

**Key Skills**

* Synthesis and development of new organic molecules
* Sound knowledge of isolation, separation and purification techniques
* Interpretation, identification and characterization of molecules using H1-NMR, C13-NMR, ICP-OES, LC-MS, ESI-MS, HPLC and FTIR
* Independently propose, direct and perform chemical reactions/ experiments with a predefined project goal such as developing new methodologies, protocols and procedure
* Involved in lab/group operation including coaching, mentoring, training, supervising
* Positive and confident individual with strong work ethics
* Scientific and numerical skills
* Operating Systems:- MS-DOS, Windows–XP/2007/2008& Packages: Ms-Office 2007
* Scifinder, Reaxys, Chem-draw and Chem Sketch

# Work Experience

## Manager(R&D) May-2022 to till the date

## Biosyn Research Chemicals-Hyderabad

* Lead key projects with R&D to support business goals
* Understand customer expectations on to-be manufactured products
* Determine and execute improved technologies used by suppliers, competitors and customers
* Transfer new technologies, products, and manufacturing processes into and out of the company
* Research, design and evaluate materials, assemblies, processes, and equipment
* Assess the scope of research projects and ensure they are on time and within budget
* Support management to hire and develop R&D personnel
* Suggest training tools to enhance employee performance and skill development
* Preparing cost sheets for new projects and ensure timely delivery
* Establish and maintain testing procedures for assessing raw materials, in-process and finished products
* Manage or mentor a team of research staff
* Oversee budgeting and cost forecasting of research programs
* Reporting to General Manager – R&D

## Research Scientist (R & D) Nov-2020 to April-2022 Sambi Pharma Pvt Ltd- Hyderabad

* Plan for the project execution in a smooth manner
* Finding the best route for the target molecule synthesis
* Trial batches for cracking feasibility and critical steps in the reaction
* Multi steps; mg scale to gram scale reactions
* Responsible for the large scale reactions by guiding the team members
* Apply experience and knowledge to identify and implement improved ways of working
* Manage, lead, motivate, train and develop a team
* Responsible for managing projects with the scientific integrity of client projects in a timely, effective and high quality manner
* Responsible for providing liaison communication with key members of client organizations
* Computer literacy in the form of MS-Office, on-line computer searching

## Reporting to Director – R&D

## Research Associate (R & D)

## September–2013 to October–2016

## Chiral Biosciences Pvt Ltd- Hyderabad

* Collection and evaluation of literature, costing and scalability of processes.
* Design for ROS for target molecules; multi step organic synthesis
* To ensure good laboratory practices in the lab.
* Maintenance of documents like patents, literature, analytical reports
* Research, Synthesis, Validation, Documentation, Calibration, solution preparation, analytical instrumentation like GC, HPLC , UV-VIS-spectrophotometer, Elemental analysis &titrations
* Preparing research proposals and funding applications
* Demonstrating procedures and supervising junior staff including scholars and lab technicians
* Developing original solutions to problems
* Process development for new drugs &intermediates.
* Responsible for literature survey and its analysis to plan a non-infringing, scalable and economic route; patent analysis preferred.
* Synthesis of new or existing molecules by employing different methods. Key involvement in the process development scale-up by optimization of reaction conditions / manufacturing process and validation.
* Comply with all regulations and policies; Perform all work in safe manner; Maintain proper records (notebooks, analytical data and scale-up records) as per relevant SOP’s including environmental and safety.
* Route scouting, chemistry evaluation, process development, optimization of drugs.
* Monitoring the daily research activities and give effective solutions.
* Liaising with representatives from other departments like manufacturing and Quality dept. to update on progress and also communicate future requirements for product transfer
* Actively involved and provided necessary back bone support to the team for customer Perrigo audits and ISO 9001:2008, ISO 22000:2005 and US-FDA audits.
* Reporting to Dy. Manager – R&D

**Education Details**

* PhD Synthetic Chemistry (2022) - IFHE & IICT- Hyderabad.
* M.Sc Organic Chemistry (2013) - Mahathma Gandhi University, Nalgonda (84%)
* B.Sc.(Bio-technology) – (2011) Osmania University Hyderabad (72%)
* Intermediate (2008) Board of Intermediate Education (76.4%)
* SSC (2006) Board of Secondary Education (69%)

**Thesis Title:**

Synthesis, characterization and study of thermal properties of compounds, composites and complexes of transition metal Cobalt.

**Personnel information**

Name: Swapna Samala

Father’s name: Shankaraiah

Husband’s name: B. Naresh Kumar

Date of Birth: 19th Sep – 1992

Nationality: Indian – Hindu

Language’s known: Telugu, English and Hindi

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**List of Publications**

1. **Swapna Samala**, Gouri Sankhar Brahma and Trilochan Swain, Synthesis and characterization of sensible thermal heat storage mixture containing phosphate compound of cobalt and sodium. **Solar Energy (Elsevier)** (Impact Factor: 4.674) **177 (2019) 612–619** <https://doi.org/10.1016/j.solener.2018.11.042>
2. **Swapna Samala**, Gouri Sankhar Brahma and Trilochan Swain, Synthesis, Characterization and Thermal property for phosphate based cobalt mixture of non calcined, calcined and composite material. **Monatshefte für Chemie** - Chemical Monthly an International Journal of Chemistry **(Springer)** Impact Factor: 1.501) 2020 151:141–152. <https://doi.org/10.1007/s00706-019-02538-9>
3. **Swapna Samala**, Gouri Sankhar Brahma and Trilochan Swain, Thermal characterization of sensible thermal heat storage phosphate mixtures and heat dissipating composite material. **Journal of Thermal Analysis and Calorimetry (Springer)** Impact Factor: 2.471, Volume & Page Number: Yet to be assigned. <https://doi.org/10.1007/s10973-020-09296-5>
4. **Swapna Samala**, Gouri Sankhar Brahma and Trilochan Swain, Synthesis and characterization of phosphate compounds of cobalt and their composites with building coating materials and solar paint: study of energy storage and energy dissipating behavior. Nano – metal Chemistry (Taylor and Francis Group) <http://doi.org/10.1080/24701556.2021.2007130>
5. **Swapna Samala**, Gouri Sankhar Brahma and Trilochan Swain, Synthesis and Characterization of a complex mixture based on cobalt and tin and study of its application towards production of hydrogen gas from ethanol. IOP Conf. Series: Materials Science and Engineering. IOP Publishing, 1170 (2021) 012002 doi:10.1088/1757-899X/1170/1/012002
6. **Swapna Samala** and Gouri Sankhar Brahma, Study of catalytical behaviour of a novel nano crystallite cobalt complex containing highly hindered poly anionic chelated ligand. communicated to ***Journal of Catalysis.*** Nov-2021