# **Shweta Yashwant Amrutkar**

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### **Career Objective**

Seeking challenging opportunities that will take advantage of my skills & knowledge of polymer and surface coating technology which will add value to the organization.

Academic Credentials			
Qualifying Examination	Institute	Year of graduating	%Marks/ CGPA
M. Tech (Polymer Engineering & Technology)	Institute of Chemical Technology, Mumbai	2021	9.5
B. Tech (Surface Coating Technology)	Institute of Chemical Technology, Mumbai	2018	8.14
12 <sup>th</sup> (HSC)	Saraswati Vidyalaya and Jr. College	2014	84.64%
10 <sup>th</sup> (SSC)	Saraswati Vidyalaya	2012	92%

## **Work Experience**

AkzoNobel India Ltd., Bangalore (June 2018-June 2019)

Department- Protective Coating (MPY), Research Development & Innovation.

- Development projects: Modification of local PU product for corrosion resistance of steel, development of costeffective epoxy screed solventless floor coating, development of low-cost surface tolerance epoxy
- System qualification of power segment: Siemens Gamesa & Senvion approval as per specification.
- Value Engineering Projects: Evaluation & testing of paint by substituting alternate raw material to reduce the cost
- Evaluation of competitor samples.
- Chromoscan support: 30+ shades developed in local and global products.
- Providing technical information of products to the sales team.

### **Professional Training**

**BASF India Ltd., Mumbai** (May2017-June 2017)

Department- Construction Chemicals-Pigment & Dispersion division, Technical Services.

- Water-based floor coating- optimized formulation with reduced cost.
- Waterproofing- developed a system to prevent dampness and efflorescence migration to the surface.
- Paver block coating- Emulsion based clear coating to substitute solvent based acrylic coating.

### **Academic Projects and Research Experience**

- M. Tech Research Project (Jan 2021- June 2021)
  - Topic- Synthesis & Characterization of Mechanochromic Polymers. Guide- Prof. (Dr.) S. T. Mhaske
- **B. Tech Final Year Project** (March 2018- May 2018)
  - Topic-Synthesis of Non-Isocyanate Polyurethane. Guide-Dr. A. S. Sabnis & Prof. (Dr.) G. D. Yadav
- Undergraduate Research Trainee (BTUGRP) (August 2016-June 2017)
  - Topic- Conductive Coating by Interfacial Polymerization. Guide- Prof. (Dr.) S. T. Mhaske
- Summer Trainee (May 2016-July 2016)
  - Topic- Chemical modification of epoxy and polyesteramide coating for increased corrosion resistance.

### **National/International Presentations**

- "Synthesis of anticorrosive and flame-retardant coating based on turmeric and magnesium hydroxide" International Conference on Science & Technology, Coimbatore, 2021.
- "Polylactic Acid (PLA): A boon for Tissue Engineering" Papyrus, VORTEX 2017.
- "Enhancement of anticorrosive properties of epoxy coating by modified pistachio shell ash"
   International Level Conference CORCON 2017, NACE International.
- "Applications of Thermo responsive polymers"
  - National Level Conference RANGOTSAV 2017.
- "Industry Defined Problem- Transparent heat reflective coatings for glass"
  - National Level Conference on Advances on Polymers and Coating- RANGOTSAV 2017.

### **Review and Research Paper Publication**

- "Shape Memory Polymer Nanocomposite: A review on structure-property relationship" Polymer Bulletin, 2021.
- "Synthesis of anticorrosive and flame-retardant coating based on turmeric and magnesium hydroxide" International Research Journal on Advanced Science Hub, Volume 03, Issue 02S, 2021.
- "Enhancement of epoxy coating with modified seed ash"
  - Bombay Technologist International Journal, Volume 66, Issue 1, Pages 31-36, 2019
- "Superior Anticorrosive Properties in Epoxy Coating through Waste Utilization"
  - Book of papers of International Conference -CORSYM 2018, NACE International.
- "Enrichment of epoxy coating system with modified shell ash"

  International Journal of Environment and Waste Management, Volume 21, Issue 01, Pages 58-79, 2018.
- "Enhancement of anti-corrosive performance of epoxy coating by pistachio shell ash"
   Book of papers of International Conference -CORCON 2017.

### **Awards and Achievements**

- Received best presentation award at ICOST-2021, Coimbatore.
- Selected in *Top 10 Product Innovations amongst 2000*+ participants in **3M Young Innovator Challenge, 2020** and being part of YICA team 2020.
- Secured AIR 280 in GATE 2019.
- Received best presentation award at CORSYM-2018, IIT Madras.
- DST Inspire scholarship (2014)- Stood amongst the top 1% of students appearing for the Higher Secondary Certificate Examination.

### **Positions and Responsibilities**

- Event Head Organized Art Events in Manzar 2017
- **Department Coordinator** Worked for Creative Department in Vortex 2015

### **Technical Skills**

- Instruments- FTIR, XRD, TGA, DSC, UV-Vis, Optical microscopy, Particle size analysis (DLS)
- Characterizations- Salt spray, Weathering resistance, QUV-A/B, Humidity resistance, Hardness, Scratch resistance, Impact resistance, Abrasion resistance, Adhesion tests, Water whitening resistance, Wet Scrub, Water vapour permeability, chemical resistance

#### **Extra-Curricular Activities**

- Worked for a live independently organized TED event, in ICT, Mumbai.
- Volunteered for Run for Cause & AWAAZ, cause for children's welfare.
- Member of Art Club of ICT.
- Qualified Elementary and Intermediate grade examination held by Government of Maharashtra.