

Bhupendra Singh Chauhan (Mechanical Engineering)

Soft Skills: • ANSYS, Catia Basic, AutoCAD, Matlab, Nastran, Microsoft Office

Specialization

M.Tech: Thermal Engineering

Ph.D: Mechanical Engineering

Other: UGC NET Management (2012), UGC NET Industrial Relations (2013),

Area of Interest

Research: Energy and Fuels, IC Engine,

Technology Development: Alternative Fuels and IC engine application

Innovation: Renewable Energy

Other: Patent-2

Participated - In Specialized Training / Certified Courses :

1. Attended Certificate of Online Workshop on Intellectual Property Rights organized by Pandit Deendayal Petroleum University (PDPU) and Intellectual Property Protection Organization (IPPO) on 10th & 11th April 2020, Gandhi Nagar, Gujarat.
2. Session Chair, in "4th International Conference on Innovative Advancements in Engineering and Technology (IAET- 2020)", Elsevier-Material Today Proceedings, Jaipur National University, Jaipur (Rajasthan) with National Academy of Sciences, India (NSAI) on February 21-22, 2020.
3. Attended IPR Awareness Workshop, on 14-03-2020, organized by Department of Mechanical Engineering, Meerut Institute of Engineering and Technology, Meerut (UP), sponsored by CST (UP).
4. Invited Lecture, AICTE-ISTE- Sponsored, 6 Days Faculty Development Programme on Advance Technologies in Automobiles with its Impact on Environment and Applications of Renewable Resources of Energy at Gulzar Group of Institutes, Ludhiana. 16th May 2018, Study on the Performance and Emission of a Diesel Engine fuelled with Biodiesel from Non Edible Oils, IC Engines
5. Attended IPR Awareness Workshop, on 24-03-2018, organized by Division of Research and Development, Lovely Professional University, Punjab sponsored by CST- Punjab.
6. Organizing Committee Member in International Conference on Composite Materials: Manufacturing, Experimental Techniques, Modelling and Simulation (ICCMEMS-2018), on 15-17 March 2018 at Lovely Professional University, Punjab supported by Elsevier (Material Today Proceedings).
7. Attended National workshop on "Paradigm Shift in Indian Economy: Demonetization" at Delhi Technical Campus (GGS IP University), Greater Noida (UP) University, Delhi, on 12 April 2017.
8. Attended National conference on "Recent Advance in Alternative Energy Source" at Department of Mechanical Engineering, Delhi Technological University, Delhi, on 29 January 2018.

9. Technical Session Chair in “International Conference on Composite Materials: Manufacturing, Experimental Techniques, Modeling and Simulation (ICCMEMS-2018)”, Elsevier-Material Today Proceedings, LPU Punjab 15-18 March 2018.
10. Attended, National Workshop on Recent Advances in Alternative Energy Sources At DTU, Delhi, on 29 January 2018.
11. Received- Outstanding Reviewer for Applied Energy-November-2018, Outstanding Reviewer for Renewable Energy Focus-May -2018, Reviewer Certificate for Energy Conversion and Management in March- 2018
12. Received- Outstanding Reviewer for Renewable and Sustainable Review-July-2017, Outstanding Reviewer for ENERGY-January-2017, Reviewer Certificate for Renewable and Sustainable Review-April-2017, Outstanding Reviewer for Applied Thermal Engineering-October-2016, SCI-Elsevier.
13. Received- Outstanding Reviewer for ENERGY in November-2014, Reviewer Certificate for ENERGY in August-2016, Reviewer Certificate for Applied Thermal Engineering in July 2016, Applied Thermal Engineering in March, 2016, Reviewer Certificate for Journal of The Taiwan Institute of Chemical Engineers in July 2014--SCI-Elsevier.
14. Attended Faculty Development Program (FDP) –NITTTR Chandigarh, on 28th November 2016 – 2nd Dec. 2016
15. Organizing Committee Member in International Conference on Advance Production and Industrial Engineering (ICAPIE-2016), on 9-10 December 2016 at Delhi Technological University, Delhi-42.
16. Invited Lecture- 24/9/2016, Adesh Institute of Engineering, Faridkot, Punjab on “Role of Additive in biodiesel fuelled engine”.
17. “Guest of Honor” from Institution of Engineers (India), Delhi State Center, ITO, Delhi-02, on 26th January 2017.
18. Technical Session Chair in National Conference on “Emerging Trends in Mechanical Engineering and Technology (ETME-2017)” at Sharda University, Greater Noida (UP) India, on 24 March 2017
19. “Best Group Award” in group presentation during Summer School 2014 at Pusan National University (Korea), with University of Nottingham (UK), Loughborough University (UK), University of Birmingham (UK), organized by Pusan Clean Coal Center & Engineering Doctorate Center in Efficient Fossil Energy Technologies, 2014. 06. 29 to 2014. 07. 05.
20. As Organizer Chair of International Conference of Advance Research and Innovations [ICARI-2014, ICARI-2015, ICARI-2016, ICARI 2017, ICARI 2018, ICARI 2019 and ICARI 2020] at Institution of Engineers (India), Delhi state centre, with www.ijari.org
21. One week Short Term Course on Engine Emissions Measurement & Control, by Delhi Technological University in association with AVL India Pvt. Limited, from July 8-12, 2013 in Department of Mechanical Engineering, Delhi Technological University, Delhi-42.
22. Received “Student Internship” among 19 countries participants. Internship training about Korean Company Culture at Seoul, organized by Korea Venture Business Association in 2010

Publication - Books / Chapters / Papers / Articles / Blogs: (A) Research Papers in SCI, SCIE Journals [Google Citation-1196, h-index-10, (April 2020)]
[Scopus Citation-843, h-index-8, SCI-Impact Factor- 53.625]

1. “Effect of varying biogas mass flow rate on performance and emission characteristics of a diesel engine fuelled with blends of n-butanol and diesel”, Journal of Thermal Analysis and Calorimetry, doi.org/10.1007/s10973-019-09055-1, (2019), 1-14, Geetesh Goga, Bhupendra Singh Chauhan, Sunil Kumar Mahla, Amit Dhir, Haeng Muk Cho (Impact Factor 2.471)

2. "Influence of diesel, biodiesel, and n-butanol fuel blends on performance and emission characteristics of a dual fuel engine using varying mass flow rates of biogas", *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, (In Press-UESO-2019-1431). Authors: Geetesh Goga , Sunil Kumar Mahla, Varun Singla, Bhupendra Singh Chauhan , Amit Dhir (Impact Factor 0.555)
3. "Trend and time series analysis by ARIMA model to predict the emissions and performance characteristics of biogas fuelled compression ignition engine", *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, doi.org/10.1080/15567036.2019.1670286. Authors: Sunil Kumar Mahla, Kulwinder Singh Parmar, Jujhar Singh, Amit Dhir, Sarbjot Singh Sandhu, Bhupendra Singh Chauhan (Impact Factor 0.555)
4. "Combined impact of varying biogas mass flow rate and rice bran methyl esters blended with diesel on a dual fuel engine", *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, doi.org/10.1080/15567036.2019.1623948. Authors: Geetesh Goga, Bhupendra Singh Chauhan*, Sunil Kumar Mahla, Haeng Muk Cho, Amit Dhir (Impact Factor 0.555)
5. "Effect of compression ratio on combustion, performance, and emission characteristics of compression ignition engine fueled with palm (B20) biodiesel blend", *Energy*, 178 (2019), 676-684. Authors: Pali Rosha, Saroj Kumar Mohapatra, Sunil Kumar Mahla, Haeng Muk Cho, Bhupendra Singh Chauhan, Amit Dhir (Impact Factor 5.537).
6. "Performance and emission characteristics of diesel engine fuelled with rice bran biodiesel and n-butanol", *Energy Report*, 5 (2019) 78-83. Authors: Geetesh Goga, Bhupendra Singh Chauhan*, Sunil Kumar Mahla, Haeng Muk Cho (Impact Factor 3.83)
7. "Influence of EGR on the simultaneous reduction of NO_x-Smoke opacity trade-off under CNG-Biodiesel dual fuel engine", *Energy*, 152 (2018), 303-312. Authors: SK Mahala, Amit Dhir, JB Gill, Haeng Muk Cho, Hee-Chang Lim, Bhupendra Singh Chauhan* (Impact Factor 5.537).
8. "Practice of Diesel fuel blends using alternative fuels: A review", *Renewable and Sustainable Energy Reviews*, 59 (2016), 1358-1368. Authors: Bhupendra Singh Chauhan, Ram Kripal Singh, HaengMuk Cho, Hee-Chang Lim (Impact Factor 10.556).
9. "A study on the performance and emission of a Diesel engine fuelled with Karanja biodiesel and its blends", *Energy*, 56 (2013), 1-7. Authors: Bhupendra Singh Chauhan, Naveen Kumar, HaengMuk Cho, Hee-Chang Lim (Impact Factor 5.537).
10. "A study on the performance and emission of a Diesel engine fuelled with Jatropha biodiesel oil and its blends" *Energy*, 37 (2012), 616- 622. Authors: Bhupendra Singh Chauhan, Naveen Kumar, Haeng Muk Cho (Impact Factor 5.537).
11. "Experimental Studies on fumigation of ethanol in a small capacity diesel engine", *Energy*, 36 (2), (2011), 1030-1038. Authors: Bhupendra Singh Chauhan, Naveen Kumar, Shyam Sunder Pal, Yong Du Jun (Impact Factor 5.537).
12. "Performance and Emission Study on Medium Capacity Diesel Engine with Pre-Heated Jatropha Oil", *Energy*, 35 (2010), 2484-2492. Authors: Bhupendra Singh Chauhan, Naveen Kumar, Yong Du Jun, Kum Bae Lee (Impact Factor 5.537).
13. "Performance and Emission Studies of an Agriculture Engine on Neat Jatropha Oil", *Journal of Mechanical Science and Technology*. 24 (2) (2010), 529-535. Authors-Bhupendra Singh Chauhan, Naveen Kumar, Haeng Muk Cho (Impact Factor 1.221).

(B) Research Papers in International Journals-Scopus, KSCI, EI, ISI & other indexed Journals

1. "Live Monitoring For Forensic Artifacts from IM Messenger Packets Using Freeware", *International Journal of Advance Research and Innovation*, 7(2), (2019) 94-97. Authors: Sankarshana Kadambari, Bhupendra Singh Chauhan, Mohit Soni
2. "Properties and characteristics of various materials used as biofuels: A review", *ICCMEMS-2018, Materials Today: Proceedings*, 5 (2018) 28438–28445. Authors: Geetesh Goga, Bhupendra Singh Chauhan*, Sunil Kumar Mahla, Haeng Muk Cho, Amit Dhir, Hee Chang Lim.

3. "Computational Analysis of Liquid Jet Impingement Micro-channel Cooling", ICCMEMS-2018, Materials Today: Proceedings, 5 (2018) 27877–27883. Authors: M. Zunaid, Haeng Muk Cho, Afzal Husain, Anant Jindal, Rohit Kumar, Bhupendra Singh Chauhan*
4. "The Analysis of the Throttle body of the Intake System in the Engine through CFD", International Journal of Advance Research and Innovation, 5(1), (2017), 75-77. Authors: ChangChunXu, Bhupendra Singh Chauhan, Haeng Muk Cho
5. "Integrated Kano Model and QFD in Designing Passenger Car", International Journal of Advance Research and Innovation, 5(2), (2017), 241-242. Authors: Mahesh Kumar Shukla, Ranganath MS, BS Chauhan
6. "QFD Concepts Integrated with Design of Indian Military Vehicles" International Journal of Advance Research and Innovation, 4(4), (2016), 633-634. Authors: MK Shukla, Bhupendra Singh Chauhan, Ashutosh Kumar Rai
7. "Quality function deployment in India: A review", International Journal of Advance Research and Innovation, 4(2), (2016), 587-591. Authors: MK Shukla, Bhupendra Singh Chauhan
8. "Static structural analysis of crankshaft for single cylinder camless engine", Journal of Energy Engineering, 23(3), (2014), 241-248. Authors: Kanwar Jabar Singh Gill, Khushpreet Singh, HM Cho, Hee Chang Lim, Bhupendra Singh Chauhan, Dae Ho Park
9. "Temperature transients of piston of a Camless SI Engine using different combustion boundary condition treatments", Journal of Energy Engineering, 23(3), (2014), 231-240. Authors: Kanwar Jabar Singh Gill, Khushpreet Singh, HM Cho, Bhupendra Singh Chauhan
10. "Experimental study of Linseed oil as an alternative fuel for Diesel engine", International Journal of Advance Research and Innovation, 2(2013),1-5. Authors: Ashutosh Kumar Rai, Bhupendra Singh Chauhan, Amrita Pandey, HaengMuk Cho.
11. "Emission analysis of a medium capacity Diesel engine using mahua biodiesel", Journal of Energy Engineering, 22(2), (2013), 136-147. Authors: Ajay Kumar Sharma, LM Das, SN Naik, Bhupendra Singh Chauhan, HaengMuk Cho.
12. "Performance analysis of OFDM with adaptive parameters on various modulation schemes", Journal of Energy Engineering, 22(3), (2013), 293- 298. Authors:Chandrajeet Meena, Amit Solanki, Bhupendra Singh Chauhan, HaengMuk Cho.
13. "Study of a wave absorber in various distance placed in a sinusoidal propagate wave", Applied Mechanics and Materials, 302, (2013), 326-331. Authors: Zhen-Zhong Yuan, BhupendraSingh Chauhan, Hee-Chang Lim.
14. "Physico-chemical analysis of Linseed oil and its blends as a potential fuel for Diesel engine", 2nd International Conference on Energy and Environmental Protection (ICEEP 2013) (ICEEP), Advance Material Research 724-725 (2013), April 19-20, China by Inner Mongolia University Hongkong Industrial Technology Research Centre. Authors: AK Rai, Bhupendra Singh Chauhan, Naveen Kumar, Haeng Muk Cho, Amrita Pandey.
15. "A study on the performance end emission characteristics of a Diesel engine fuelled with linseed oil and its blends", Energy, IMECE-65937, Proceedings of the ASME 2013 International Mechanical Engineering Congress and Exposition, pp-1-5. 13-26 November 2013, San Diago, USA. AK Rai, BS Chauhan, HM Cho, N Kumar.
16. "Some Experimental investigation on use of Methanol and Diesel blend in a single cylinder Diesel engine", International Journal of Renewable Energy Technology Research, 2(1), (2013), 1-16. Authors: Chinmaya Misra, Naveen Kumar, BS Chauhan, HC Lim.
17. "The Performance and Emissions Analysis of a Multi Cylinder Spark Ignition Engine with Gasoline LPG & CNG", Journal of Korean Institute of Gas (KIGAS), 15(4), (2011), 33-38. Authors: Bhupendra Singh Chauhan, HaengMuk Cho.
18. "A study on experiment of CNG as a clean fuel for automobile in Korea", Journal of Korean Society of Atmospheric Environment, 26(5), (2010), 469-474. Authors: Bhupendra Singh Chauhan, HaengMuk Cho.

19. "The Study on Performance and Emission of CNG as a Potential Fuel in Korea", Journal of Korean Institute of Gas (KIGAS), 13(6), (2009), 39-43. Authors: HaengMuk Cho, Bhupendra Singh Chauhan.

(C) Research Papers in indexed National Journals

1. "Performance evaluation of an air cooled Diesel Fuelled with Neat Neem Oil and Diesel Blends", Journal of Biofuels, 3(1), (2012), 42-52. Authors: RC Singh, R Chaudhary, RK Pandey, S Maji, Babbar, BS Chauhan, R Gautam, C. Mishra.
2. "Performance and emission studies of a compression ignition engine on blends of calophyllum oil and diesel", Journal of Biofuels, 3(1), (2012), 53-64. Authors: C Misra, Naveen Kumar, Sidharth, B S Chauhan.
3. "Evaluation of Performance and Emissions Characteristics of Thumba Oil in a Compression Ignition Engine", Journal of Biofuels, 2(2), (2011), 107-114. Authors: Sidharth, Naveen Kumar, Bhupendra Singh Chauhan, SK Sinha

(D) Paper Presented in Indexed International Confernces

1. "Study on manufacturing and quality concept of automobile compressor in Die casting", for ICARI 2020, 19th January 2020, IE (India), Delhi state center, Delhi, India
2. "Manufacturing of aluminum casting using High Pressure Die Casting Machines", for ICARI 2020, 19th January 2020, IE (India), Delhi state center, Delhi, India
3. "Environmental Impact of Electric and Biodiesel Car- A Review", for ICARI 2019, 20 January 2019, IE (India), Delhi state center, Delhi, India, ISBN- 978-93-5346-324-3.
4. "Preventive and Predictive Maintenance of Automobile", for ICARI 2019, 20 January 2019, IE (India), Delhi state center, Delhi, India, ISBN- 978-93-5346-324-3.
5. "Performance and emission characteristics of a diesel engine using rice bran oil methyl esters", for ICARI 2019, 20 January 2019, IE (India), Delhi state center, Delhi, India, ISBN- 978-93-5346-324-3.
6. "Performance and emission characteristics of a diesel engine fueled with blends of diesel and n-butanol", for ICARI 2019, 20 January 2019, IE (India), Delhi state center, Delhi, India, ISBN- 978-93-5346-324-3.
7. "Performance and emission characteristics of a dual fuel engine fueled with diesel and biogas", for ICARI 2019, 20 January 2019, IE (India), Delhi state center, Delhi, India, ISBN- 978-93-5346-324-3.
8. "QFD: Internal Customer of NOAC", for ICARI 2018, 28 January 2018, IE (India), Delhi state center, Delhi, India, ISBN-978-93-5279-880-3.
9. "Study on Plastic Injection Mold flow analysis for head lamp reflector in Automobiles", for ICARI 2018, 28 January 2018, IE(India), Delhi state center, Delhi, India, ISBN-978-93-5279-880-3.
10. "Physico chemical analysis of Jatropha and Karanja oil and its blend as a potential fuel", for 2nd Green & Sustainable Chemistry (Elsevier), 14-17 May 2017, Berlin, Germany
11. "The Analysis of the Throttle Body of the Intake System in the Engine through CFD", for ICARI 2017, 29 January 2017, IE(India), Delhi State Center, Delhi, India, ISBN-978-93-5258-841-1.
12. "Combustion Characteristic of Jatropha Biodiesel in A Single Cylinder Diesel Engine", for RAME 2016, 14th & 15th October 2016, DTU, Delhi, India, ISBN-978-194523970-0.
13. "Combustion Behavior of Bio Fuels In A Single Cylinder Diesel Engine", for ICARI- 2016, 27th Feb, 2016, IE(India), Delhi state center, Delhi, India, ISBN 978-93-5258-841-1.
14. "Energy Scenario of India in 21st Century", for International conference of advance in engineering and technology(ICADET-14), 15-16 February 2014, LKCE-Ghaziabad, (UP), India.
15. "Feasibility of Linseed oil as a fuel for direct combustion Diesel engine", for International conference on agile manufacturing (ICAM), December 2013, IIT BHU Varansi (UP).
16. "Performance and Emission of Thumba Oil on Medium Capacity Diesel Engine", published in proceedings of International Symposium on Fuel and Lubricants, March 5-7, 2012, by Indian oil, India Habitat Centre, Delhi, India.

17. "Experimental investigation of performance and emissions study of neat Karanja biodiesel and diesel", 16th Cross straits Symposium on Energy and Environment Science and Technology (CSS-EEST), 13-15 November 2014, Jeju, South Korea. (By- Kyusu University-Japan, Shanghai Jiao Tong University- China, PNU-Korea).
18. "Performance end emission study of Linseed oil as a fuel for CI engine", International Conference on Energy, Biomass, Waste and Environmental Management (CICEBWEM), World Academy of Science Engineering and Technology (WASET)- 7 (5),(2013), 787-790 Switzerland.
19. "Feasibility Study of Vegetable Oil as a Potential Fuel for Diesel Engine" for Korean Society of Automobile Engineering, May 26, 2010, KNU, South Korea.
20. "Experimental Studies on NOX Reduction in a Diesel Engine with Cold EGR", for Korean Academic Industrial Society, 2010 , KUTE, South Korea.
21. "State and Opportunities of biofuels in Korea" for New Frontiers in Biofuels, 18-19 January 2010, Indian Habitat Center, Organized by Department of Mechanical Engineering, DTU, Delhi
22. "Performance and Emission Study on an Agriculture Engine with Pre-heated Jatropa Oil", published in proceedings of Petrotech 2009, January.12-16 2009, Vigyan Bhavan, New Delhi, India.
23. "The Performance and Emission Studies of Gasoline and CNG, as a Potential Fuel in Korea", published in the proceedings of Korean Society of Mechanical Engineers Fall Conference, November 5-16, 2008, Yongpyeong, South Korea.

(E). Book Published

1. ISBN 978-613-8-91749-6, Investigation of Diesel-Eucalyptus biodiesel fuel CI Engine, <https://www.morebooks.de/store/gb/book/investigations-on-diesel-eucalyptus-biodiesel-fueled-ci-engine/isbn/978-613-8-91749-6>, Authors-Geetesh Goga, Sunil Kumar Mahla, Bhupendra Singh Chauhan[SP]
2. ISBN 978-613-9-85720-3, Utilization of biodiesel and ethanol in CI engine, <https://www.morebooks.de/store/gb/book/utilization-of-biodiesel-and-ethanol-in-ci-engine/isbn/978-613-9-85720-3>, Authors- Bhupendra Singh Chauhan, Sunil Kumar Mahla, Amit Dhir [LAP]
3. ISBN 978-613-9-84412-8, Performance evaluation of Jatropa Biodiesel in CI Engine, <https://www.morebooks.de/store/gb/book/performance-evaluation-of-jatropa-biodiesel-in-ci-engine/isbn/978-613-9-84412-8>, Bhupendra Singh Chauhan, Sunil Kumar Mahla [LAP]
4. ISBN 978-620-2-31040-6, CFD Studies of heat Transfer in Heat Sink, <https://www.morebooks.de/store/gb/book/cfd-studies-of-heat-transfer-in-heat-sink/isbn/978-620-2-31040-6>, Authors-Sunil Kumar Mahla, BS Chauhan, Geetesh Goga [SP]
5. ISBN 978-613-9-81892-1, Performance evaluation and emissions characteristics of Biogas and Oxygenate additive as pilot fuel for dual fuel mode. <https://www.morebooks.de/store/gb/book/performance-and-emissions-of-biogas-and-oxygenated-additives/isbn/978-613-9-81892-1>, Authors- SK Mahla, Bhupendra Singh Chauhan [LAP]
6. ISBN 978-620-2-31021-5, Utilization of Di-Methyl Carbonate-Diesel blends in CI Engine, Scholar Press, 2018, <https://www.morebooks.de/store/gb/book/utilization-of-di-methyl-carbonate-diesel-blends-in-ci-engine/isbn/978-620-2-31021-5>, Authors-Sunil Kumar Mahla, BS Chauhan [SP]
7. ISBN 978-620-2-31030-7, Investigations on HHO and DMM Fuels under dual fuel mode, <https://www.morebooks.de/store/gb/book/investigations-on-hho-and-dmm-fuels-under-dual-fuel-mode/isbn/978-620-2-31030-7>, Authors-Sunil Kumar Mahla, BS Chauhan

(ii) Edited Books

8. International Conference of Advance Research and Innovation (ICARI-2020), <https://ijari.org/assets/conf/icari-2020/icari-2020-abstract.pdf>
9. ISBN 978-93-5346-324-3, International Conference of Advance Research and Innovation (ICARI-2019), <http://ijari.org/images/ICARI2019/Abstract-ICARI2019.pdf>
10. ISBN 978-93-5279-880-3, International Conference of Advance Research and Innovation (ICARI-

2018), <http://ijari.org/images/ICARIAbstracts2018.pdf>

11. ISBN 978-93-5258-841-1, International Conference of Advance Research and Innovation (ICARI-2017), <http://ijari.org/images/ICARIAbstracts2017.pdf>

12. ISBN 978-93-5258-841-1, International Conference of Advance Research and Innovation (ICARI-2016), <http://ijari.org/images/ICARI Abstracts2016.pdf>

13. ISBN 978-93-5156-328-0, International Conference of Advance Research and Innovation (ICARI-2015) <http://ijari.org/images/ICARI Abstracts2015.pdf>

14. ISBN 978-93-5156-328-0, International Conference of Advance Research and Innovation (ICARI-2014), <http://www.ijari.org/images/ICARI Abstracts.pdf>