**CURRICULUM VITAE**

## Shivam Sharma

**B. Tech. (Mechanical Engineering)**

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## Tel: +91 8968336727

**Career Objectives**

To perform every job with complete concentration and interest that makes the perfect environment to live the life which gives success with peace and self satisfaction.

**Area(s) of Interest**

Operations and Maintenance of Boilers, Thermopacks, Compressors, Chillers, Air Handling Units and ETP.

**Educational Qualifications**

**B. Tech.** : Bachelor of Technology from Rayat Bahra Institute of Engineering & Nano Technology , Hoshiarpur affiliated to Punjab Technical University, Kapurthala.  
**Specialization** : Mechanical Engineering with 7.99 CGPA ( First Division with Distinction ) in batch 2018-2021.

**Diploma** : From Mehr Chand Polytechnic College, Jalandhar affiliated to PSBTE.

**Specialization** : Mechanical Engineering with 74.64 % ( First Division ) in batch 2014-2017.

**Class X** : From Shiv Jyoti Public School, Jalandhar with 7.2 CGPA in batch 2013-2014. (CBSE).

**Scholarship Awarded**

* MHRD Scholarship during B.Tech. at Rayat Bahra Institute of Engg. & Nano Technology, Hoshiarpur

**Professional Experience**

**Shiva Texfabs Limited, Machhiwara ( Punjab )**

**Designation :** Utilities & Boiler Operations and Maintenance Engineer.

**Period :** 04/03/2021 to till now

**Job description :**

Having an experience in Boiler Operations and Maintenance in Petcoke and Steam Coal fired CPFD Boiler and Thermopack in Recycled Polyester Staple fibre Plant.

Detail : Type – CPFD (with FBC System ) Make- THERMAX capacity- 4 TPH, working pressure 10.54 Kg/cm2 , max output 2.51 MW, maintenance of 2.5 TPH and 1 TPH ( Make CHEEMA) boilers. Erection & Commissioning of 15 LKC X 3 Thermopacks ( Make Thermotech ) and maintenance of 40LKC Thermopack.

**Responsibilities :**

* Operations & Maintenance of CPFD Boilers.
* Emergency handling of Boiler and Thermopack. (Tripping, power failure etc.)
* Responsible for safe Startups and Shutdowns.
* Ability to take quick action during emergencies.
* Make periodic inspections to see that all equipment and controls are operating properly and are in good condition.
* Responsible for purchasing and procurement of technical goods and services for an industrial operation.
* Maintain consumption and production records.
* Maintenance of Fans (ID, FD, PA), blowers, coal feeders, control valves, Motorized and (Main steam stop valve) and other drives to run the plant. - Preventive maintenance as well as breakdown maintenance, which are required for plant maintenance. Planning for shutdown work in annual maintenance.
* Performing the shutdown work and make plant better through Predictive maintenance.
* Conducted regular observation on boilers and auxiliary units to identify any inconsistencies.

**JCT Limited, Phagwara ( Punjab )**

**Designation :** Trainee Engineer ( Boiler Maintenance )

**Period :** 01/07/2017 to 31/06/2018

**Job description :**

* Monitoring & maintenance of all critical components in Babcock and Wilcox boiler. Like Combustor, Cyclone, Seal pot/ Loop Seal, Fluidized Bed Heat Exchanger (FBHE), Ash coolers, Paddy Husk feeding conveyor, Rotary screw feeders (for fuel feeding), Bed material bunker, Lime stone bunker, fuel Bunker, Flue gas Ducts, Safety Valve, Metallic Expansion Joints etc.
* Planning of job schedule for boiler equipments like fans, blowers, feed water pumps etc.
* Servicing and Maintenance of Centrifugal Pumps, Globe valves and Gate valves.
* Knowledge about attending of Pressure part tube leakages.
* To check the behaviors of the various equipments with optimum operation parameters and its reliable suitability to put into regular service.
* To co-ordination and follow up with maintenance department on status of day to day routine maintenance, executing preventive and break down maintenance completion.
* Managing the functions analytical, troubleshooting and preventive breakdown maintenance of various equipments.

**Technical Skills**

**AutoCAD Skills-**

* Proven proficiency in design and development of pipelines and Boiler mountings and accessories
* Good understanding of Mechanical design.
* Good understanding and experience in designing
* Proficient in CAD Designing.
* Ability to troubleshoot, diagnose and solve complex technical issues.

**Projects done on AutoCAD**

1. **Design and Development of Boiler Parts and Mountings.**

**Description:**

    The project is towards the erection and commissioning of Boiler Housing & mapping of civil works, boiler Accessories like- Multiple Therma Cyclones, Wet scrubbers, Steam Pipelines.

1. **Design and Development of Chiller parts.**

**Description:**

The project is towards the erection and commissioning of Chiller parts & Accessories like- Condensers, evaporators , water Pipelines.

1. **Drawing & Modeling of 2D and 3D views of gears, pulleys, flywheels, valves , etc.**

**Outline of Self Training Work:**

I worked as in a Vocational Trainee at Rail Coach Factory, Kapurthala leading to the project on “**Rain & RMPU** **Water Conserver Coach**”. The proposal is for Indian Railways. The main objective is to collect rainwater and water coming from RMPU and utilize this water to overcome the shortage of water in the coach.

The objective of the prototype work as follows;

* Rainwater and water coming from RMPU are stored in a separate tank.
* Water is filtered in the separate tank to clean small dust particle.
* After filtrations, water is fit for cleaning purpose and washroom purpose.
* Water is then stored in the separate tank itself.
* When there is a shortage of water in the coach, water collected in the separate tank will be used to overcome the need by supplying stored water to main tank.
* At the bottom of the tank, there is NRV (Non-return valve) so if the main tank is full, water will not enter in a separate tank.

The separate tank is placed on both sides of the vestibule. Each coach can have 4 tanks, 2 on each side.

# B.Tech. Work

Heating of the materials by using the radiations of the microwave is not a new application; some newer applications are emerging in the field of processing of materials by using the microwave radiations due to which it becomes a novel processing technique. Many authors have worked on ceramic materials and their sintering by using the microwave radiations. Now a days the applications of the microwave is being extended up to the sintering of the metallic powders. In the past years; many researches has processed the metallic powders and their sintering by using the microwave radiations; and used them in different applications like cladding as well as joining of the materials. The present work is based upon the joining of SS-430 and Mild Steel materials through microwave radiations. XRD, EDS and SEM were used to characterize the prepared samples. Mechanical characterization like tensile testing was performed to saw the strength of the joint and Vicker’s micro hardness tester was used to check the hardness of the joint. Observed results showed that the SS-430 and Mild Steel material was successfully joined by the microwave radiations by using nickel as a base powder (EWAC). A cellular structure having less defects was observed by using the metallurgical characterizations. The mechanical characterizations of joints shows that due to better metallurgical bonding and diffusion, mechanical strength was increased and also the defects were less. The ultimate tensile strength which was observed during the experiment was 471 MPa. Hardness was higher of the joint due to the presence of carbon which was absorbed from graphite sheet resulted in the formation of carbides in the microstructures of microwave processed joints.

**Skills**

**Software Packages:** Auto Cad, Solidworks, Origin , MS Word, MS Excel, ERP, SAP

**Academics:** 2nd rank in RBIENT, Hoshiarpur

**Languages Known:** English (Speak, Read, and Write); Hindi (Speak, Read, and Write); Punjabi (Speak, Read and Write).

# Internships

* **Dassaults Systemes Solidworks** ( 2 Months )

Exposed to the Solidworks Software and get certified for **Mechanical Design** at a Associate Level by the **DASSAULTS SYSTEMES** which is held at **IKGPTU, Kapurthala**

* **Rail Coach Factory , Kapurthala** (6 Weeks)

Exposed to various machining processes involved in making **Rail Coaches** .

* **Leader Valves Limited , Jalandhar** (4 Weeks)

Exposed to the various processes involved in making **Pipe fittings, Valves**.

* **Skyy Rider Institutions** (2 Weeks)

Exposed to virtual internship and got knowledge of various Electric **Vehicle Systems & Technology**.

* **NPTEL** ( 2 weeks )

Exposed to the various Non **Traditional Machining processes**.

* **Shiva Texfabs limited , Macchiwara** ( 4 Months )

Exposed to various functions which is performed by Utility Department in an Industry.

# Short Term Program Attended

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| **S. No.** | | **Course Name** | **Duration** |
| 1. | | Online course on “Material Characterization” by IIT, Madras | Four weeks (27th Dec, 2020 to 23th Jan, 2021) |
| 2. | | Online course on “Scanning Electron / Ion / Probe Microscopy in Material Characterization ” by IIT Roorkee | Four weeks (27th Dec, 2020 to  23th Jan, 2021) |
| 3. | | Elearning program on “ Bulk Material Handling ” by TATA Steel | Two weeks (30th March, 2020 to 13th April , 2020). |
| 4. | | Elearning program on “ Basic TQM ” by TATA Steel | One weeks (06th April, 2020 to 13th April , 2020). |
| 5. | | Elearning program on “Basic Metallurgy ” by TATA Steel | One weeks (04th April, 2020 to 11th April , 2020). |
| 6. | | Online Certification Exam on “The Fundamentals of Digital Marketing” by Google Digital Garage | One weeks (01st  Nov, 2020 to 07th Nov , 2020). |
| 7. | | Online Certification Course on “Teamwork Foundation” by Linkedin learning. | One day on 29th July , 2020 |
| 8. | | Online Certification Course on “Human Resources ” by Linkedin learning. | One day on 30th Dec , 2020 |
| 9. | | Online Certification Course on “ Electrical Works in Hybrid Machines” by Saudi Council of Engineers | One day on 07th Jan, 2021 |
| 10. | Online Course on “Refrigeration and Air Conditioning” by Godrej Disha Vocational Training . | | One Month (06th  July, 2020 to 05th Aug , 2020). |
| 11. | Online Certification Course on “ CNC Programming with MasterCam” by Skill India | | Four Weeks (01st  June, 2020 to 30th June , 2020). |
| 12. | Online Certification Course on “Principles of Management” by GDG Cloud India | | Two days (22nd &23rd Jan,2021) |
| 13. | Online Course on “ Introduction to Data Science” by University of Michigan | | One day on (07th Jan, 2021 ) |
| 14. | Participated in “Zero- Investment Innovations for Education Initiatives” held by Sri Aurobindo Society. | | One day on ( 16th Mar, 2021) |
| 15. | Successfully completed the “EF SET Certificate and has earned the English level.” | | One day on ( 25th Feb, 2021) |
| 16. | Attended online short term course on “Analysis and Design of Structures : Practices & Challenges” organized by NIT, Jalandhar. | | Five days (15th- 19th feb, 2021 ) |
| 17. | Participated in one day virtual workshop on “Advanced Vehicle Safety Systems” held by BOSCH. | | One day on ( 12th Mar, 2021) |

**Extra Curricular**

* Participated in Mehr Chand Polytechnic college for Minvera 2016 and secured 1st position in Mathematica at Rayat Bahra Ropar Campus.
* In the same event also secured 2nd position in Face Painting Competition.
* Participated in National Youth Parliament Festival organized by Government of India.
* Took part in the Cricket Tournament held at Rayat Bahra Hoshiarpur campus and won the tournament.
* Participated in Quiz Competition held at CT College.
* Also participated in the various quiz and events organized by Government of India.

**Strength**

* Life itself is the greatest strength. Professional strengths in implementation of planned, preventive & predictive maintenance practice.
* Adept in creating innovative strategies and formulating administrative policies for accelerated growth of the organization.
* Good working knowledge in building, negotiation and interpersonal skills, analytical mind and comprehensive problem detection/ solving abilities
* Excellent man-management, time management, leadership skills;
* Learn by Observation and Motivator.
* To learn the concepts of controlling mind powers & also the way to use it.
* To understand Human Psychology.

**Hobbies**

* Playing Cricket & football.
* Reading Motivational Books, Journals, Conferences articles, Blogs.
* Watching movies specially related to imagination, motivation & mind power.
* Repairing & maintenance of household appliances.

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# Personal Details

# Name: Shivam Sharma

**Date of Birth:** 11-07-1998

**Gender:** Male

**Category:** General

**Permanent Address:** 31, Chandan Nagar, Sodal Road, Jalandhar

**Permanent Phone No:** 8968336727 , 6284235829



Date: ( Signature )