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### EDUCATION

2014-2019 **PhD**, Maulana Azad National Institute of Technology (MANIT), Bhopal, India  
2011-2013 **M.Tech.** Maulana Azad National Institute of Technology (MANIT), Bhopal, India  
2006-2010 **Bachelor of Engineering with First Class**, Chhattisgarh Swami Vivekananda Technical University, Bilai, India

### DETAILS OF RESEARCH PROJECT

Year	Title of Project	Funding Agency	Amount	Status	Role
2023	Experimental analysis of Nu and f in DPHE using turbulators in food processing technology	M.P. Council of Science & Technology	5,15,000/-	Ongoing	PI
2020	Analysis of Solar Photovoltaic AC & DC Surface/Submersible Pumping System for Irrigation Purpose	M.P Urja Vikas Nigam Ltd.	3,85,000/-	Completed	CO-PI
2019	Investigating the effect of Temperature, Humidity, and particulate Matter on Corrosion in Galvanized sheet metal at Indian atmosphere	Panasonic India Pvt. Ltd.	15,00,000/-	Completed	PI
2019	Efficient Thermal Energy Storage Systems Using Phase Change Materials PCMs	Collaborative Research Scheme (CRS), NPIU, MHRD	3,00,000/-	Completed	CO-PI
2019	Development of Low-Cost single-family solar cooker	Collaborative Research Scheme, NPIU, MHRD	2,25,000/-	Completed	CO-PI

## **Event Organized**

<b>S. No</b>	<b>Name of Event</b>	<b>Duration</b>	<b>Sponsoring Agency</b>
1	Research Methodology & How to Write a Good Scientific Research Paper	10/01/2023 to 14/01/2023	M.P. Council of Science & Technology, Bhopal
2	International Conference on Technology Innovation in Mechanical Engineering (TIME 2021)	22/04/2021 to 23/04/2021	Self-Sponsored

## **PUBLICATION DETAILS (SCI: , SCOPUS: )**

### **Research Paper Published**

1. Heeraman J, Chaurasiya PK, Kumar R. Heat Transfer Enhancement in Double Pipe Heat Exchanger: Exploring Twisted Tape Inserts with Dimple Configuration. Journal of Thermal Analysis and Calorimetry (accepted).
2. Heeraman J, Kumar R, Chaurasiya PK, Verma TN, Chauhan DK. Optimisation and comparison of performance parameters of a double pipe heat exchanger with dimpled twisted tapes using CFD and ANN. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering. 2024 Feb 14:0954408923122359. <https://doi.org/10.1177/0954408923122359>
3. Suresh B, Meshram K, Dasore A, Rajak U, Chaurasiya PK, Verma TN. Predict the characteristics of diesel engine using glycine max oil biofuel. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering. 2024 Feb 18:09544089241230885. <https://doi.org/10.1177/0954408924123>.
4. Jain PK, **Chaurasiya PK**, Rajak U, Nath Verma T, Tiwari D. Application of artificial intelligence to investigate the performance and flow pattern near staggered piece in V-ribs with aligned gaps roughness in solar air heater using relevant input parameters. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering. 2024 Jan 23:09544089231223032. <https://doi.org/10.1177/095440892312230>
5. Choudhari MS, James J, Mohan M, Sharma VK, Kumar EA, **Chaurasiya PK**. Influence of measurement parameters on hydrogen absorption properties of hydrogen storage alloys. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects. 2023 Aug 1;45(3):8538-52.
6. Alheety MA, Al-Jibori SA, Mahmood AR, **Chaurasiya PK**, Karadag A, Verma TN, Tiwari D. A cheap and high yield route for synthesis of 3H-1, 2-benzodithiol-3-thione for hydrogen storage applications. International Journal of Hydrogen Energy. 2023 Mar 15;48(23):8549-62.

- <https://doi.org/10.1016/j.ijhydene.2022.11.226>. (SCI, Elsevier, Impact Factor: 7.1).
7. Kumar K, Singh A, **Chaurasiya PK**, Pathak KK, Pandey V. Progressive development in hybrid liquid desiccant- vapour compression cooling system: A review. *Sustainable Energy Technologies and Assessments*. 2023 Feb 1;55:102960. <https://doi.org/10.1016/j.seta.2022.102960>. (SCI, Elsevier, Impact Factor: 7.6).
  8. Choudhari MS, **Chaurasiya PK**, Thakur M, Paswan M, Sharma VK. Performance investigation of the hydrogen- based energy storage system employing high-pressure metal hydride pair. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*. 2021 Nov 10:1-3. <https://doi.org/10.1080/15567036.2021.2000070>. (SCI, Taylor & Francis, Impact Factor: 2.9).
  9. **Chaurasiya PK**, Rajak U, Veza I, Verma TN, Ağbulut Ü. Influence of injection timing on performance, combustion and emission characteristics of a diesel engine running on hydrogen-diethyl ether, n-butanol and biodiesel blends. *International Journal of Hydrogen Energy*. 2022 May 12; 47(41):18182-93. <https://doi.org/10.1016/j.ijhydene.2022.03.268>. (SCI, Elsevier, Impact Factor: 7.1).
  10. Jain PK, Chaurasiya PK, Verma TN, Tiwari D. Investigation of the heat discharge from a solar-powered air heater with distinctive dual arc artificial roughness. *Sustainable Energy Technologies and Assessments*. 2023 Dec 1;60:103543. <https://doi.org/10.1016/j.seta.2023.103543>
  11. Heeraman J, Kumar R, **Chaurasiya PK**, Beloev HI, Iliev IK. Experimental evaluation and thermal performance analysis of a twisted tape with dimple configuration in a heat exchanger. *Case Studies in Thermal Engineering*. 2023 Jun 1;46:103003.
  12. **Chaurasiya PK**, Patidar H, Shende V, Rajak U, Verma TN, Dwivedi G. Evaluation of the reduction in greenhouse gas emissions attributable to wind energy: A retrospective evaluation of Indian Offshore and Coastal Site. *Ocean Engineering*. 2023 Aug 1;281:114665. <https://doi.org/10.1016/j.oceaneng.2023.114665>
  13. Pawar A, Jolly A, Pandey V, **Chaurasiya PK**, Verma TN, Meshram K. Artificial intelligence algorithms for prediction of cyclic stress ratio of soil for environment conservation. *Environmental Challenges*. 2023 Aug 1;12:100730. <https://doi.org/10.1016/j.csite.2023.103003>
  14. Nema VK, Singh A, **Chaurasiya PK**, Gogoi TK, Verma TN, Tiwari D. Combustion, performance, and emission behavior of a CI engine fueled with different biodiesels: A modelling, forecasting and experimental study. *Fuel*. 2023 May 1; 339:126976.

- <https://doi.org/10.1016/j.fuel.2022.126976>. (SCI, Elsevier, Impact Factor: 6.6).
15. Heeraman J, Kumar R, **Chaurasiya PK**, Gupta NK, Dobrota D. Develop a New Correlation between Thermal Radiation and Heat Source in Dual-Tube Heat Exchanger with a Twist Ratio Insert and Dimple Configurations: An Experimental Study. *Processes*. 2023 Mar 13;11(3):860. <https://doi.org/10.3390/pr11030860>. (SCI, MDPI, Impact Factor: 3.3).
  16. Jain PK, Lanjewar A, **Chaurasiya PK**, Tiwari D, Sharma VK. Experimental testing of solar-based air heater roughed with discrete V-down rib and staggered element. *Environmental Science and Pollution Research*. 2023 Jan 17:1-5. <https://doi.org/10.1007/s11356-022-25067-1>. (SCI, Springer, Impact Factor: 3.4).
  17. Rathod NJ, Chopra MK, Shelke SN, **Chaurasiya PK**, Kumar R, Saxena KK, Prakash C. Investigations on hard turning using SS304 sheet metal component grey based Taguchi and regression methodology. *International Journal on Interactive Design and Manufacturing (IJIDeM)*. 2023 Mar 3:1-2. <https://doi.org/10.1007/s12008-023-01244-5>. (Scopus, Springer).
  18. Kodi Raghunath, Ravuri Mohana Ramana, Charankumar Ganteda, **Prem Kumar Chaurasiya**, Damodar Tiwari, Rajan Kumar, Dharam Buddhi, Kuldeep Saxena. Processing to pass unsteady MHD flow of a second-grade fluid through a porous medium in the presence of radiation absorption exhibits Diffusion thermo, hall and ion slip effects. *Advances in Materials and Processing Technologies*. 2023, <https://doi.org/10.1080/2374068X.2023.2191450>. (Scopus, Publisher: Taylor & Francis)
  19. Singh SK, Kacker R, **Chaurasiya PK**, Gautam SS. Correlations on heat transfer rate and friction factor of a rectangular toothed v-cut twisted tape exhibiting the combined effects of primary and secondary vortex flows. *International Communications in Heat and Mass Transfer*. 2022 Dec 1;139:106503. <https://doi.org/10.1016/j.icheatmasstransfer.2022.106503>. (SCI, Elsevier, Impact Factor: 6.7).
  20. Arockia Dhanraj J, Alkhaldeh R, Van De P, Sugumaran V, **Chaurasiya PK**, Velmurugan K, Fayaz H. Appraising Machine Learning Classifiers for Discriminating Rotor Condition in 50W-12V Operational Wind Turbine for Maximizing Wind Energy Production through Feature Extraction and Selection Process. *Frontiers in Energy Research*.:1161. (SCI, Frontiers, Impact Factor: 3.8).
  21. Rathod NJ, Chopra MK, **Chaurasiya PK**, Pawar SH, Tiwari D, Kumar R, Saxena KK, Buddhi D. Design and optimization of process parameters for hard turning of AISI 304 stainless

- steel using Taguchi-GRA-PCA. International Journal on Interactive Design and Manufacturing (IJIDeM). 2022 Aug 26:1-2. <https://doi.org/10.1007/s12008-022-01021-w>. (Scopus, Springer).
22. Kumar P, Jain AK, **Chaurasiya PK**, Tiwari D, Gopalan A, Arockia Dhanraj J, Solomon JM, Sivakumar A, Velmurugan K, Fefeh Rushman J. Sustainable Machining Using Eco-Friendly Cutting Fluids: A Review. Advances in Materials Science and Engineering. 2022 Sep 26;2022. <https://doi.org/10.1155/2022/5284471>. (SCI, Hindawi, Impact Factor: 1.2).
23. Rajak U, Singh TS, Verma TN, **Chaurasiya PK**, Shaik S, Afzal A, Cuce E, Rajhi AA, Saleel CA. Experimental and parametric studies on the effect of waste cooking oil methyl ester with diesel fuel in compression ignition engine. Sustainable Energy Technologies and Assessments. 2022 Oct 1;53:102705. <https://doi.org/10.1016/j.seta.2022.102705>. (SCI, Elsevier, Impact Factor: 7.6).
24. Paliwal P, Webber JL, Mehbodniya A, Haq MA, Kumar A, **Chaurasiya PK**. Multi-agent-based approach for generation expansion planning in isolated micro-grid with renewable energy sources and battery storage. The Journal of Supercomputing. 2022 Nov;78(17):18497-523. <https://doi.org/10.1007/s11227-022-04609-x>. (SCI, Springer, Impact Factor: 2.6)
25. Sheik MA, Aravindan MK, Beemkumar N, **Chaurasiya PK**, Jilte R, Shaik S, Afzal A. Investigation on the thermal management of solar photo voltaic cells cooled by phase change material. Journal of Energy Storage. 2022 Aug 15; 52:104914. <https://doi.org/10.1016/j.est.2022.104914> (SCI, Elsevier, Impact Factor: 8.9).
26. **Chaurasiya PK**, Rajak U, Singh SK, Verma TN, Sharma VK, Kumar A, Shende V. A review of techniques for increasing the productivity of passive solar stills. Sustainable Energy Technologies and Assessments. 2022 Aug 1; 52:102033. <https://doi.org/10.1016/j.seta.2022.102033>. (SCI, Elsevier, Impact Factor: 7.6).
27. Agrawal Y, Bhagoria JL, Gautam A, **Chaurasiya PK**, Dhanraj JA, Solomon JM, Salyan S. Experimental evaluation of hydrothermal performance of solar air heater with discrete roughened plate. Applied Thermal Engineering. 2022 Jul 5; 211:118379. <https://doi.org/10.1016/j.applthermaleng.2022.118379>. (SCI, Elsevier, Impact Factor: 6.4).
28. Sharma J, Soni S, Paliwal P, Saboor S, **Chaurasiya PK**, Sharifpur M, Khalilpoor N, Afzal A. A novel long term solar photovoltaic power forecasting approach using LSTM with Nadam optimizer:

- A case study of India. Energy Science & Engineering. 2022 May 11. <https://doi.org/10.1002/ese3.1178>. (SCI, Wiley, Impact Factor: 4.0).
29. Rajak U, Nashine P, **Chaurasiya PK**, Verma TN, Dasore A, Pathak KK, Dwivedi G, Shukla AK, Saini G. The effects on performance and emission characteristics of DI engine fuelled with CeO<sub>2</sub> nanoparticles addition in diesel/tyre pyrolysis oil blends. Environment, Development and Sustainability. 2022 Apr 20:1-21. <https://doi.org/10.1007/s10668-022-02358-8>. (SCI, Springer, Impact Factor:4.0).
  30. Sheik MA, Aravindan MK, Beemkumar N, **Chaurasiya PK**, Dhanraj JA. Enhancement of Heat Transfer in PEG 1000 Using Nano-Phase Change Material for Thermal Energy Storage. Arabian Journal for Science and Engineering. 2022 Apr 8:1-5. <https://doi.org/10.1007/s13369-022-06810-9>. (SCI, Springer, Impact Factor:2.8).
  31. Dasore A, Rajak U, Panchal M, Reddy VN, Verma TN, **Chaurasiya PK**. Prediction of overall characteristics of a dual fuel CI engine working on low-density ethanol and diesel blends at varying compression ratios. Arabian Journal for Science and Engineering. 2022 Feb 8:1-8. <https://doi.org/10.1007/s13369-022-06625-8>. (SCI, Springer, Impact Factor:2.8).
  32. Rajak U, Dasore A, **Chaurasiya PK**, Verma TN, Nashine P, Kumar A. Effects of microalgae-ethanol-methanol- diesel blends on the spray characteristics and emissions of a diesel engine. Environment, Development and Sustainability. 2022 Jan 4:1-22. <https://doi.org/10.1007/s10668-021-01998-6>. (SCI, Springer, Impact Factor:4.0).
  33. Rathod NJ, Chopra MK, **Chaurasiya PK**, Vidhate US, Dasore A. Optimization on the Turning Process Parameters of SS 304 Using Taguchi and TOPSIS. Annals of Data Science. 2022 Jan 9:1-5. <https://doi.org/10.1007/s40745-021-00369-2> (Scopus, Springer).
  34. Rathod NJ, Chopra MK, **Chaurasiya PK**, Vidhate US. Optimization of Tool Life, Surface Roughness and Production Time in CNC Turning Process Using Taguchi Method and ANOVA. [10.1007/s40745-022-00423](https://doi.org/10.1007/s40745-022-00423). (Scopus, Springer).
  35. Verma M, Ghritlahre HK, **Chaurasiya PK**, Ahmed S, Bajpai S. Optimization of Wind Power Plant Sizing and Placement by the Application of Multi-Objective Genetic Algorithm (GA) in Madhya Pradesh, India. Sustainable Computing: Informatics and Systems. 2021 Sep 1:100606. <https://doi.org/10.1016/j.suscom.2021.100606>. (SCI, Elsevier, Impact Factor: 4.9).
  36. Shunmugasundaram M, Nagarajan SM, Reddy Y, **Chaurasiya PK**, Kumar A, Rajak U. An Experimental Study and Joining Parameters Optimization of Friction Stir Weld Butt Joint by

- Taguchi Approach to Maximize the Mechanical Properties. *Arabian Journal for Science and Engineering*. 2021 Nov 26:1-5. <https://doi.org/10.1007/s13369-021-06352-6>. (SCI, Springer, Impact Factor:2.8).
37. Dhanraj JA, Mostafaeipour A, Velmurugan K, Techato K, **Chaurasiya PK**, Solomon JM, Gopalan A, Phoungthong K. An Effective Evaluation on Fault Detection in Solar Panels. *Energies*. 2021 14(22):7770. <https://doi.org/10.3390/en14227770> . (SCI, MDPI, Impact Factor: 3.2).
38. Singhal, Ashish K., Narendra S. Beniwal, Khalid Almutairi, Joshuva Arockia Dhanraj, Ali Mostafaeipour, Alibek Issakhov, **Prem K. Chaurasiya**, Hossein Goudarzi, and Vinod K. Singh 2021. "Experimental Analysis of Modified DC-P&O Technique with Arm Controller for a Stand-Alone 40 W PV System" *Energies*. 2021. 14, no. 19: 6169. <https://doi.org/10.3390/en14196169>. (SCI, MDPI, Impact Factor: 3.2).
39. Vikas Kumar Thakur, Manoj Kumar Gaur, Amrat Kumar Dhamneya, **Prem Kumar Chaurasiya**. 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*. 2021. <https://doi.org/10.1080/15567036.2021.1971338>. (SCI, Taylor & Francis, Impact Factor: 2.9).
40. **Prem Kumar Chaurasiya**, Sanjay Kumar Singh, Piyush Kumar Jain, Upendra Rajak, Tikendra Nath Verma, A.K. Azad, Keshavendra Choudhary, Abeer M. Alosaimi, Anish Khan. Heat transfer and friction factor correlations for double pipe heat exchanger with inner and outer corrugation. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*. 2021. <https://doi.org/10.1080/15567036.2021.1953635>. (SCI, Taylor & Francis, Impact Factor: 2.9).
41. Rajeev Gupta, Akshay Rameshbhai Gupta, Nikhlesh Pathik, R. K. Pateriya, **Prem Kumar Chaurasiya**, Upendra Rakjak, Tikendra Nath Verma, Abeer M. Alosaimi, Mahmoud A. Hussein. Novel Deep Neural Network Technique for Detecting Environmental Effect of COVID-19. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*. 2021. <https://doi.org/10.1080/15567036.2021.1941435>. (SCI, Taylor & Francis, Impact Factor: 2.9).
42. Verma TN, **Chaurasiya PK**, Rajak U, Dhakar K, Nagdeve L. A Numerical Study on the Effect of Engine Characteristics by Using Ethanol-moringa-diesel Fuel. *Journal of Engg. Research EMSME Special Issue* pp. 2021 Aug 1; 7:16. <https://doi.org/10.36909/jer.EMSME.13857> (SCI).
43. Tikendra Nath Verma, Prerana Nashine, **Prem Kumar Chaurasiya**, Upendra Rajak, Asif Afzal, Sakendra Kumar, Dheerendra Vikram Singh, A.K. Azad. The effect of ethanol–methanol–diesel– microalgae blends on performance, combustion and emissions of a direct injection diesel

- engine. Sustainable Energy Technologies Assessments. 2020, Vol.42, 100851. <https://doi.org/10.1016/j.seta.2020.100851>. (SCI).
44. Singh TS, Rajak U, Samuel OD, **Chaurasiya PK**, Natarajan K, Verma TN, Nashine P. Optimization of performance and emission parameters of direct injection diesel engine fuelled with microalgae Spirulina (L.)– Response surface methodology and full factorial method approach. Fuel. 285:119103. <https://doi.org/10.1016/j.fuel.2020.119103>. (SCI).
45. Rajak U, Nashine P, **Chaurasiya PK**, Verma TN, Patel DK, Dwivedi G. Experimental & predicative analysis of engine characteristics of various biodiesels. Fuel. 285:119097. <https://doi.org/10.1016/j.fuel.2020.119097>. (SCI).
46. Rajak U, **Chaurasiya PK**, Nashine P, Verma M, Kota TR, Verma TN. Financial assessment, performance and emission analysis of Moringa oleifera and Jatropha curcas methyl ester fuel blends in a single-cylinder diesel engine. Energy Conversion and Management. 2020 Nov 15; 224:113362. <https://doi.org/10.1016/j.enconman.2020.113362>. (SCI).
47. Krishania N, Rajak U, **Chaurasiya PK**, Singh TS, Birru AK, Verma TN. Investigations of spirulina, waste cooking and animal fats blended biodiesel fuel on auto-ignition diesel engine performance, emission characteristics. Fuel. 2020 Sep 15; 276:118123. <https://doi.org/10.1016/j.fuel.2020.118123>. (SCI).
48. Rajak U, **Chaurasiya PK**, Nashine P, Verma TN, Verma Rohit. A Numerical Investigation of the Species Transport Approach for Modeling of Gaseous Combustion. Journal of Thermal Engineering. 2020. (Accepted). (SCOPUS). **Chaurasiya PK**, V Kranthi Kumar, Vilas Warudkar, Siraj Ahmed. Evaluation of Wind Energy Potential and Estimation of Wind Turbine Characteristics for Two Different Sites. International Journal of Ambient Energy. [10.1080/01430750.2019.1611634](https://doi.org/10.1080/01430750.2019.1611634). (SCI).
49. Prem Kumar Chaurasiya, Pragati Pandey, Upendra Rajak, Krishnakant Dhakar, Manoj Verma, Tikendra Nath Verma. Epidemic and challenges of coronavirus disease-2019 (covid-19): India response <https://ssrn.com/abstract=3569665>.
50. **Chaurasiya PK**, Ahmed S, Warudkar V. Wind Energy Development and Policy in India: A Review. Energy Strategy and Reviews. Vol. 24, pp- 342-357. 2019. [10.1016/j.esr.2019.04.010](https://doi.org/10.1016/j.esr.2019.04.010). (SCI).
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52. **Chaurasiya PK**, Sanjay Singh, Rashmi Dwivedi, Ravishanker V Choudri. Combustion and emission characteristics of diesel fuel blended with raw jatropha, soybean and waste cooking oils. Heliyon. Vol. 5, pp- 1-7. 2019. [10.1016/j.heliyon.2019.e01564](https://doi.org/10.1016/j.heliyon.2019.e01564). (SCOPUS)
53. **Chaurasiya PK**, Ahmed S, Warudkar V. Comparative analysis of Weibull parameters for wind data measured from met-mast and remote sensing techniques. Renewable Energy. 2018 Jan 1; 115: 1153-65. [10.1016/j.renene.2017.08.014](https://doi.org/10.1016/j.renene.2017.08.014). (SCI).
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55. **Chaurasiya PK**, Siraj Ahmed, and Vilas Warudkar. Wind Characteristics- observation- using- Doppler-SODAR for wind energy applications. Resource-Efficient Technologies. Elsevier. 2017. [10.1016/j.refffit.2017.07.001](https://doi.org/10.1016/j.refffit.2017.07.001). (SCOPUS).
56. **Chaurasiya PK**, Prasad V, Khare R. Scenario and Risk of Hydro Power Projects in India. International Journal of ChemTech Research. 2013; 5(2):1068-75. (SCOPUS)
- INTERNATIONAL & NATIONAL CONFERENCE***
57. **Prem Kumar Chaurasiya**, Nikhil Janardan Rathod, Piyush Kumar Jain, Vikas Pandey, Shashikant, Kunal Lala. Material Selection for Optimal Design Using Multi-Criteria Decision Making. 2023 3rd International Conference on Advancement in Electronics & Communication Engineering (AECE), 979-8-3503-3072-4/23; 206-210.
58. Dhanraj JA, Muthiya SJ, Subramaniam M, **Chaurasiya PK**, Akshayraj N, Selvaraju N, Ramanathan KC. Implementation of K\* Classifier for Identifying Misfire Prediction on Spark Ignition Four-Stroke Engine through Vibration Data. SAE Technical Paper; 2021 Oct 1. <https://doi.org/10.4271/2021-28-0282> .
59. Dhanraj JA, Muthiya SJ, Subramaniam M, Salyan S, Chaurasiya PK, Gopalan A, Anaimuthu S. A Comparative Study with J48 and Random Tree Classifier for Predicting the State of Hydraulic Braking System through Vibration Signals. SAE Technical Paper; 2021 Oct 1. <https://doi.org/10.4271/2021-28-0254>
60. Rajak U, Nashine P, Dasore A, Balijepalli R, Chaurasiya PK, Verma TN. Numerical analysis of performance and emission behavior of CI engine fueled with microalgae biodiesel blend. Materials Today: Proceedings. 2021 Mar 6. <https://doi.org/10.1016/j.matpr.2021.02.104>.

61. **Prem Kumar Chaurasiya**, Vilas Warudkar, Siraj Ahmed. Application of Remote Sensing in Wind Energy. 4<sup>th</sup> National Conference on Recent Trends in Innovation in Mechanical Engineering, Secunderabad, January 2017.
62. **Prem Kumar Chaurasiya**, Vilas Warudkar, Siraj Ahmed. Comparison of SODAR and LIDAR measurements of wind speed and direction for wind energy application. Elsevier. 2016. (Elsevier).
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64. Khare Ruchi, Prasad Vishnu, Gupta Vishal, **Chaurasiya PK**. Numerical Derivation of Flow Characteristics of Plunger Valve. Springer-Verlag Berlin Heidelberg, 2011.

**Book Edited/Editing/Editor**

1. Lead Guest Editor of Energies (SCI, Impact factor-2.74)
2. Lead Guest Editor of Environmental Science and Pollution Research (SCI, Impact factor-3.7)
3. Managing Guest Editor of Material Today Proceeding, Elsevier.
4. Guest Editor of Technology Innovation in Mechanical Engineering (TIME 2021), Lecture Notes in Mechanical Engineering, Springer Publication. (Scopus Indexed).

**Book Chapter Authored**

1. Siraj Ahmed, **Prem Kumar Chaurasiya**. Application of Remote Sensing in Wind Resource Assessment. Encyclopedia of Renewable and Sustainable Material. 2018. [10.1016/B978-0-12-803581-8.11038-0](https://doi.org/10.1016/B978-0-12-803581-8.11038-0). (Elsevier).
2. **Prem Kumar Chaurasiya**, Abul Kalam Azad, Vilas Warudkar, Siraj Ahmed. Advancement of Remote Sensing of Wind. Advancement in Clean Energy Technologies. 2020. ISSN No. 978-0-12-821221-9. (Elsevier).  
<https://www.sciencedirect.com/science/article/pii/B9780128212219000050?via%3Dihub>
3. Sanjay Chhalotre, Prem Kumar Chaurasiya, Upendra Rajak, Rashmi Dwivedi, R.V Choudri. Numerical Analysis of Performance Parameters and Exhaust Gas Emission of the Engine with Regular Air Intake System and with Insulated Air Intake System. Lecture Notes in Mechanical Engineering, Springer Publication.
4. Upendra Rajak, Thokchom Subhaschandra Singh, Prerana Nashine, **Prem Kumar Chaurasiya**, Tikendra Nath Verma, Anish Khan, Abdullah M. Asiri. Influence of fuel injection pressure for diesel-waste cooking oil cofuel in a research engine. Advanced technology for the conversion of waste into fuels and chemicals. 2021. ISBN: 978-0-323-90150-5.

<https://elsevier.aptaacorp.com/AuthorProofBooks/downloadbook.html?id=ef82bd8c7960ab8fcd6c12b3d9100eff>.

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6. Sri, M.R.S.R., Sree, G.V., Mohammad Shareef, S., Rajak, U., Peera, A.G., Chaurasiya, P.K. (2022). Design of Aerial Top Dresser. In: Chaurasiya, P.K., Singh, A., Verma, T.N., Rajak, U. (eds) Technology Innovation in Mechanical Engineering. Lecture Notes in Mechanical Engineering. Springer, Singapore. [https://doi.org/10.1007/978-981-16-7909-4\\_8](https://doi.org/10.1007/978-981-16-7909-4_8)
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### **INVITED TALK**

1. Delivered Expert Talk on Advancements in wind Energy Technologies under one-day webinar in association with Department of robotics & Cloud Technology, RTMNU at Nagpur Institute of Technology, Nagpur on 12th June 2021.
2. Delivered Expert Talk on Advancement in Wind Energy Assessment as resource person for IIC driven on 21.02.2022 at Hindusthan College of Engineering and Technology, Coimbatore.

3. Delivered Expert Talk on Developing Soft Skills and Effective Science Communication (Under the KARYASHALA Scheme - A SERB Initiative) at Maulana Azad National Institute of Technology Bhopal on 8 July 2023.
4. Delivered Expert Talk on Recent Trends in the Development of Alternative Fuels at Energy Centre Maulana Azad National Institute of Technology Bhopal on 23 February 2024.
5. Delivered Expert Talk on Intellectual Property Rights: Protection of Invention and Copyright at Bansal Institute of Science and Technology Bhopal on 09 March 2024.

### **ACHIEVEMENTS**

- Awarded Second Prize in 10<sup>th</sup> International Conference on Drift and Research Shift in Pharm-Ag, Engineering and Science in oral paper presentation entitle “Advancement in remote sensing of Wind”.
- Recipient of **YOUNG SCIENTIST AWARD in the 4<sup>th</sup> International Scientist Award on Engineering Science and Medicine**, Organized by VDGGOOD Professional Association, Chennai.
- Recipient of **Fellowship of Training of Young Scientist** at 34<sup>th</sup> M.P Young Scientist Congress Award (2019).
- **Won third prize in Oral presentation** at MANIT, Bhopal on “Research Scholar Day” (06 December 2018).
- **Invited by State Council of Science, Technology and Environment Meghalaya (SCSTE, Government of Meghalaya)** for conducting a firsthand field visit for installation of wind turbine, November 2017.

### **PERSONAL PROFILE**

Date of Birth : 31<sup>st</sup> October 1988  
Father's Name : Shri. Vinod Kumar Chaurasiya  
Nationality : Indian  
Permanent Address : House No-577, Kurud road kohka  
Vinod modern tailor, Supela Bhilai, Distt-Durg, (C.G), 490023

### **DECLARATION**

I hereby declare that the information furnished above is true to the best of my knowledge.

Place: Raipur  
09-04-2024

**(Prem Kumar Chaurasiya)**