

## 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.

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## 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 11<sup>th</sup> 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 Drosipренone-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 Ultraperformance 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  $\alpha$ -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 Chrmatography (**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.
- 8<sup>th</sup> Indo Global summit & Expo on Vaccines, Therapeutics 7 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