

Manoj Bohara

Phone: +977-9848997842 | Address: Kathmandu, Nepal | Email: manoj00x0@gmail.com

ACADEMIC PROJECT

Conversion of Waste Plastic into Fuel and Its Utilization in SI Engine

May 2022-March 2023

Executive Team Member

Pokhara, Nepal

- Convert waste plastic into fuel.
- Physical and chemical properties of the fuel is determined.
- Plastic fuel is extracted by fractional distillation of plastic fuel and compared with properties of petrol available in market.
- Studied effect on petrol engine performance i.e., mileage and exhaust due to plastic fuel.

EDUCATION

Tribhuvan University- Western Regional Campus

Graduation April 2024

BE. Automobile Engineering

Pokhara, Nepal

- Major subjects: C programming, Python, Mathematics, Engineering mechanics, Mechanics of material , Theory of Mechanics, Engineering Drawing, Computer Aided Drawing, Thermodynamics and heat transfer, Workshop technology, Metrology, Control System, Automobile Components Design, Vehicle Dynamics, Electric Machines, Automobile Engines, Fluid Mechanics and Machines, Manufacturing and production process, Engineering Economics, Organization and Managements, Regression Analysis & Time series analysis, Modeling optimization problem in EXCEL, Decision Analysis, Risk Analysis, Optimization and Simulation using CRYSTAL BALL, System Design and Simulation etc.
- Developed final year project called “Conversion of waste plastic into fuel and its utilization in SI engine” studied and researched about the plastic and its properties and developed pyrolysis system to convert plastic into fuel and studied its properties, mileage in SI engine and exhaust pollution contents.

CERTIFICATIONS & TRAININGS

- **Material Processing:** *Georgia Institute of Technology(Coursera)-Online Course*
- **Industrial visit on AgroThai Food Pvt. Ltd - 2023**
- **Runner up in Technical fair – 2022**
- **Workshop on Identification of Misinformation:** *US Embassy Youth Council(USYC)- 2022*
- **Design and simulation on CATIA : SIMES**
- **Training on CATIA – 2021**
- **Industrial visit in Jagadamba Motors: Assembly plant of TVS – 2021**

SKILLS

- Basic Computer Skills: MS Office Package, E-mail, Internet
- Software skills: 3D modelling assembly detailing in software like SolidWorks, Computer Aided Design (CAD), CATIA, and Structural, Thermal and Fluid Flow analysis in CAE(ANSYS), Computational Fluid Dynamics(CFD), Finite Element Methods(FEM) etc
- Proficient in modeling for 'Decisions & Data Management and Analysis' using MS Excel sheet and add-ins
- Programming skills: Basic knowledge in C programming, Python, Database
- Operational skills: Operating knowledge of machines like Conventional Lathe machine, Drilling machine, Shaper, Slotter and Turret lathe, Milling, Center and Surface Grinding, Screw Threads and Gear manufacturing Methods and Sheet metal works.
- Research and Development skills: Documentation, Presentation, Project handling and Engineering Drawing skills
- Soft Skills: Excellent communication skills in English, Nepali and Hindi language
- Holding driving license of: 2 wheelers and 4 wheelers vehicles

INTERSHIPS AND EXPERIENCES

1. Internship on Bindhya Service Center: Hyundai

Nov 21, 2021 to Dec 15, 2021

2. Internship on Balaju Auto Works (BAW/Agni): Mahindra

May 6, 2022 to May 25, 2022

- Understanding of vision, mission, product and core service of the organization
- Basic Servicing: Engine oil/oil filter change, Air filter and AC filter change, General Checkup, Coolant and Brake oil top up, Break pad clean and change
- Familiar with the car parts, their functions and working mechanism
- Basic working principle of engine, transmission gearbox, cooling system, AC system, ignition system, fuel system and lubrication system
- Job Card Preparation and Diagnostic Test.
- Management System: Plant layout, Organizational structure, Service allocation process, Material handling process and Quality management
- Equipment and System Used: Tool set and Special purpose devices
- Study Enrollment Process: Technical, Spare parts, Service and Customer care department
- Pre Delivery Inspection (PDI)

3. Vijay Motors Pvt. Ltd: Subaru: Service Advisor Trainee

Feb 7, 2024 to April 28, 2024

- Customer Interaction: Listen to customer's concerns, gather information about vehicle's issues or service requirements.
- Vehicle Inspection and Service Recommendations: Identify problems or maintenance needs and recommend appropriate services/ BG products or repairs along with detailed explanations of recommended services, including costs and timeframes.
- Scheduling and Coordination: Schedule service appointments and coordinate with technicians to ensure that vehicle are serviced promptly and efficiently and manage the workflow to minimize wait times for customers.
- Opening and Closing of Job Card: Opening of job card with all the necessary record and close it with stating work done and parts issued after final inspections and send it for billing.
- Quality Work: Check the quality of work of the mechanics and techs and do final inspection of vehicle operating condition such as noise, sound, color of exhaust gases, body/engine vibration etc.
- Technical Learning: Study and learn service manual of the company's different vehicle models and upgrade with the ongoing latest technology and also conduct special attentions and provide guidance in major tasks such as engine overhauling, transmission box/gear box over hauling, operating scanning tools etc.
- PDI: Conduct Pre Delivery Inspection for new vehicles before delivering to the customers.
- Data Record and Analysis: Record the daily basis data and information of the vehicle and work done so as the analysis the data on technical, managerial and marketing point of view using different tools in MS Excel and Word.

4. CE Construction - Super Trishuli Hydropower Project: Mechanical Engineer

May 1, 2024 to Present

- Equipment (includes excavator, boomer, shotcrete, dumper, loader and others) and Plant maintenance and repair, Troubleshooting and Planning for preventive maintenance and exploration of ways to avoid equipment breakdown in future.
- New Equipment Commissioning and Testing.
- Handling, utilization and mobilization of equipment, parts and accessories to the different site locations on daily basis.

- Technical evaluation of critical spares and spare parts and research of plant performance and work with the operator staff to identify issues and implement optimizations.
- Meetings & Reporting - participate in daily planning and executing meeting with management team and organizing the monthly meetings with the operators and management committee.
- Responsible for the overall management, leadership, direction, and proper operation of a hydropower plant.
- Providing day-to-day supervision of operating expenses and the progress of work, with assistance from head office and external experts, as required.
- Oversee site provisions for employee occupational safety and health programs.
- Prepare daily equipment status and breakdown report and sent it to the head office and other management team and discuss on it to reduce the mean time to repair (MTTR).
- Review and comment on all plant incident reports; analyze equipment failures; determine causes; recommend recovery plans; and develop cost-effective solutions to prevent re-occurrence.

CONTACTS

Manoj Bohara

Contact: 9848997842

Address: Kathmandu, Nepal

Mailing Address: manoj00x0@gmail.com

LinkedIn: <https://www.linkedin.com/in/manojbohara/>

GrabCAD: <https://grabcad.com/manoj.bohara-1/models/>