



Profile:

Passionate rubber and polymer technologist with 3^+ years of experience in the Automotive Industry especially in Product development and manufacturing unit. Reduced PU scraps up to 33% within two years by VA/VE & Cost Reduction method and developed 12 μ polymeric anticorrosive coating that lasts 800⁺ hours in SST during MTech Project. Seeking a job among in the coating industry, Epoxy, Polyurethanes, Rubber and Automotive Industry.

Career Objective:

To be an astute learner and a responsible individual in a challenging environment and to establish myself as an able performer.

Education:

Course	Specification	College/School	Year	Marks
MTech.	Rubber Technology	IIT Kharagpur	2020-2022	8.35*
BTech.	Polymer Science	Bhaskaracharya College of Applied Sciences Dwarka Sector 2, (University of Delhi)	2013-2017	65 %
Std. XII	Science (State Board)	C.P.V.N. Inter College, Farrukhabad	2012-2013	87 %
Std. X	Science Science (State Board)	C.P.V.N. Inter College, Farrukhabad	2010-2011	67 %

<u>Internship:</u>

• TATA STEEL R&D Jamshedpur (December 2021-March 2022; 3 Months)

Topic: Development of anti-corrosive Epoxy nano composite coating for steel substrates. **Skills:** Mechanism of Corrosion and prevention, Protective Paints & Coatings – Salt Spray Test (SST), Adhesion, Conical mandrel Test, DLS, CLSM, Contact Angle, Electrochemical Impedance Spectroscopy (EIS), Impact etc.

Observation: Epoxy-PA coating with 0.1 wt.% IBA-PANI modified Fe₂O₃ inhibitor performed 800 hours in SST on Galvannealed Iron.

• Indian Oil Corporation Limited R&D Gurgaon, Haryana (2017; 1.5 Month)

Topic: Effect of LLDPE on melting and crystallization behavior of Beta nucleated PP.

Skills: Melt Flow Index (MFI), Micro-Extrusion, Injection molding, DSC, TGA, Tensile, Tear etc.

Work Experience:

Senior Engineer at Bharat Seats Limited, Joint Venture of Maruti Suzuki India Limited (August 2017 - July 2020; 3 year)

Designated in **Production and Product Development** in Polyurethane Foam manufacturing, Complete seating system for **Automotive 2-Wheeler and Four-wheeler**.

Responsibilities: Expertise in Production Planning and Quality Control with Manpower Management, Quality testing like Compression, Tensile, Cushioning, abrasion etc., Productivity enhancement and OEE simulation, new product development and design validation, Reaction Injection molding, Robot Teaching, SAP, 5S, Kaizen with ground implementations.

Achievements & Certifications:

- Published paper in 'Indian Journal of Chemical Technology' in 2018 A. Barak, V. D. Gangwar, and S. K. Shukla, "Development and characterization of polyvinyl chloridegraphite membrane," *Indian J. Chem. Technol.*, vol. 25, no. 2, pp. 196–200, 2018.
- Certification of Speaker in 'International Conference on India Corrosion Technology Forum (IONEX)' on ''Advances in anti-corrosive coatings". [Presentation Link: <u>https://docs.google.com/presentation/d/1KJ_hL6mXVQfkEQomfR9VNhUWhlSvQ5mO/edit?usp</u> <u>=sharing&ouid=102938834929341982936&rtpof=true&sd=true</u>]
- Paper presentation in a National Seminar on "Recent Innovations in Chemical Science and Environment Technology" at University of Delhi.
- > "Manpower Management" certified by Maruti centre for Excellence (MACE).
- > "VA/VE and Cost Reduction" certified by Maruti centre for Excellence (MACE).
- > "Fire Prevention and Fire Fighting" certified by 'Crisis Management-When It Strikes'.
- > "Safety, Health & Environment" certified by Indian Polyurethane Association (IPUA).

Coursework Information:

MTech

Basic Rubber Science, Industrial Rubbers and their Applications, Engineering Design with Rubbers, Rubber Compounding & Reinforcing materials, Characterization of Rubber & Rubber like materials, Physical Testing of Rubbers, Rheology and Processing of Rubbers, Rubber Product Manufacturing Technology etc.

BTech

Introduction to polymer sciences, Raw material of polymers, Business Entrepreneurship and Management, Polymer Chemistry, Unit Operations, Polymer Rheology, Polymer Characterization, Polymer Additives, Polymer Processing and Mold Design, Polymer Testing, Polymer Blends and composites, Polymer Degradation, Fiber science and Rubber Technology, Polymers in Packaging Technology, Engineering Graphics and Design/Paint Technology, Tyre Technology, Recyling and waste management, Conducting Polymers, Chemical Bonding, Fiber Manufacturing Technology, Speciality Polymers, Research Methodology, Basic Electronics, Applied Polymer Science, Polymeric Nanomaterials, Research, Computer Programming and Fundamentals.

References:

Prof. Dr. Nikhil Kumar Singha Rubber Technology Centre Indian Institute of Technology, Kharagpur, India Phone: +91-3222-281758 Email- <u>nks@rtc.iitkgp.ac.in</u> **Dr. Tapan Kumar Rout** Principal Scientist and Project Leader Research & Development Tata Steel Ltd, Jamshedpur India Phone: +91-8092088390 Email- tapankumarrout@tatasteel.com **Dr. Suryakanta Nayak** Principal Researcher Research & Development Tata Steel Ltd, Jamshedpur India Phone: +91-8658626626 Email- suryakanta.nayak@tatasteel.com

Declaration:

I, Vyom Deep, hereby declare that the information contained herein is true and correct to the best of my knowledge and belief.

Date: 05.04.2022 Place: IIT Kharagpur