# **Curriculum Vitae**

# **Abhijeet Khodke**

M. Tech Corrosion Technology, (Department of Metallurgy and Materials Engineering)

Address: 3, Vijay Nagar, Panchavati, Nashik

E-mail: abhijeetkhodke3@gmail.com

Contact number: 075-8882-7036

### **SUMMARY**

Good researcher with ability to apply basic engineering principles to solve technical problems. Sound knowledge of Corrosion Science, Surface Coating, Electrochemistry, Material Science, Metallurgy, Production processes and Analytical Chemistry. Eager to contribute and learn from the industry.

### **EDUCATION**

| Qualification                        | Institute   | Board/University  | Year        | Percentage / GPA                                |
|--------------------------------------|---|---|-------------|---|
| M. Tech                              | Defence Institute of  | Deemed  | 2019 – 2021 | Last Sem GPA: 10.00/10                          |
| Corrosion<br>Technology              | Advanced Technology,<br>(DIAT) (DRDO).                                | University  |             | Overall GPA: 7.97/10                            |
| B. Tech<br>Mechanical<br>Engineering | Mukesh Patel School of<br>Technology<br>Management and<br>Engineering | Narsee Monjee<br>Institute of<br>Management<br>Studies (NMIMS). | 2015 - 2019 | Last Sem GPA: 3.06/4.00  Overall GPA: 2.35/4.00 |

#### **WORK EXPERIENCE**

### **Production Supervisor, Shraddha Enterprises, (Present)**

- ➤ Worked in process development and overseeing the surface coating processes like anodizing, chromate-conversion coating, and high-temperature black oxidation coating as per the standard flow chart.
- > Hands on experience in anodizing rivets, washers, aluminium seals and various aluminium parts.
- Maintained the inventory, bath chemistry, equipments and controlled different process parameters.
- ➤ Data collection of rework material, data analysis, investigated the root cause and took the corrective action.
- ➤ Documentation, project validation, project coordination, product marketing, and timely delivery of orders.

## Researcher, M.Tech Thesis Project, Defence Institute of Advanced Technology (DIAT), 2020 to 2021

- > Improved the internal corrosion resistance of aluminium tube grade 6061 by performing electrolysis internally, and developed oxide coating up to 37 μm thickness.
- Planned the DOE's, performed the experiments and optimized the internal tube coating thickness with Taguchi analysis using statistical Minitab software.
- ➤ Investigated effects of different process parameters like electrolyte concentration, temperature, and current on coating thickness.
- Investigated different sealing methods like Hot D.I water sealing, Potassium Dichromate sealing, and Stearic acid sealing on nano-porous oxide coatings.
- Assessed corrosion monitoring techniques like Salt-Spray testing, Tafel polarization test using Gamry Instrument, material characterization techniques like SEM-EDS, XRD, Optical Microscope and surface wettability with Contact Angle Goniometry.

# Intern, Hindustan Aeronautics Limited (HAL Ojhar Division), June 2018

Experienced the concepts of manufacturing of components and heat treatment process.

### **SOFTWARE SKILLS**

MINITAB, Solid Works, DIALux- evo and RELUX software, MS Excel, MS Power Point, MS Word, MS Outlook.

### **RELEVANT COURSES**

- Concepts in materials.
- Introduction to Corrosion.
- Advanced Coatings.
- Advanced Characterization Techniques.
- Corrosion prevention and control.
- High Temperature Corrosion.

## **PRESENTATION SEMINARS**

**M.Tech Final Year Project:** Development and Parametric Optimization of Inner Tube Nano-Structured Anodized Aluminium coating.

**B.Tech Final Year Project:** Performance enhancement of solar powered LED street light system using Dialux- Evo and Relux software.

Steel Corrosion.

Hydrophobic Coating.

Chemical Vapor Deposition (CVD).

Cathodic and Anodic Protection.

## **ACHIEVEMENTS**

Bachelor's group project was recognized as the best engineering idea and received full funding from college.

Master's research project ranked first in the department of Metallurgy and Materials Engineering.

# **HOBBIES**

- Reading success stories.
- Reading coating and corrosion failure case studies.
- Listening music.
- Regular fitness and training.

## **PERSONAL PROFILE**

Date of birth: 08/10/1997

Nationality : IndianMarital status: Single

• Languages known: English, Marathi, Hindi

I hereby declare that the details and information given above are true to the best of my knowledge.

ABHIJEET NITIN KHODKE