

Curriculum Vitae

Priyanka B.Shivde (Junior Research Fellow)

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Career Intent

To work in an organization that provides excellent opportunities for acquiring experience that commensurate with my abilities and also provides excellent growth opportunities. I would like to effectively employ my knowledge in achieving organizational goals.

Educational Qualification

Qualification	University/Board	Passing Year	%/CGPA
M.E. (Chemical Engineering)	Gujarat Technological University (VGES, Ahmedabad)	2018	8.7/10.0
B.E. (Chemical Technology)	Gujarat Technological University (SRICT, Bharuch)	2016	9.40/10.0
H.S.C.	Gujarat Higher Secondary Educational Board	2012	61.5%
S.S.C.	Gujarat Secondary Educational Board	2010	84.15%

Professional Experience

- ✓ A Visiting Faculty at “**Sal College of Engineering, Ahmedabad**” From March 2018 to June 2018. Experience in teaching of technical subjects of core chemical engineering and lab experiments.
- ✓ From 10th July 2018 to 28th April 2020, Working as Project Fellow in the **Council of scientific and industrial research -National Chemical Laboratory (Chemical engineering and process development department) Pune - India**. Experience in the MTO (methanol to olefins) reaction using heterogeneous catalyst, Zeolites (ZSM-5, SSZ-13) and its modification for the production of olefins (DME, ethylene, propylene, etc). MTO reaction using FBR reactor and at high temperature and ambient pressure. Handling and experience in the high-pressure reactor for the synthesis of catalyst used for the reaction. Data interpretation knowledge of catalyst during synthesis.
- ✓ Experiences in the waste water treatment of industrial effluent as well as synthetic effluent mainly pharmaceutical products (paracetamol, ibuprofen, naproxen) and dye compounds (congo red). Synthesis of adsorbents from biomass and its modification using adsorption technology for the treatment of pollutants. Different processes for the treatment of pollutants mainly Adsorption, Coagulation and Hydrodynamic Cavitation.
- ✓ Professional skills in water quality analysis like COD, Ammoniacal nitrogen, TOC, color determination of pollutants.
- ✓ Working in the pilot plant for the production of paracetamol and SCADA control system. Working in the down stream processing of the product also experiments on the mass transfer operations (Crystallization, Adsorption, Distillation, Evaporation, Drying)
- ✓ From 1st February 2021 to till date, working as Junior Research Fellow in **Somaiya Vidhyavihar University, Mumbai** working on green packaging materials using agricultural raw materials as paddy straw. Rice straw is crucial agro waste and world-wide researchers are working on eco-friendly products like, table ware from paddy straw. Currently, our focus towards making table ware products on large scale and reduce the challenges faced by pulping process of paddy straw.

Analytical Instrument Skills

Handling, Sample Preparation and Data Interpretation Knowledge of, UV-Vis Spectrophotometer, FTIR (Fourier Transform Infrared Spectroscopy), FESEM (Field Emission Scanning Electron Microscope), ESEM (Environmental Scanning Electron Microscope), TEM (Transmission Electron Microscopy), BET Surface Analyzer, DLS (Dynamic light scattering), AAS (Atomic Absorption Spectroscopy), XRD (X-Ray Diffraction), GC (Gas Chromatography), HPLC.

Technical Skills

- ✓ Computational Tools Used: MATLAB, SciLab.
- ✓ Project Experiments and Modelling as well as Simulation.
- ✓ Working on Latex, Origin Pro 8.0 and Zotero

- ✓ Computer knowledge, Experience in the use of scientific graphics Software and work in Windows Xp and Ubuntu (Linux) Operating Systems.
- ✓ Coordination and leadership qualities.
- ✓ Good presentation and teaching skills.

Academic Projects

B.E Project: “Rectification of Dilute Formic Acid to Its Commercial Grade by Extractive Distillation and explore Utility in API synthesis”

Rectification of azeotropic solution of compounds (Formic acid and water system) by different separation methods (Distillation) and Separation of formic acid and water using entrainer. Color removal of formic acid by use adsorption method using synthetic charcoal treatment.

M.E Project: “PETSc Based Numerical Modelling of Chemical Reactors”

Modelling based on chemical reactors and develop the numerical model for the different types of chemical reactions. Use of different computational software (PETSc and MATLAB) for the solution of numerical equations. Modelling of real process system (process data from published research papers) of chemical reactors like plug flow reactors, continuous stirrer tank reactor, fluid flow reactor etc.

Poster Presentations/Conferences

- ✓ Attended seminar at institute level on Application and Use of HPLC in Pharmaceutical Industries, SRICT, Bharuch, India, year 2015.
- ✓ Multidisciplinary Symposium (Institute Level) on Process Design and Optimization of Chemical Equipment's in Industries, Ahmedabad, India, Feb.-2017.
- ✓ Participated in International Conference on “Paradigm shift in chemical engineering education, processes and technology” Ahmedabad, India, sep.16 and 17- 2017.
- ✓ Attended expert lectures in different category includes advances in chemical engineering, catalysis and nanomaterials, troubleshooting problems in HPLC and GC, CSIR-NCL, Pune, India.
- ✓ Poster presentation in international conference “RACEE 2019” Chennai, India.
- ✓ Research data presents in conference on ECOHEALTH “Environment Sustainability” ICEES 2020, Feb. 24-26, Vadodara, India.

Awards And Fellowships

- ✓ **Gold Medalist** (Gujarat Technological University Topper, Branch - Chemical Technology - 2016).
- ✓ Received Academic Excellency scholarship in Bachelor's Degree, SRICT, Bharuch, India.
- ✓ 1st rank Topper in Secondary Educational School 10th board and received prize.

Industrial Training

S. Kant Healthcare Limited (API Plant), Vapi, India. (Duration – 2nd June to 2nd July 2015).

Extracurricular Activities

- ✓ Participated in technical events and worked in college union. Worked as volunteer for different seminar and events. It helped me to increase my coordination power and leadership quality.
- ✓ Conducted virtual expert lecture on “**Role of Catalyst in Chemical Reactions**” at SRICT-2020, Bharuch, India.
- ✓ Invitation of expert lecture on “**Advance oxidation process for waste water treatment**” at FETR-2020, Bardoli, India.

Personal Details

Name: Priyanka Babubhai Shivde

Date of Birth: 7th September 1994

Religion: Hindu

Nationality: Indian

Marital Status: Single

Strengths: Smart work, Helping Nature, Ability to quickly adopt new Technologies

Languages Known: English, Hindi, Marathi, Gujarati

Hobbies: Travelling, Outdoor activities, Explore new things

Declaration

I hereby declare that the above written information is true to the best of my knowledge.

Date:

Place:

Signature

(Priyanka Shivde)

