An Ambitious Assistant Professor aiming to leverage 15+ years of rich experience in Industry and Academics in the field of Mechanical & Automobile Engineering. Graduated as an Engineer in 2003 from India and completed Masters in 2005 from UK with specializations in the field of Mechanical Manufacturing and Automobile Engineering. Have enriching experience of 5 + years in Industry and 10+ years in Academics in India and Abroad.
Currently Pursuing Research in the field of Biofuels; has published 15 papers in National and International Journals; has been an author to numerous book chapters; along with guiding 12 students for their Masters programme. Has arranged various National and International level Seminars and Workshops on latest innovations and technologies in the field of Automotive Engineering. An active member and a part of CU family for the last 7 years.

Prof. (Dr.) Navdeep Sharma Dugala
E-mail: hod.automobile@cumail.in

Professional Qualifications

2016- 2020- **Ph.D.** in Mechanical Engineering from Chandigarh University, Gharuan.

2003-2005 -**Masters of Science** in Mechanical Engineering (London) UK.

1999-2003 - **Bachelor of Technology** in Mechanical Engineering from Punjab Technical University

Job and Research Profile:

1. 8+ Years of Experience as Assistant Professor in the most Premier University &Institutes of North India, rich Research and Teaching experience of Automobile & Mechanical Department along with that taking care of Department as Department-Head.
2. 4+ years of rich experience of research in the field of biodiesels, Dual Fuel, single cylinder working on Alternate fuels with operational, combustion and emission characteristics.
3. 8 Publications in National level conference with 6 Scopus Indexed International Journals and 01 Book Chapter has been published. Acceptance of 04 others is been waited.
4. Involved in all types of academics and administration activities for the university like BOS Member, Academic Council Member and Over-all Department's In charge, Nodal officer for university for correspondence.
5. Regular member of Admission cell for the college, putting the best efforts to have quality students enrolled for the University.
6. Development and training of new staff members to work in different sections, awareness of university's policies, safe handling of consignments in office as well as in field and in providing information confidently as well.
7. Provided academic advisement to students including assistance with thesis and dissertation development.
8. Maintained Classroom structure and student engagement.
9. Developed Curriculum matching to International University standards.
10. Performed research to be utilized in academic writing for publications.
11. Collaborated with faculty members in Research on Bio Diesels and Alternate fuels.

Research Publications:

1. The effect of predecessor and successor processes on Cryogenic treatment effects: A review, International Journal of applied Engineering Research, IJAER. ISSN 0973-4562 Vol. 10 No.54 (2015).

2. A review - Influence of heat treatment on AISI 1040 steel fatigue, microstructure and mechanical properties. 1st National Conference of Innovations in Civil and Mechanical Engineering Baddi University. ISSN: 2277-4459 (2015).
3. View point- The smart vehicles of future. 2nd National Conference on Mechanical Engineering, Panjab University Regional centre Jalandhar. Paper ID : NCME-201561 (2015).
4. Fuel Cell Technology- A Basic Overview. 3rd National Conference on Advancements in Simulation & Experimental Techniques in Mechanical Engineering (NCASEme-2016).
5. Designing and Fabrication of Catalytic Converter using Non Noble Metals. ESDST 2017, BBSBEC , Fatehgarh Sahib. ISSN: 2278-0181 (2017).
6. Selecting an Eco Friendly Refrigerant - A Review Paper. 4th National Conference on Advancements in Simulation & Experimental Techniques in Mechanical Engineering (NCASEme-2017).
7. Production of Mahua Bio-Diesel Transesterification Process. International Journal of Mechanical Engineering and Technology (IJMET) 2017.
8. Exhaust Gas Analysis and Temperature Effect of Bio-Diesel On Single Cylinder Diesel Engine. International Journal of Mechanical Engineering and Technology (IJMET) 2017.
9. Production of Methyl Ester of Mahua (*Madhuca* Biodiesel) for improving its cold flow characteristics. Indian Journal of Science and Technology, Vol 11(26), DOI: 10.17485/ijst/2018/v11i26/130567, July 2018.
10. Production of Dual Fuel Biodiesel as an Alternative Fuel for Diesel Engine with Improved Cold Flow Characteristics. Indian Journal of Science and Technology, Vol 11(26), DOI: 10.17485/ijst/2018/v11i26/130567, July 2018.
11. An experimental investigation on the production and comparison of blended biofuel from non-edible vegetable oil. International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), 2019.
12. Production of Jatropha Oil Biodiesel and Improvement of its cold flow properties. International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), 2019.
13. An experimental study-engine combustion performance and exhaust gas emissions analysis of Mahua oil biodiesel. International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), 2020.
14. Characterization of Physical and Chemical Properties of Mahua Oil Biodiesel for Improvement in Its Cold Flow Properties. International Journal of Scientific & Technology Research volume 9, issue 03, March 2020.
15. Study of Physical and Chemical Properties of Blended Biofuel Prepared from 2ndGeneration Feedstock. International Journal of Advanced Science and Technology. 2020.
16. Analysis of Engine Performance and Emissions Characteristics of Produced Neem Oil Biodiesel and its Blends. International Journal of Scientific & Technology Research volume 9, issue 03, March 2020.
17. Dual Bio-Fuel as an Alternate Fuel for CI Engines with Enhanced Physical and Chemical Properties. International Journal of Scientific & Technology Research volume 9, issue 03, March 2020.
18. Evaluation of physicochemical characteristics of Mahua (*Madhuca indica*) and Jatropha (*Jatropha curcas*) dual biodiesel blends with diesel. Journal of King Saud University - Engineering Sciences. May 2020-https://doi.org/10.1016/j.jksues.2020.05.006.
19. Experimental investigations on the performance and emissions characteristics of dual biodiesel blends on a varying compression ratio diesel engine. S.N. Applied Sciences. May-2021-https://doi.org/10.1007/s42452-021-04618-0