

Bhavesh S Hirani

Sr. Executive (R&D)

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☎ **7874281527**

📍 **Vadodara, Gujarat-390019**

Professional Summary

- ✓ Dedicated senior executive in research and development with over 8 years of total hands on experience in the green synthesis of N, O, and S-based heterocyclic compounds and fluorinated speciality intermediates which is a vital for pharmaceutical applications. Expertise in green innovative synthesis of new molecules, characterization and improving existing commercial products. conducts comprehensive prior art searches using google patents to assess patentability and freedom-to-operate (FTO). collaborate with cross-functional teams to ensure smooth technology transfer for the scale-up.
- ✓ Dedicated first aider with a comprehensive background in emergency response and event safety management.

Area of interest: Green Chemistry, Medicinal Chemistry, Organic Synthesis, Speciality Chemical Synthesis

Technical R&D Competencies:

- **Fluoro-speciality:** Specialized in synthesis and characterization of fluoro-specialty molecules versatile use in pharmaceuticals, agrochemicals and polymer industries.
- **Process Development:** Expertise in green chemistry, sustainable practices and one-pot synthesis to improve yields and safe commercialization.
- **Familiar with industrial chemical processes:** Helex, Nitration, Halogenation, Esterification, Diazotization, Hydrogenation, Pressure reaction and High vacuum distillation.
- **Regulatory & IP:** Strong understanding of patent law and documentation standards required for legal compliance.

Professional Experience

GUJARAT FLUOROCHEMICALS LIMITED

Senior Executive R&D

Ranjitnagar, Panchmahals, Gujarat

07/05/2021 – Present

- Research on the synthesis and characterization of fluorinated molecules have proven to be versatile, combining the unique properties of the C–F bond with specialized scaffolds to deliver enhanced applications, these molecules used as pharmaceutical or agrochemical intermediates and speciality chemicals.

1) 6-Fluoro-2-methyl-1H-indole 2) 3-(Trifluoromethyl)acetophenone

DAI-ICHI KARKARIA LIMITED

Associate coordinator

Dahej GIDC, Bharuch, Gujarat

15/06/2020 to 01/05/2021

- Synthesis and characterization of specialty polymers and resins is an important for Engineering adhesive, Emulsion stabilizer, Petrochemical additives.

1) Acrylate and methacrylate esters

2) Melamine-Based Epoxy Resins

RUBAMIN PRIVATE LIMITED

Halol GIDC, Vadodara, Gujarat

Senior Chemist

06/07/2018 to 08/06/2020

- Performed hydrometallurgical processes involving recovery and purification, applying principles relevant to chemical processing.
- Synthesis and characterization of metal hydroxide and carbonate compounds under controlled laboratory conditions for catalytic organic transformations and pharmaceuticals formulations.
- Executed separation and purification techniques including solvent extraction and ion exchange, ensuring high purity standards materials

DEEPAK NITRITE LIMITED.

Nandesari GIDC, Vadodara, Gujarat

Trainee Chemist

- Where I have completed the project work during period of November 2017 to April 2018. A Dissertation on the project entitled:

‘Synthesis and Characterization of Thiocarbohydrazide’

Achievements and Certificates

- ❖ Certificate of Excellence from **THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA** for the excellence achieved in the field of N.C.C for **Ship Attachment** National Level Camp at Mumbai Naval Dockyard.
- ❖ The **National Cadet Corps Certificate ‘B’** and ‘C’ Examination held in 2015-2016 under the authority of Ministry of Defence, Government of India.

Academic Credentials

- ❖ **Ph.D. (Chemistry) (Course work 76.7 %)**
Registration: 10-Aug-2023 (Synopsis submitted in April-2026)

Department of Chemistry, Government Science College Pardi, Valsad 396125, Gujarat, India.
(Affiliations with Veer Narmad South Gujarat University, Surat 395007, Gujarat, India.)

Title: “Synthesis of new N, O, and S based heterocyclic compounds and their applications”

- ❖ **Patent Law for Engineers and Scientists (50%)** **Jan-Apr 2023**

IIT Madras, NPTEL Online Certification Course

- ❖ **Master of Science in Applied Chemistry (65.68 %)** **April-2018**

The Maharaja Sayajirao University of Baroda, Vadodara-390002, Gujarat, India.

❖ **Bachelor of Science (Honors)-Chemistry (56.6 %)** **April-2016**
The Maharaja Sayajirao University of Baroda, Vadodara-390002, Gujarat, India.

Conferences and Publications

- 1) **International Conference on Advanced Materials (ICAM-2025)** 27th September, 2025 Organized by Navyug Science College Surat-395009, Gujarat, India

(**Poster title:** Design and Synthesis of 5-Arylidene Rhodanine Linked Benzo imidazole Hybrids: The Evaluation of Advance Healthcare Importance as Antidiabetic Agents)
- 2) **RSC Sponsored National Seminar on Green Chemistry and Sustainable Laboratory Practices (GCSLP-2025)** 3rd March, 2025 Jointly Organized by Department of Chemistry Sardar Patel University Vallabh Vidyanagar & Department of Chemistry Pandit Deendayal Energy University Gandhinagar.

(**Poster title:** Green and sustainable approaches for synthesis of heterocyclic Schiff-bases as a pharmaceutical agent: a comprehensive study).
- 3) **National Conference on Next-Gen Chemical Frontiers: A dynamic horizon-2024** 11th December, 2024 organized by Department of chemistry, V.N.S.G.U., Surat.

(**Oral title:** Synthesis of fluorinated *N*-heterocyclic compounds employing tetramethylammonium fluoride isopropyl alcohol adducts via S_NAr fluorination).
- 4) Bhavesh S Hirani*, Dr. Sevak B Gurubaxani; **Green and sustainable one-pot synthesis of novel tetrahydropyridines using [Et₃NH] [HSO₄] as an ionic liquid catalyst**; Current Chemistry Letters; 14(2); (2024); ISSN: 1927-7296. doi: 10.5267/j.ccl.2024.10.007.
- 5) Bhavesh S Hirani and Sevak B Gurubaxani, **A Brief Update on Nitrogen (N), Oxygen (O), and Sulfur (S) Based Heterocycles Containing Advanced Materials in Next-Generation Energy Conversion and Storage Devices**. International Journal of Chemical Synthesis and Chemical Reactions. 2025; 11(02) :-p. Available from:<https://journalspub.com/publication/ijaac/article=21261>

Additional Skills

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|-----------------------|-------------------|------------------------|
| - Analytical Thinking | - Problem Solving | - Strong Communication |
| - Microsoft office | - Documentation | - Best AI tools |

Personal

Date of Birth: 10/09/1995

Gender: Male

Marital Status: Married

Language Proficiency: English, Hindi, Gujarati

DECLARATION: I hereby declare that the above-mentioned information is genuine to my knowledge I bear responsibility for the correctness of the mentioned particulars.

Place:

Date: