

# Sanjeev Prajapati

## Engineer – Product Testing & Validation

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### Professional Summary:

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- Experienced and self-motivated engineer with over 7.5+ years of work experience in Automobile industry looking after Vehicle Testing and Component Level Testing. Expertise in design verification, testing & validation of emission exhaust catalytic converters for Automotive OEM applications and familiarized with testing equipment's (SIGU, MEXA, SCAT) and measuring equipment – MEXA Emission Analyzers, FTIR, Multimeter, Inline Tester, Anemometer, Dynamometer, Load Cell.
- Collaboratively working with Application Engineers and R&D Chemists for new formulation & development programs.
- Dynamic & Confident Candidate, with ability to take pressure of Multiple assignments.
- Proven track record of working collaboratively across cross functional teams to achieve goals.
- Good in MS Office, proficient English Communication Skills.
- Good Listener and Team Player.

### Technical Aptitude:

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- Knowledge of ICE & Engine Combustion process.
- Knowledge of Emission Control Technology and its Functions.
- Familiar with Fuel Cells and Hybrid Technology Battery Systems.
- Awareness of Exhaust System Testing.
- Awareness in Tractor Transmission Testing.
- Experienced of Installation & Operation Test Equipment's.
- Experienced of Preventive Maintenance & Trouble Shooting of Test Rig.

### Work Experience: Present

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#### Johnson Matthey

| Manesar | Gurugram, Haryana, Jun'2018 – Till date.

##### Emission Lab – Test Engineer

- **Operations Management** - Operate SCAT Emission Test Rig for Catalyst Development. Support Installation & Operation Test Equipment's, Preventive Maintenance & Trouble Shooting of Test Rig and ensuring EHS Compliance in Test Lab Area.
  - Development of testing for BS-6 Catalyst like DOC, CSF, SCR, ASC, TWC ETC.
  - Conducting test on catalyst as per test request and correlation activity PMA analysis.
  - Manage testing schedule as per priority and requirement.
  - Maintain all gases as per requirement in lab.
  - Manage shift schedule on daily basis as per the availability of Manpower.
  - Conducting various tests on catalyst like Ageing and performance testing of catalyst.
  - Working on Analyzer (MEXA-1) and FTIR.
  - Reports generation and data analysis and presentation.
  - Manage Capex and Opex as per annual forecast.
- **Report Analysis & Results** - provide support to Senior members of the team to ensure analysis, interpretation and actions taken regarding the outcomes of test data are appropriate. Feedback testing results and anomalies to submitters, answering queries and responding to further requests as required.
  - Data analysis of catalyst performance testing conversion checking and all.
- **Fault Finding** - Independently fault find on complex issues in the facilities on test and facility equipment and vehicles to minimize downtime. Provide support to others in the team during fault finding activities to ensure correct procedures are being followed and relevant factors are considered.
- **Maintenance & Calibration** - Ensure all equipment are ok and calibrated before using. Linearity and NOx conversion efficiency maintenance in Mexa-1 with the help of GDC. Manage and resolve technical troubleshooting while testing.

## **Escorts Ltd**

**| Faridabad | Haryana, Oct'2015 – April'2018.**

### **Vehicle Lab – Test Engineer**

- Vehicle Testing and Evaluation of test result.
- Basic hydraulic testing as per requirement like pump performance and efficiency test, RV Performance test analyzing of Crack off and full opening pressure, Lifting capacity test with Standard frame and on Hitch Point and Load maintenance Test.
- Testing to be done as per Standard Like: - IS-12224, IS-4468.
- Endurance durability, reliability, and validation testing.
- Conduct testing as per DVP.
- Daily inspection of testing vehicles.
- Report generation, data analysis.

### **Trainings & Certifications:**

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- One-month industrial training in Surya swami automobile at Karnal (Haryana)
- SAEINDIA colligate club from Geeta institute of management and technology, Kurukshetra.
- Training attended in national skill Development Corporation.

### **Education Credentials:**

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- Professional graduation from Mechanical Engineering from IIMT study Ahmedabad Gujrat certified from British Accreditation Council through Distance E-learning classes.
- Diploma (regular 3-year) in Automobile Engineering. From Govt. Polytechnic (Haryana) with 65% in 2015.
- 10th Passed from Govt sr. sec. School, (HBSE) in 2012.

### **Competencies:**

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- Basic vehicle Testing on dynamometer like Full throttle performance, Part Throttle Performance, Engine Cooling performance with straw and without straw test as per standard (IS-12236).
- Working knowledge on Air flow mapping & Temperature mapping on Tractors for operator comfort.
- Familiar with CVS Lab & Chassis Dyno for Vehicle Testing.
- Endurance Testing, Validation Testing of Vehicle.
- Brake Testing and Track Vehicle Testing.
- Durability and Reliability of Vehicle.
- Conduct testing as per DVP.
- Product development as per market requirement.
- 5S, Kaizen, safely working.
- Electric vehicle working and principle.
- Working of hydraulic system.
- Performance Learning about Catalyst.
- Emission Analyzer working principle.
- BS-6 learning as per norms.

### **Additional Info / Expertise Developed:**

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- MEXA Emission Analyzers and FTIR system.
- SIGU (Simulated Hot/Cold Gas Units) Emission Test Rig.
- Oven chambers for aging Catalytic Converters.
- CP Sierra Software for writing Test Methods Automation system.
- Gas Management System (gas cylinders for Catalytic testing) and Gas Detection Systems.
- Engine After Treatment System and System design for upcoming Euro legislations.
- Dyno Calibration and Load Cell & Its Calibration.
- Inline Tester for Hydraulic Systems.
- Sensor mounting & Its Calibration.