

SUMMARY

Accomplished **Research & Development and Quality Control Scientist** with **9+ years of analytical chemistry experience** across pharmaceutical R&D, method development, and validation. Recognized for extensive **research and editorial contributions**, including **15+ peer-reviewed publications**, **35+ verified peer reviews**, and membership in the **Royal Society of Chemistry (RSC)** and **American Chemical Society (ACS)**. Strong expertise in **Quality-by-Design (QbD)**, **green analytical chemistry**, and **stability-indicating chromatographic methods**. Committed to advancing scientific integrity and editorial excellence in analytical and pharmaceutical sciences.

PROFESSIONAL SYNOPSIS

- I am currently working as Senior Scientist-I with **CAMBREX HIGH POINT**, 4170 Mendenhall Pkwy, High Point, NC 27265, from March 2024 to Present.
- Working as Scientist-II with **CAMBREX HIGH POINT**, 4170 Mendenhall Pkwy, High Point, NC 27265, from May 2022 to February 2024.
- Working as Analytical Development Chemist-III with **CAMBREX CHARLES CITY**, 1205 11th Street, Charles City, IA, 50616 from August 2021 to April 2022.
- Worked as Chemist with **PHARMACEUTICS INTERNATIONAL, INC. (PII)**, 10819 Gilroy Rd, Hunt Valley, MD 21031 from August 2018 to June 2021.
- Worked as Lab Assistant at **SACRED HEART UNIVERSITY**, 5151 Park Ave, Fairfield, CT 06825, from June 2017 to May 2018.
- Worked as QC chemist with **AUROBINDO PHARMA LTD**, Hyderabad, India from May 2015 to May 2016.
- Worked as Chemist with **SPECTRUM PHARMA RESEARCH SOLUTIONS**, Hyderabad, India from August 2015 – March 2016
- **Proficiency in** Method validation, Method Development, Transfer of all analytical methods and Evaluation and maintenance of In-House Reference standards or working standards.
- Quick learner, energetic and motivated, aspiring to become a sound and successful professional in the areas of my interest. Conceptually strong with an innovative and analytical approach to work with an eye for detail.

EDUCATIONAL QUALIFICATION

Master of Science in Chemistry

Sacred Heart University,
Connecticut, USA
August 2016- May 2018

B. Pharmacy (Bachelor of Pharmacy)

Jawaharlal Nehru Technological University,
Telangana, India
October 2012- May 2016

SOFTWARE SKILLS

- Chromatography software's like Empower, Trackwise, SAP, LIIMS, Master Control.
- Mailing tool like Outlook

EMPLOYMENT CHRONICLE

CAMBREX HIGH POINT

May 2022 - Present

- Preparation of analytical method validation protocols, execution of validation of analytical methods and transfers.
- Responsible for qualification and characterization of reference standards.
- Performs analytical testing utilizing established methods.
- Responsible for maintaining and reviewing notebooks and data entries.
- Responsible to write analytical protocols, reports, and similar documents.
- Performs laboratory investigations.
- Responsible to maintain equipment and laboratory cleanup.

CAMBREX CHARLES CITY

August 2021 – April 2022

- Developed, established, and validated analytical testing methodologies used to control raw materials, production intermediates and final products using HPLC, UPLC, GC, Karl Fischer Planning to complete the calibration of all instruments/Equipment's as per schedule.
- Analyze and Develops/Modifies existing analytical methods for compound identification, purity, and potency testing.
- Performing the analytical **Method Validation, Method Verification, Method transfers and Method Evaluation.**
- Experienced in writing **Method validation and Method transfer Protocols.**
- I have in-depth knowledge of chromatographic analysis. As a professional chromatographer, troubleshoots the instruments, method development challenges.
- Expertise in writing the **Method Validation, Method Verification and Method Evaluation Reports.**
- Expertise in creating and using the spread sheets to summarize the data, preparing the standard solutions, serial dilutions of the solutions and calculation of the results.
- Successfully transfers documented analytical methods to Quality control and process support group.
- Review the method validation and transfer protocols and reports.

- Hands on experience in analyzing the APIs, in-process and the finished products using **HPLC, GC, NMR, UV-Visible Spectrophotometer, FTIR** and so on as per the SOPs.
- Expertise in handling HPLC with various detectors such UV, PDA, CAD, RI, Conductivity.
- Expertise in analyzing the raw materials for **pH, Viscosity, Specific gravity, Refractive Index, Moisture Content (Karl-Fischer)**, Heavy metals, Chlorides, Sulphates, Acid Value, Iodine Value, Saponification Value, Peroxide Value, and purity using FT-IR, HPLC (as per the USP monograph).
- Involved in providing direct analytical support of in-process, bulk and finished product samples via wet chemistry, physical measurements, and Chromatographic techniques.
- Proficient in the **Method Validation and Method Verification** of the drug products.
- Proficient in using Chromatographic software (**Empower 3**), LIMS.
- Expertise in creating and using the spread sheets to summarize the data, preparing the standard solutions, serial dilutions of the solutions and calculation of the results.
- Outstanding experience in documenting and reviewing chromatographic and non-chromatographic data as per GMP.
- Perform daily verification and calibration of analytical equipment's such as balances, pH meters, FT-IR, UV-Visible spectrometer, Osmometer, viscometer, Break-loose gliding force, Friabilator, Hardness Tester.
- Collaborating with QA and Production regarding the status of product analysis.
- Involved in training the new analysts for analyzing the IPC's and release samples.

SACRED HEART UNIVERSITY**June 2017 – May 2018**

- Perform daily calibration and verification of analytical equipment required for laboratory practical.
- Taught Undergraduate students wet chemistry techniques, Titrations, PH meters and Spectronic meters.
- Taught students how to use UV-Vis, NMR, GC-MS, and IR
- Helped students in calculating and evaluating the data sheets.
- Review and grade class assignments, exams, and presentations.
- Maintained lab under strict safety environment.

AUROBINDO PHARMA LTD**May 2015 – May 2016**

- Responsible for Analytical lab instruments daily calibrations & Execution of calibrations per schedules.
- Perform Quality Control testing of raw materials, intermediates, and final products and include stability studies to support the timely release of products.
- Responsible for the daily function of the Quality Control laboratory testing.
- Chemical testing for all raw materials, excipients and other materials as per the test request form.

- Responsible for analyzing raw material and finished products by performing a variety of tests such as Assay, pH, Melting point, water content by **Karl fisher, FT-IR and UV-Visible Spectrophotometer**.
- Experience performing various titrations such as Acid Value, Peroxide Value, and Saponification Value.
- Experience in maintaining the sample inventory through Microsoft Excel worksheet and generating report in Microsoft Word.
- Perform Daily Status Update of each received samples into shared computer system.
- Hardness, friability and disintegration analysis for solid dosage forms.

PATENTS

- Novel 5-substituted Oxindoles Derivatives and the process for preparation of the same
- Synthetic Substituted Oxindole Sulfonamide compounds and method of preparation thereof

PUBLICATIONS:

Published Research Articles

1. Heptad Green Metrics and Quality by Design Tool evaluated UPLC Content Determination Method for Bexagliflozin in Formulation Product. SSRN Electronic Journal. (2023). <https://dx.doi.org/10.2139/ssrn.4726796>.
2. Isolation and Identification of forced degradation products of Febuxostat. Separation Science Plus (2023). <https://doi.org/10.1002/sscp.202300237>.
3. Quantification of Drospirenone-and Ethinyl Estradiol-Related Impurities in a combined Pharmaceutical Dosage Form by a Chromatography Method with a QbD Robustness Study. Journal of AOAC International. (2024). <https://doi.org/10.1093/jaoacint/qsad118>.
4. A quality-by-design evaluated liquid chromatography method development and validation for the separation and quantification of nitroxoline and its impurities . Journal of separation Science. (2024). <https://doi.org/10.1002/jssc.202300760>
5. Quality by design tool evaluated green stability-indicating UPLC content determination method for the Olanzapine and Samidophan dosage form. Microchemical Journal. (2024). <https://doi.org/10.1016/j.microc.2023.109835>
6. Quality by Design Tool Assessed Ultrapformance Liquid Chromatography Method for the Analysis of Remomgliflozin and Teneligliptin in Oral Dosage Form. American Chemical Society. (2024) <https://doi.org/10.1021/acsomega.3c04589>
7. Stability indicating reversed-phase-high-performance liquid chromatography method development and validation for pyridostigmine bromide and sodium benzoate in oral solution. Biomedical Chromatography. (2024) <https://doi.org/10.1002/bmc.5800>
8. Wang resin catalyzed sonochemical synthesis of 2-amino-3, 5-dicarbonitrile-6-thio-pyridines as potential inhibitors of SIRT1. Journal of Molecular structure. (2024). <https://doi.org/10.1016/j.molstruc.2023.136756>

9. Reversed-Phase-HPLC Assay Method for Simultaneous Estimation of Sorbitol, Sodium Lactate, and Sodium Chlorides in Pharmaceutical Formulations and Drug Solution for Infusion. American Journal of Analytical Chemistry. (2024) [10.4236/ajac.2024.152004](https://doi.org/10.4236/ajac.2024.152004).
10. Determination and Quantification of Related Impurity Substances in Elvitegravir Drug Substance by Full Factorial Design Evaluated Liquid Chromatography Method. Separation Science Plus (2024) <https://doi.org/10.1002/sscp.202400168>
11. Chiral (S)-BINOL-phosphates: Design, synthesis and their antibacterial and α -glucosidase inhibition studies. Journal of the Indian Chemical Society.(2024) <https://doi.org/10.1016/j.jics.2024.101244>
12. In (OTf) 3 promoted sonochemical approach to 3-(2-chloropyrimidin-4-yl) indoles: Their in silico and in vitro evaluation against SIRT1. Journal of Molecular structure.(2024) <https://doi.org/10.1016/j.molstruc.2024.138471>
13. Greenness assessment for the control of trace-level genotoxic process impurities in Vildagliptin by liquid chromatography with mass spectrometry. Sustainable Chemistry and Pharmacy(2024) <https://doi.org/10.1016/j.scp.2024.101811>
14. Stability-Indicating RP-HPLC Method Development and Validation for Determination of Impurities in Loperamide Hydrochloride Capsules Dosage Form. Biomedical Chromatography. (2025) <https://doi.org/10.1002/bmc.70027>

Articles Under Review

15. Development and Validation of Stability-Indicating RP-HPLC method for the quantification of Bumetanide Related impurities in Tablet dosage forms. **Journal of Molecular Structure**.

PEER REVIEWER (Reviewed >35 peer reviews)

- Separation Science Plus (**Total Reviewed = 9**)
- Journal of AOAC International (**Total Reviewed = 3**)
- Royal Society of Chemistry (**Total Reviewed = 1**)
- Reaction Chemistry and Engineering (**Total Reviewed = 3**)
- Biomedical Chromatography (**Total Reviewed = 13**)
- Chemistry Open (**Total Reviewed = 1**)
- Scientific Reports (**Total Reviewed = 1**)
- Journal of Applied Pharmaceutical Science (**Total Reviewed = 6**)
- Discover Chemistry (**Total Reviewed = 2**)
- Discover Applied Sciences (**Total Reviewed = 1**)

MEMBERSHIP (JOURNALS)

- Royal Society of Chemistry
- American Chemical Society

POSTER/ORAL PRESENTATION

- DQbD based UPLC content determination for the Olanzapine and Samidorphan dosage form, MECAP-2023: International Conference on Materials Engineering, Materials Chemistry and Materials Physics, 2023, Held at Sri Sagi Ramakrishnam Raju Engineering College.
- Quantification of Drospirenone and Ethinyl Estradiol-Related Impurities by a Chromatography method, ETMGC 2021: International e-conference on Emerging Trends in Medicinal and Green Chemistry Held at St. Ann's College for Women.
- Nanotechnology Approaches for personalized treatment of multidrug resistant concerns, DRAVYAKA 2015: A 6th National Pharmacy conference held at Geethanjali College of Pharmacy.
- High throughput screening, at Two-day National Conference on Global career opportunities for pharmacist Held at Malla Reddy Institute of pharmaceutical sciences.
- Magnetic drug Delivery system, at National level seminar on recent trends in advanced drug delivery systems held at Jyothishmathi college of Pharmacy.

PARTICIPATIONS

- Two Days national Conference RIPE-2015 on REFORMS AND INNOVATIONS IN PHARMACY EDUCATION TOWARDS GLOBAL STANDARD held on March 2015, JNT University, Hyderabad.
- 8th Indo Global summit & Expo on Vaccines, Therapeutics & Healthcare held on November 2015 by OMICS International conference series at Hyderabad, India.

GOOGLE SCHOLAR PROFILE

<https://scholar.google.com/citations?user=CNx-Pd8AAAAJ&hl=en>

RESEARCH GATE PROFILE

<https://www.researchgate.net/profile/Vaishnavi-Chintala>

	All
Citations	77
h-index	5
i10-index	4