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~ Research & Development (Formulation & Analytical) ~

Analytical Method development | Formulation R&D | Corporate Management | Compliance of Data

Seeking a position in Research & Development (Analytical R&D & Formulation Development) to utilize my analytical experience to deliver a Best science and best product development.

Associated with PRIVI LIFE SCIENCE – MANAGER R&D

CAREER- At a Glance

- ☑ Ambitious, self-directed, dedicated & hard-core professional with total 15+ years of experience. Out of this in **agrochemical pesticide formulation. Plant Flower extract as an insecticide, fungicide development.**
- ☑ Proficiency at **Formulation product development & Analytical Method Developments** for **known & unknown molecule.**
- ☑ Carrying out R&D activities to ensure highly innovative techniques and methodologies that will increase production efficiency. Ability to manage & lead team in direct supervision. Knowledge in lab safety, relevant application of raw materials & chemical processes. Excellent leadership & team building capabilities.
- ☑ Creating a good database management system to maintain necessary documentations and records that can be utilized in future for reference purpose. Proficient in performing analysis using mass spectrometry techniques sep'n **HPLC, GC, GC-MS Single & Triple QQQ, LC-MS/MS, U.V Spectrophotometer.**
- ☑ Keeping abreast with new developments and inventions about the field. Making full utilization of technological advancements to have in-depth understanding of the analytical issues.
- ☑ Excellent time management skills with ability to work accurately and quickly prioritize, coordinate and consolidate tasks, whilst simultaneously managing the diverse range of function from multiple sources along with keen interest in Research & development.
- ☑ An effective communicator with expertise in identifying & adopting emerging trends to achieve organizational objectives and profitability norms.

PERSONAL TRAITS

Strong analytical and interpersonal skills. Organized and detail oriented to handle complex and dynamic research projects. Possess good solving skills and ability to work independently & as with team.

OBJECTIVES

Seeking a Sr. Management position in Research & Development Synthesis, Formulation Analytical in Chemicals, Agrochemicals, Speciality Chemicals where I can utilize my 15+ years of multitasking experience to deliver a best science and best product development

OCCUPATIONAL CONTOUR

- ☑ Mass Spectrometry(GC, GC-MS- Shimadzu 2010, Agilent [Single Quadruple], GC-MS/MS QQQ Agilent, LC-MS/MS- Waters/ ABSciex 3200 ESI)
- ☑ High Performance Liquid Chromatography :- HPLC- Waters, Agilent, UPLC
- ☑ UV. Vis Spectrophotometry. -Shimadzu
- ☑ FT-IR Spectroscopy
- ☑ Potentiometric titration like: -Metlor, Karl Fischer.
- ☑ Study of New molecule and their intermediates. (Identification, Characterization and Quantitation).
- ☑ LC-MS (Thermo Scientific) and LC-MS/MS (Water"s, AB Sciex), Brookfield viscometer DV2.
- ☑ Instrumentation Troubleshooting and Maintenance.
- ☑ Clinical Plasma sample extraction analysis, Pesticide Residue Analysis. Method development for pharmaceutical , agrochemical Formulation mixtures.
- ☑ Formulation development. Oil water emulsions, Wet Chemistry, Plant scale up.

PROFILE VALUE

PRIVI LIFE SCIENCE PVT LTD

Growth Path:

Manager : - Apr'20 - Present R&D

Asst. Manager: - Apr'19 -present R&D (Formulation Development & Analytical Method development , Bio analytical method)

Responsibilities:

- ☑ Develop and Commercialize Eco-friendly formulation products which can be patented.
- ☑ Agro Formulation Sample preparation & analysis for the allocated parameters as per IS , APAC methods given. Or as per molecule chemistry to do method development.
- ☑ Developing and commercializing existing or third party products Agricultural +Ready to use products for gardening.
- ☑ Reduction in Product Quality related Customer Complaints.

- ☐ Managing the daily activity of Formulation Development Lab. Setting up the entire lab in terms of Formulation R&D. To lead the group of scientists whenever required.
 - A] Formulation Development
 - B] Stability studies.
 - C] Market survey
- ☐ **Interact with vendors /suppliers regarding commercial, all types of chemicals i.e. LR, AR, and HPLC grade. Uses of raw materials being used, define specification.. Preparing and Implementing SOP for New Product Development.**
- ☐ **Leading formulation R&D functions and monitoring** of Physical, Inorganic test, Heavy metal analysis and testing activities for Raw Material (Chemical / Formulation) , in process, Intermediates & A.I, finished products. Bio analytical methods viz :- Determination of sugar content, acid value, peroxide value, Protein % in molecules.etc...gravimetric estimation, saponification of oil.
- ☐ **Developing and standardizing Formulation R&D methods as per CIB-RC, ECOCERT registration** requirement for custom synthesis for different type and grade of the chemicals & Formulations.
- ☐ Carrying out uninterrupted **release of finished product by coordinating with production**, ware-house and quality control. **Identification of materials and equipments required for lab level, pilot and bulk level production of product**
- ☐ Using sophisticated instruments like GC-MS, GC & HPLC Agilent, for carrying out analytical development activities. Sample for LC-MS/MS third party sourcing.
- ☐ Carrying out stability check study of stable formulations mixtures by performing Physical, Inorganic tests. Planned day to day activities analysis of samples prepared and executed validation protocols. .
- ☐ **Coordinating with plant & QC during technology transfer and between R&D synthesis lab and manufacturing unit, marketing unit, purchase department supply chain for technical related issues.**

Molecules work :- Eucalyptol, Cedar wood oil, Cinnamon Oil, Eugenol, Citronellal, Citral, Menthol, Camphor, Azadirachtin, Gibberlic acids , Chenopodium Quinoa-Saponins, Micronutrient NPK formulation

- **Team Size handling:** - 11 People

GODREJ AGROVET LTD.

Since Oct'15: Mar'19 Duration: - 3 Years 5 Months

Sr. Executive - Analytical R&D Analytical & Formulation Analysis Method Development

Responsibilities:

- ☐ Heading analytical department and managing the daily activity of Analytical Development Lab.
- ☐ Assisted to senior for formulation development, understanding & delivery of product in terms of development & analysis.
- ☐ Interact with vendors /suppliers and contributing in seminars to ensure that up to date technologies and trends are used in new developments.
- ☐ Providing support on analytical R&D functions and monitoring of routine Analytical functions and testing activities for Raw Material(Chemical / Formulation) , in process, Intermediates & A.I, finished products.
- ☐ Developing and standardizing analytical methods as per ASTM or customer -specific requirement/ as per CIB registration requirement for custom synthesis for different type and grade of the chemicals & Formulations.
- ☐ Carrying out uninterrupted release of finished product by coordinating with production, and quality control.
- ☐ Using sophisticated instruments like **HPLC- Water's E 2695- Empower -2 UV - Shimadzu and Karl-Fisher** for carrying out analytical development activities related to specialty chemicals.
- ☐ Determining and setting controls for impurities in finished products by employing HPLC or LC-MS (Outsource) and carrying out **stability Check study of stable formulations mixtures by performing Physical, Inorganic tests. Planned day to day activities analysis of samples and shared the results with synthetic R&D and prepared and executed validation protocols.**
- ☐ Compiling and reviewing validation of analytical methods & analytical instruments, and Critical review of raw data during Analytical Method Validation.
- ☐ Coordinating with plant & QC during technology transfer and between R&D synthesis lab and manufacturing unit, marketing unit, purchase department supply chain for technical related issues.

Highlights :

- Developed method for non UV absorbent molecule i.e HOMOBRASSONOLIDE. Praise work by EX.R&D Head in front of Mr. NADIR GODREJ. Method development for different types of formulations.i.e 0.1 HBR, BPS+EPS, AZA (Azadirachtin)
- Authorized signatory for internal COA for molecules
- Method development for specially for (NONUV ABDOSRBANT Molecules like HBR & Intermediates Tetrol, Pure-2 -ene) , Cymoxanil, TPM, Glyphosate, Difenconazole, Propiconazole (Formulation mixtures) more than 25 molecules MD done with in laboratory.
- Individual responsible for HPLC Water's maintainance, troubleshooting, decision maker for Mobile phase preparation, Column recovery, Linearity study of molecules, Development & Validation of molecules. UV -SPECTROPHOTOMETER calibration and maintenance& operation.

Molecules work : - BPS, QZP, Propaquizafop, AVG , Difenconazole, Propiconazole, EPS, Homobrassonides [& intermediates ,Pure-2-ene , Lactone] Azadirachtin, Gibberlic acid, Thiophenate Methyl, Carbendazim, BPS+ EPS wdg fprmulation analysis M.D.

HINDUSTHAN SPECIALITY CHEMICALS PVT LTD

Aug'15 to Oct'15: Duration :- 3 Months

Sr.Chemist – Analytical R&D

Project: -- “Manufacturing of Epoxy Resin and allied products.

Responsibilities :

- Assisted QC & QA Manager and prepared R&D Formulations under guidance of R&D Technical Manger (as per the requirement of market and customer) using different application like Brook field Viscometer DV2T, Differential Scanning Colorimeter (D.S.C.) and Metler-Toledo (Potentiometric Titration).

Highlights :

- Potentiometer Metler Toledo (Epoxy, Amine value), Binder Incubator, Durometer Standardization, calibration, maintenance, trouble shooting
- **Heading 2 people for QC/ QA activities.**

The Ministry Of Agriculture [Contract] –

Directorate of Plant protection & Quarantine storage

Aug'11 to Jul'15: Duration :- 4 Years.

Growth Path:

Deputy Quality Manager :-Mar"14 to Jul"15

Deputy Technical Manager :-May"13 to Mar"14

Research Associate :-Aug"11 to Jul"15

Project: “Monitoring of Pesticide Residue on National Level (MPRNL) by “Dr.K.K.Sharma, Project Coordinator.

Responsibilities:

- Analyzed pesticide residue in agriculture commodities like Vegetables, Fruits, Cereals, farm gate IPM & NON-IPM, JNPT import fruits like Apple, Grapes, Mandarin, Dragon fruit, Pear, Banana, and Mango.
- Operation sophisticated equipments like GC-ECD & FPD Detector-Shimadzu, GC-MS (SHIMADZU)-QP-MS/MS and LC-MS/M.S Waters, ABSciex 2100. Procured and maintained the spare parts for the analytical equipment
- Permissible limit for human consumption for food, industrial and modified pesticides products.
- Developed and standardized analytical methods as per AOAC or customer or specific requirements.
- Analytical method development/Validation for products. SOP Protocols, Validation Report writing, Product related troubleshooting, Analytical Method related troubleshooting, Design of experiment (DoE), and Training to less skilled staff.
- To lead the group of scientists whenever required
- Processed trouble shooting and investigation of manufacturing.
- Carried out **4 -ISO 17025 -NABL** audits and prepared documents as per NABL standards for chemical testing laboratories.
- Maintain the Laboratory's Quality System. Perform analytical tests in the laboratory. Assist with laboratory administrative duties. Maintain smooth laboratory work flow. Obtain laboratory certifications and complete QA/QC assignments. Maintain the quality assurance of the laboratory by Schedule and successfully complete semi-annual proficiency testing for all analytes in NABL Scope of Accreditation. Promote good customer relations with all PRL -NABL clients.

Highlights :

- Method Development & Method validation for Synthetic Pyrethrimides, Organo Chlorine, Organo Phosphate Carbamates, 80 + molecules study on GC,GC-MS,LC-MS/MS.
- Gained exposure in 2- FAPAS-International PT Programme, while participating in the year 2013-2014 & 2014-2015 Cucumber Puree.
- 4 NABL Audits attended and successfully got certification for PRL, 5 Internal Audit conducted. Internal signing authority for SOP standards.
- Certified with ISO/IEC 17025:2000 NABL Exposure in NABL AUDITS with Internal authorize signatory.
- **Heading team of 6 people.(3 Ph.d fresher + 3 Contractual)**
- Given complete trainings for handling of GC & GC-MS& LC-MS Starts with sample preparation to till identification of molecules by using mass library.
- Excellent exposure in maintaining Intermediate checks for C.R.M-Certified Reference Material and preparing of using Dr.Ehrenstofer Standards for working stocks in various level like 1000 Ppm,100Ppm,1Ppm as per requirements.

Team Size handling: - Total no 6:-

Bombay Bioresearch Center.

Feb'07 to Jan'11: Duration :- 4 Years

Bio-analytical Officer – Analytical Method Development.

Responsibilities:

- Analytical method development/Validation for CRO products , SOP, Protocols, Validation Report writing,
- Analytical Method related troubleshooting, Design of experiment (DoE), Training to less skilled • staff.

- Performed analytical testing in support of stability studies. Developed analytical methods to solve challenging chemistry Troubleshoot technical problems. Designs experimental plans to address specific issues. Plan, write and executes validation protocols Interprets, analyze, and manage data .Write and disseminate technical data summaries and reports as needed. Ascertain the quality of final reported test results.
- Perform routine and non-routine analysis on drug substances, reference materials and drug products using a variety of instrumental and wet chemistry techniques.
- Search and scan relevant literature. Document validation protocols, validation and progress reports as appropriate and assist in the preparation of study reports
- Monitor and assess current analytical methods and assist in improvements and amendments according to audits practices. Looked after Pharmacodynamics & Pharmacokinetics and made documents as per regulatory & sponsor auditors
- Review work from various sources, may assign work to others, and less experienced employees. Stability studies of drugs Extracted plasma sample analysis, bioavailability & bioequivalence of drug.
- Looked after maintenance & archival of documents, maintenance of Library of analytical books HPLC, LC-MS/MS; distribution and archiving of LNB & Log books, prepared purchase indents of stationary, chemicals & other laboratory items, and correspondence. chemical storage, deep freezer, balance calibration, testing and conductivity of water.
- **Handled HPLC-Agilent , LC-MS –Thermo fischer** and planned & organized for timely installation of analytical equipments in ADL department.

ASTEC CHEMICALS PVT LTD.

Jun'5 to Dec'06 Duration :- Year 6 Months

Organic Synthesis Chemist - [R&D]

Responsibilities:

- ☑ Planning and execution of day today synthesis [Under guidance of R&D manager]
- ☑ Interpretation of results from the experiments and design of new reactions. Coming up with new methods, catalysts or reagent to improve yields in existing processes and evaluate the same in lab. Drive results in cost reduction projects via own initiatives. Developing robust process in lab and carry out scale up operations up to KG scale as and when required
- ☑ Technology transfer to pilot plant and eventually to plant when required. Estimated the demand for the product, analyzed, reported, gave recommendations and developed strategies to improve quality and quantity by using different method. responsible for in-process reaction monitoring, solvent recovery, in-process testing and raw material analysis.
- ☑ Evaluate safety of a given process
- ☑ Performed assessment and reporting on daily basis for individual synthesis batch by maintaining reports and coordinating with concern manager.
- ☑ Contribution with ideas in team meetings.
- ☑ Creating & Maintaining the formulas, process to manufacture, Raw material and finish product specification and other R&D related documents
- ☑ .

Highlights :

- Efficiently improved purity & percentage level of compounds using different methods and lining up batches as per instructions given by R&D manager.
- Exposure on instrument Gas Chromatography –Head Space (Learn in addition along with R&D activity).

CIPLA PHARMACEUTICALS PVT LTD.

Aug '04 to Oct'04 Duration :- 3 Months

Industrial Training programme.

Responsibilities:

- Trainee chemist in Quality Control, responsible for in-process reaction monitoring, solvent recovery, in-process testing and raw material analysis.
- Worked on Stability study of bulk drugs and formulations (antibiotics) Highlights,
- Physical Characterization of API and drug products using Particle sizer (Light scattering), Zeta sizer (Zeta potential), DSC, Rheometry, HPLC, UPLC etc.SOP writing, validation program
- Analytical Method Development for Nano suspension Analysis
- Dissolution method development for drug devices

Academic Credentials

2004 Master of Science (M.sc) in Analytical Chemistry from S.N.D.T University -Second Class 58.00 %

2002 Bachelor of Science (B.sc) in Chemistry from Mumbai University -Second Class 59.25 %

Trainings Undergone

- Underwent Certified Training of Handling GC & GC-MS from Regional Plant Quarantine Station-Chennai.
- Underwent Training General Requirement for the Competence of Testing & Calibration Laboratories and Internal Audit as per ISO/IEC 17025:2005. From I.D.E.M.I- MUMBAI.
- APWSS International Conference at Hyderabad.
- Seminar Launch Program on „New! Thermo Scientific Vanquish UHPLC“ by “THERMOFISCHER SCIENTIFIC”
- QaD Application & advantage of detector. – WATERS INDIA (SEMINAR)
- LC-MS/MS Practical Hands on experience on instrument by WATER“S INDIA PVT LTD
- LC Trouble shooting by WATERS INDIA PVT LTD.

SOFTWARE SKILLS

- Empower-2
- Chemstation
- GC-MS Solution.
- LC-MS Solutio

Personal Snippets

Date of Birth : 9th April 1982
Permanent Address : 3rd Floor / Flat no 32, Shree raviraj C.H.S,Jaihind Colony, Vishnunagar, Gupte Road, Dombivli-West.
Current Address : 9th Floor / 902 Casa Lagoona Phase-II, LSG Scetor-3 , Khoni , Taloja ,Kalyan, Thane , Dombivli- East
Language Known : English, Hindi, Marathi; German (Beginner),
Passport no : Z-5153890