** in an **International conference on Sustainable and Innovative solutions for Current challenges in Engineering and Technology (ICSISCET-2021)** at MITS Gwalior from November 13-14, 2021.
5. **Chaired a Technical Session** in National Conference on Sustainable Environment and Climate (SOLARIS 2020) held at SRMU, Barabanki (U.P.) during February 07-09, 2020.
6. **Chaired a Technical Session** in **International conference on Sustainable and Innovative solutions for Current challenges in Engineering and Technology (2019)** at MITS Gwalior from November 02-03, 2019.
7. **Chaired a Technical Session** on February 09, 2019 in **"Solaris-2019"** An International Conference on Renewable Energy Sustainable Climate held New Delhi, during 7^{th}-9^{th} February 2019.
8. **Chaired a Technical Session** in International Conference on Advanced Technologies in Renewable Energy for Future Sustainability (ATREFS-2019) held at UTD, RGPV under TEQIP-III, during 30th-31st January 2019.

Coordinator/Organizing Committee Member/Reviewer

1. Worked as **Program Committee Member and Reviewer** in an **International conference on Sustainable and Innovative solutions for Current challenges in Engineering and Technology (ICSISCET-2021)** at MITS Gwalior from November 13-14, 2021.
2. Worked as **Organizing Secretary** in two day workshop on **"Thermal Performance and Modelling of Heat and Flame Resistant Materials"** organized by Madhav Institute of Technology & Science, Gwalior under the sponsorship of TEQIP III from January 29-30, 2021.
3. Worked as **Organizing Committee Member** in **Second International Symposium on Sustainable Development Research in the Asia-Pacific 2019** at MITS, Gwalior from 19^{th} Dec. to 21^{st} Dec. 2019.
4. Worked as **Reviewer** in **International conference on Sustainable and Innovative solutions for Current challenges in Engineering and Technology (2019)** at MITS Gwalior from November 02-03, 2019.
9. Worked as **Organizing Committee Member** in **International conference on Sustainable and Innovative solutions for Current challenges in Engineering and Technology (2019)** at MITS Gwalior from November 02-03, 2019.
10. **Coordinated** Two week AICTE-QIP sponsored STC on **"Thermodynamics and its Applications to Solar Energy System Design (STC-TASESD)"** at MITS, Gwalior from March 09-18, 2019.
11. **Coordinated** one day Workshop on **"Building Envelope Design for Energy Optimization"** at MITS Gwalior on September 07, 2019.
12. Worked as **Co-Convener** in the **3^{rd} International Conference on "Renewable Energy**

Innovation Research and Applications" held at UTD, RGPV, Bhopal from December 27-28, 2019.

Workshops/Summer Schools/ Short Term Courses

1. **Participated** in one day webinar on "Engineering Education" organized by IETE, Bhopal & Gwalior, IEEE, M.P. Subsection and Institution of Engineers (India), Gwalior on September 05, 2020.
2. **Participated** in online webinar on "Role of the Ideal teacher in transforming the academic life of students" sponsored by TEQIP-III, organized by Rajkiya Engineering College, Ambedkar Nagar, on May 13, 2020.
3. **Participated** in five day webinar on "Research & Innovation" organized by Vidyavardhaka College of Engineering, Mysuru during August 17-21, 2020.
4. **Participated** in one week Faculty Awareness Program on "Outcome Based Education & NBA Accreditation" organized by Rajgad Dnyanpeeth's Shri Chhatrapati Shivajiraje College of Engineering, Pune during May 12-17, 2020.
5. **Participated** in one week online FDP on "Maximal Utilization of ICT Tools for Online Teaching-Learning Process" sponsored by TEQIP-III, organized at Rajkiya Engineering College, Ambedkar Nagar, during 09^{th}-13^{th} May 2020.
6. **Participated** in one week online FDP on **"Renewable Energy Sources: A way ahead"** organized by Cummins College of Engineering for Woman Nagpur in association with ASM International Pune chapter and ISHRAE Nagpur chapter during May 15-21, 2021.
7. **Participated and presented** a research paper entitling "A study on enviro-economic analysis of hybrid greenhouse dryer" in National Conference on Sustainable Environment and Climate (SOLARIS 2020) held at SRMU, Barabanki (U.P.) during February 07-09, 2020.
8. **Participated** in one week online FDP on "Matlab Applications in Engineering and Science" sponsored by TEQIP-III, organized jointly by Rajkiya Engineering College, Azamgarh and GCE, Karad, during April 27- May 01, 2020.
9. **Participated** in 5 days online FDP on "Material for Thermal and Renewable Energy Research" organized by Sri Sai Ram Institute of Technology, Chennai, from May 20 - May 24, 2020.
10. **Participated** in Workshop on "Data Science/Machine Learning" sponsored by IETA and IICA on April 20, 2020.
11. **Participated and presented** a research paper entitling "Various Techniques used to Enhance Heat Transfer Rate of Photovoltaic Panels using Phase Change Materials" in 3^{rd} International Conference on Renewable Energy Innovation Research and Applications (IC-REIRA 2019) held at RGPV, Bhopal during December 27-28, 2019.
12. **Participated** as a Faculty Member in **Industry Conclave 2019** "Technology: From Ideas to Implementation" held on April 12, 2019 at MITS Gwalior.
13. **Participated** in Two days National Workshop on "Advanced Manufacturing Systems" sponsored by TEQIP-III, organized at MITS, Gwalior during 27^{th}-28^{th} October 2018.

14. **Participated** in Two days National Workshop on "Advanced Optimization Techniques and Research Directions" sponsored by TEQIP-III, organized at MITS, Gwalior during Nov. 16-17 2018.
15. **Participated** in One day Workshop on "Energy Audit & Management" sponsored by TEQIP-III, organized at MITS, Gwalior during September 29, 2018.
16. Quality improvement programme, short term course on "**Photovoltaic Thermal (PVT) Applications**", December9-15, 2011, Indian Institute of Technology Delhi, New Delhi.
17. Quality improvement programme, short term course on "**Building Integrated photovoltaic Thermal System**", February 8-14, 2011, Indian Institute of Technology Delhi, New Delhi.
18. Quality improvement programme, short term course on "**Building Integrated photovoltaic Thermal System**", February 8-14, 2011, Indian Institute of Technology Delhi, New Delhi.
19. Quality improvement programme, short term course on "**Tribology in Practice**", May 10-14, 2010, Indian Institute of Technology Delhi, New Delhi.
20. Quality improvement programme, short term course on "**alternative sources of energy**", February 4-10, 2010, Indian Institute of Technology Delhi, New Delhi.
21. Quality improvement programme, short term course on "Applications of solar Energy and earned carbon credits", February 6-12, 2009, Indian Institute of Technology Delhi, New Delhi.
22. Quality improvement programme, short term course on "Potential of bio- fuels and other renewable energy sources", December 15-20, 2008, Indian Institute of Technology Delhi, New Delhi.
23. **MHRD/AICTE sponsored summer school on** "Alternative sources of energy", July 10-25, 2008, Indian Institute of Technology Delhi, New Delhi.
24. Quality improvement programme, short term course on "Utilization of solar energy and its applications", February 8-22, 2008, Indian Institute of Technology Delhi, New Delhi.
25. **National workshop cum seminar**, January22, 2008 on "Indian energy scenario and energy security'' at Indian Institute of Technology Delhi, New Delhi.
26. Quality improvement programme, short term course on "Concept of renewable energy", June 13-27, 2005, Indian Institute of Technology Delhi, New Delhi.
27. AICTE Sponsored short term course on "Waste- a misplaced resources", Jan 31-Feb05, 2005, Madhav Institute of Technology and Science Gwalior.
28. AICTE Sponsored short term course on "Recent trends, technique and multimedia applications in Mechanical engineering" July 12-17, 2004, Madhav Institute of Technology and Science Gwalior.
29. AICTE Sponsored short term course on "Melt treatment in foundries", June 14-18, 2004, National Institute of Technology, Hamirpur.
30. AICTE Sponsored short term course on "water conservation and methods and practices", March 22-27, 2004, Madhav Institute of Technology and Science Gwalior.

Conferences/Workshop/Seminar

1. **International conference** on Energy Security, Global Warning and Sustainable Climate, SOLARIS, 7 – 9 February, 2012.at BHU Varansi organized by **IIT Delhi.**
2. **National workshop,** March 6-7, 2009, on '**Quality Management in Technical Education' at MITS Gwalior**
3. **National workshop cum seminar**, January22, 2008 on "**Indian energy scenario and energy security''** at Indian Institute of Technology Delhi, New Delhi.
4. **National seminar,** September 25-26, 2007, on '**Renewable Energy: Potential and Sustainable Development**' at MITS Gwalior
5. **International Conference,** Feb. 7-9, **Solaris 2007, at IIT Delhi**
6. **National seminar,** March 24-25, 2006, on '**Infrastructure Management for New World order and Systems**' at MITS Gwalior
7. **International Conference,** DEC. 12-14, 14th '**ISME International conference on Mechanical Engineering in Knowledge age' at DEC Delhi**

Sponsored Research Projects

1. Research Project on "Performance investigation of Solar Thermal Systems for sustainable Built Environment" with funding amount of 16.00392 Lakh from AICTE New Delhi (File No: 8-24/FDC/RPS(POLICY-1)/2019 -20): Status: **Ongoing**
2. Research Project on "Heat and Mass Transfer Analysis of Hybrid Solar Dryer with Uniform Heating" with funding amount of 13.52 Lakh from AICTE New Delhi (File No: 8-173/RIFD/RPS/POLICY-1/2014 -15): Status: **Completed.**
3. Research Project on "Advance refrigeration and air-conditioning lab" with funding of 6.50 Lakh from AICTE New Delhi. Status: **Completed.**
4. Research Project on "Design and development of off road vehicle for BAJA 2014" with funding of 3.40 Lakh from TEQIP-II, R&D Fund. Status: **Completed.**
5. Research Project on "Performance Enhancement of solar distillation system using Nano particles" with funding of 12.90 Lakh from NPIU, New Delhi. Status: **Completed.**

Patents Filed

S. No	Title of Patent	PI & CO-PI	Patent Granting Authority
1.	Method and Apparatus for controlling temperature of solar Dryer	PI	Intellectual Property of India
2.	Apparatus for Heating Automotive/Industrial Coolant Using Solar Evacuated Tubes and System	Co-PI	Intellectual Property of India

Details of Seminars/Workshops/Conferences/Symposia/Continuing Education Programmes etc. Activities Organized

S. No.	Title	Duration	Level (National/International)
1.	TEQIP-III sponsored FDP on Renewable Energy Sources and Future Energy Needs from February 15 - 19, 2021 at MITS Gwalior	One Week	International
2.	Webinar on Building Science and Energy Conservation from September 22-26, 2020 at MITS Gwalior	One Week	National
3.	TEQIP-III sponsored Workshop on Building Envelope Design for Energy Optimization on September 07, 2020 at MITS Gwalior	One Day	National
4.	"Solar Energy Technologies" 25th Feb to 1st March 2019	One Week	National (GIAN Course)
5.	STC- TASESD (March 09 – March 18, 2019)	Two weeks	National (AICTE -QIP)
6.	FDP on "Solar Energy Applications" 1st March - 11th March 2017	Two weeks	National (AICTE -QIP)
7.	FDP on Advances Manufacturing Systems Feb.16 -22 2017 (As Convener)	One Week	National
8.	(Workshop) Manufacturing Systems (TEQIP –II funded) , 24-25 Oct 2016	Two Days	National
9.	(Workshop) Vehicle Dynamics, Sept. 26 – 28, 2016 (MPCST Funded)	Three Days	National
10.	(Workshop) Finite Element Methods for Engineers, April 2 -4, 2016, (TEQIP –II funded), (As Convener)	Three Days	National
11.	(Workshop) Innovations in teaching and Research, March 26,2015	One Day	National
12.	SRIJAN-2019, a festival of Technical Papers & Innovative Models	One day	National
13.	Fluid Mechanics (May 20 – 30, 2014)	Two Weeks	National
14.	Hybrid Solar PVT Technologies (January 16- 17, 2014)	Two Days	National
15.	Engineering Thermodynamics (Dec. 11, 2012 –Dec. 21, 2012)	Two Weeks	National
16.	Alumni meet (Reunion 1979 batch)	One Day	International

	(October 20, 2012)		
17.	Solar Energy Utilization (Sep. 15, 2004)	One Day	National
18.	Bio- Energy, Sept. 17, 2005 (As Faculty Advisor)	One Day	National
19.	Kshitiz April 30, 2005	One Day	National

Consulting Assignments Undertaken

1. Calibration of pressure gauge.
2. Survey of fencing wiring of forest department Datia (M.P.).
3. Calibration of metallic tape, metallic scale and Vernier Caliper.
4. Testing of heating of engine of Royal Hyundai car
5. Cooling Load estimation of Gwalior Expo facilitation centre Gwalior trade Fair

Details of PhD Guidance

S. No.	Name of student(s)	University	Status
1.	Mr. Gaurav Saxena	RGPV, Bhopal	Awarded
2.	Mr. Pushpendra Singh	RGPV, Bhopal	Thesis Submitted
3.	Mr. Vikas Kumar Thakur	RGPV, Bhopal	Thesis Submitted
4.	Ms. Rishika Shah	RGPV, Bhopal	Thesis Submitted
5.	Mr. Vedansh Chaturvedi	RGPV, Bhopal	Pursuing
6.	Mr. Nagendra Sharma	RGPV, Bhopal	Pursuing
7.	Mr. Chandra Shekhar Koli	RGPV, Bhopal	Pursuing
8.	Mr. Dharmendra Mittal	RGPV, Bhopal	Pursuing

Details of Project/ Thesis Guidance

S. No.	Title of Thesis	Institute	Name of student(s)	Co-Supervisor(s)	Year
1.	Mr. Rajat Vidhyarthi	MITS Gwalior	Studies In Applications of Lasers In Production Engineering	Dr. D Pandey DRDE Gwalior Dr. K. C Arora, Professor MITS	2004
2.	Mr. Vivek Nanda	MITS Gwalior	Total Productive Maintenance – A Case Study on Jamna Auto Industries	----------	2011
3.	Mr. Bijendra	MITS	Manufacturing and	Dr. C S Malvi	2012

	Gond	Gwalior	performance analysis of solar flat plate collector with phase change material		
4.	Mr. Bhoopendra Bhadoria	MITS Gwalior	Manufacturing and Performance evaluation of Corrugated Polycarbonate Hybrid Solar Water Flat Plate Collector	Dr. C S Malvi	2012
5.	Richa Chauhan	MITS Gwalior	An integrated production and preventive maintenance planning model for an ageing and detoriating production systems with limited historical data		2013
6.	Awadhesh Ahirwar	MITS Gwalior	Strategic analysis for reliability of diesel locomotives in Indian Railways		2013
7.	Shashank Saxena	MITS Gwalior	Design of photovoltaic System for a biscuit Packaging Machine " A small Scale Industry		2013
8.	Omprakash Mishra	MITS Gwalior	Two Stage Filtration System in Full Scale Boiling Water for Thermal Power Plant		2013
9.	Ranjeet	MITS Gwalior	Study on battery operated hybrid solar Vehicle	Dr. C S Malvi	2013
10.	Rohit Pandey	MITS Gwalior	Grid Connected Solar Photovoltaic Potential	Dr. C S Malvi	2013
11.	Akansha Kumra	MITS Gwalior	Study and Design of PV system for small Scale Cottage Industry at Gwalior		2012
12.	Jasveer Singh	MITS Gwalior	An approach for selection of process parameters of EDM on EN-353 steel by using Taguchi method and ANOVA		2014
13.	Pankaj Shrivastava	MITS Gwalior	Analysis of Barriers to implement green supply chain management in small scale industries using interpretive modeling techniques		2015
14.	Sourabh Agrawal	MITS Gwalior	Optimization of Machining parameters of hard porcelain on CNC machine by Taguchi and RSM method		2015
15.	Amrit Pal	MITS	Study of Time Series Model		2015

		Gwalior	Forecasting in Shoe Industries	
16.	Amit Kumar	MITS Gwalior	Time based optimization of Injection Molding Machine Process Parameters on PVC using GRA - RSM	2015
17.	Lalit Goud	MITS Gwalior	Scram Jet Combustor with Pylon Injector by computational Fluid Dynamics analysis	2015
18.	Madhvi Pathak	MITS Gwalior	Parameters optimization of Electrical Discharge Machining using TOPSIS and ANOVA	2016
19.	Gurjeet Kaur	MITS Gwalior	Optimization of Electric Discharge Machining Process Parameters of Stainless Steel 304 using GRA	2016
20.	Shivani Yadav	MITS Gwalior	Optimization of MRR & TWR on Electro discharge machine using Taguchi & ANOVA based GRA	2016
21.	Sandeep Tyagi	MITS Gwalior	Optimization of CNC Wire-Electrical Discharge Machining Parameters Using Response Surface Methodology based Genetic Algorithm	2016
22.	Sehdev Nayak	MITS Gwalior	Optimization of turning parameters of EN-36 for material removal rate and tool based on Taguchi and RSM method	2016
23.	Brij Mohan Sharma	MITS Gwalior	Response surface approach of optimization to study the effect of drilling parameter in AISI-304 stainless steel	2017
24.	Ajay Motwani	MITS Gwalior	Analysis of machining parameters in wire EDM with aluminium alloy using PCA and topsis approach	2017
25.	Dharmendra Singh Yadav	MITS Gwalior	Parametric optimization of TIG welding on AISI-304 stainless steel plate by Taguchi based RSM method	2017
26.	Ravi Bhardwaj	MITS	Simultaneous optimization of multiple performance	2018

		Gwalior	characteristics in MIG welding for AISI-304 stainless steel by weighted principle component analysis		
27.	Gajendra Arya	MITS Gwalior	Analysis and optimization of end milling machining parameter for polypropylene composite using taguchi based GRA		2018
28.	Vinay Bhardwaj	MITS Gwalior	Optimization of Machining Parameters for Nylon-6 Composition in CNC Lathe Using PCA-Based TOPSIS		2018
29.	Anil Kumar Sharma	MITS Gwalior	Analysis and optimization of varying surface grinding parameter for AISI- 1018 mild steel		2018
30.	Sonal Rajoria	MITS Gwalior	A computational study of natural gas combustor using viscous model	Prof. Swati Gupta	2019
31.	Sumit Mishra	MITS Gwalior	"Heat Recovery from metal casting using scrap preheating"		2019
32.	Harsh Vardhan Etondia	MITS Gwalior	A study on response parameters of Injection molding process for poly-propylene plastic using Grey Relational Analysis		2020
33.	Kaushal Pratap	MITS Gwalior	Multi Variable analysis and optimization of electrical discharge machining process using a PCA-ANN based Approach		2020

B.E. Projects Guided

1. Road Power Generation
2. Rural development of irrigation and electrification using biogas
3. A new design and performance analysis of flat plate solar collector
4. Design and development of paddled air fin blower
5. An electric knee heating belt
6. Design of hybrid vehicle
7. Design and fabrication of all terrain vehicle
8. Design and study of humidity controlled evaporative cooler
9. Design and fabrication of HPV tricycle

10. Automatic transmissions of gears

11. Study, design, analysis and fabrication of an ATV (All Terrain Vehicle)

12. Lifting wheel chair

13. Study of the nature of irreversibility with the work supplied by the electric motor in the case of stirring

14. Performance analysis of series connected parabolic solar concentrator

15. Design of hybrid solar cooker

16. Hydraulic brake model

17. THA-n-OES (Thermal Shoes)

18. Intake air preheating by scavenging heat from exhaust gas

19. Synthesis and characterization of surfactant CTAB-Assisted MnWO4 Nanorods as electrode material for super capacitor applications

20. Wave power generation model

21. Project planning and optimization in Installation and commissioning of cooling towers

22. Solar stove Round the Clock

23. Design modification of automated Electromagnetic braking system

Administrative Experience

1. Worked as Head of Mechanical & Automobile Engineering from May 01, 2021 to till now.

2. Working as Associate Proctor from January 16, 2019 to till now.

3. Working as Proctorial Board Member from January 31, 2019 to till now.

4. Worked as Head of Mechanical & Automobile Engineering from Jan 4, 2016 to Jan 1, 2018.

5. Worked as a member of Institute Purchase Committee from August 22, 2012 to March 21, 2017.

6. Worked as a member of TEQIP-II Central Purchase Committee from July 12, 2011 to March 31, 2016.

7. Worked as warden of girls hostel Blok 5 from July 2011 to Feb 16, 2016.

8. Worked as Professor Incharge Security from November 2015 to Jan 2016.

9. Currently working as faculty advisor of SAEINDIA MITS Chapter.

10. Worked as faculty advisor of ISTE student chapter MITS.

11. Class coordinator Ist B.E. Mechanical.

12. Member of central purchase committee.

13. Worked as active member of valuation team for BE/ME/MCA/ examination May 2011.

14. Appointed as DTE nominee for diploma counseling at CSMT, Takenpur, Gwalior July 12 - 13, 2011.

15. Working as member of uniform committee for class IV employee of MITS

16. Worked as coordinator of invitation committee in PHONIX 2011.

17. Member of the committee formed by municipal commissioner Gwalior for solar city Gwalior

18. Worked as member of admission committee for BE/MCA/B Arch/Lateral entry admission 2010.

19. Worked as member of admission committee for M. Tech (PE& MH) admission 2010

Details of Extra Curricular Activity

1. Participated in essay competition on "Corruption at the top is emasculating the country" organized by India Rejuvenation Initiative at IIT Delhi, February 5th, 2009.

2. Prepared AICTE Compliance Report of MITS, 2006.

3. Active member of placement cell of MITS Gwalior

4. Actively Contributed in NASA-2004.

5. Prepared Mechanical Department Time in the years, 2003-2007.

Contribution in New Lab Development or Consolidation of Existing Lab

S. No.	Name of the Lab	Developed New lab/Consolidation of existing lab	Month and year
1.	Heat transfer lab	Consolidation of existing lab	June- July, 2004
2.	Advance Refrigeration Lab	Developed (Under AICTE MODROB Project)	2018-19
3.	Solar Energy Lab	Developed	2016-17

Any Special Achievements

1. JCI Outstanding Young Person Award (2012) in the field of Science and Technological Development.

2. GATE qualified in March 1999.

3. I have received travel grant from DST as young scientist for attending UKERC Summer School at University of Sussex, Brighton UK

Membership of Academic Bodies/Professional Societies

Life Time Member of ISTE
Member of SAE INDIA (Western)
Member of IET
Member of IAEngg