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KeyWords: Chemical synthesis| Building Block Synthesis|Discovery Chemistry Solutions| CRO| CRAMS | Intermediate Synthesis| Library Synthesis| Medicinal Chemistry & Drug Discovery |Intellectual Property Rights | Project Manager | Group Leader | EH&S | Strategic Leadership | Cross Functional Coordination | Project Management | API / Project Lead & Head I Technical feasibility and evaluations of Projects

Rich & visionary experience in driving operations across the career with proven success in ensuring optimum results

EXECUTIVE SUMMARY

Working as an Associate Director (Group Head) at Aragen Life Sciences, in the Chemistry Department, Bengaluru since June 2021.
Responsible for the following:

- Strengthening client relations through effective communication
- Anticipate and proactively address client issues
- Responsible for collaboration growth and retention
- Ensure increased customer satisfaction scores

Efficiently manage operations:

- Understanding the client requirements through identification of project scope and ensure project planning & deliverables
- Identifying and mitigating project risks. Reviewing projects periodically with project managers against project plan and timelines as per client requirements
- Identification of advanced technologies and their usage for enhancing efficiency of team
- Collaborate and influence internal stakeholders/other departments (e.g. Analytical, Project Management, HR, IT, Admin, Maintenance etc.) to provide required resources/ services
- Responsible for driving data integrity, IP confidentiality and safety protocols in all the collaborations

Ensuring profitability to the company:

- Improve profitability through efficient management of all allocated resources
- Identify new services/ business lines from existing customers for growth
- Control cost through alternative methods/ innovation and through process optimization

Providing support to sales/ pre-sales team:

- Providing sales team with scientific capabilities and infrastructure related details for business growth and attracting further investments with regards to growth in Business of FTEs
- Validating the project viability, provide go–no–go decision and ensuring that necessary inputs are provided to proposal/ S&M team
- Facilitating and supporting the sales team in deal closures/ business development activities

Ensuring high morale and skill development of team across all the collaborations:

- Motivating, recognizing and retaining the best talent through various rewards & recognition programs
- Training and developing team members through Learning & Development programs through the company.
- Enhancing the team performance through periodic reviews and corrective measures taken.
- Career management discussions with team members to boost up the morale and productivity in the group and with the team.
- Mentoring all the team members with regards to productivity, coaching, empowering and giving opportunities to grow themselves as leaders of future
- Improving the employee satisfaction scores by bring out the best cultures in the team setting and as a Group Head.

PROFESSIONAL HIGHLIGHTS

KEY ACCOUNTABILITIES

June 2021 till date: Aragen Life Sciences Pvt. Ltd., Bengaluru as Associate Director, Chemistry Solutions

Experienced chemistry personnel, holds knowledge, experience of chemical synthesis, help carry out complex custom synthesis and collaborative medicinal chemistry program needs for customers. Quality and timely chemical sourcing accelerate our programs a step further. Skilled to undertake challenges in synthetic organic chemistry, involving various types of chemistry – heterocyclic, asymmetric, microwave, enzymatic, multi-step synthesis, carbohydrate, nucleotide & nucleoside – to deliver compounds to customer requirements.

- Services with efficient and excellent quality
- Track record of developing multi-step synthetic processes
- Well trained and having skilled scientists with diversified experience in group who are capable of handling 30FTEs.
- Responsible for 3 programs of FTE collaborations (with USA and South Korea Clientele) with external clients in Discovery solution.
- Executed successfully 13 FFS programs at Aragen with the desired quality and purity with revenue generation. Most of the targets were completed before their actual dead line.
- Delivered compounds to Clients in various Discovery Programs belonging to Protacs, carbohydrates, heteocycles and carbocyles.
- Has the experience to take on any kind of synthetic challenges involving various types of chemistry including PROTAC, carbohydrate, nucleotide & nucleoside, peptide, heterocyclic, asymmetric, .
- Complex molecules from grams to multi grams.
- Reference compounds and scaffold synthesis
- Small molecules; Analogues for lead generation;
- Focused libraries: 50-200
- Multi-step stereoselective synthesis of chiral molecules

ORGANISATIONAL SCAN

May 2017 till 31st May 2021: SOLARA Active Pharma Sciences Ltd Bengaluru as Project Lead

- Worked as a Project Lead in API industry of SOLARA Active Pharma Sciences Ltd in process Chemistry intended for use in humans. Also taking care of the CRAMS proposals to check for its technical feasibility, determining the ROS and proposing to the management. Building norms for the intended route to calculate the per kg cot of the product. APIs manufactured to cGMP standards for clinical research or commercial sale meeting the requirements for identity, strength, quality and purity.
- Worked as a Project Head for Process optimization for Sterling Pharma Solutions, Northumberland, UK for the various CRAMS projects asked by the client. Conducting regular meetings with the client, communications I terms of project deliverable and regular updates to the client about the progress of the work done.
- Planning and resources identification, giving project projections
- Coordination between various departments for smooth execution of the project Selection of non-infringing synthetic route by the thorough review of literature and patents.

- Development of echo-friendly, cost effective and plant feasible process from early feasibility study to lab validations and technology transfer from R&D to production. Participate in reviewing development reports, tech transfers of DMF findings
- Analyse feasibility of new product that should add to company product profile, costing reduction and quality improvements of existing products and updating process changes and commercialization of product. Developing Norms and costing for the projects after the technical evaluation of the project.
- Team developed various process for API Products as well as for the CRAMS business

Jul 2010 – Jan 2017: Daiichi Sankyo India Pharma Pvt Ltd as Group Leader, Building Block Synthesis

Lead a team in chemistry services projects in the synthesis of building blocks for PPI Targets with the accountability of designing & synthesizing diverse class of compounds (mostly chiral) and delivered them from MG to Grams scale. Identifying, defining, and selecting specific research problems pertaining to synthesis of pharmaceutically active molecules required for clinical studies. Designing and synthesizing scaffolds and Building blocks for compound library synthesis in Protein interaction (PPI)

Key Deliverables:

- Spirodiketopiperazine series: Issue in synthesis was resolved using Ugi approach and number of steps were reduced from 450 to 180 for 45 building blocks
- HD5-oxadiazole series: Discovered a novel one-pot synthesis of oxadiazole-imidazolidinedione ring reducing total number of steps from 216 to 120
- Imidazolidine-dione series: Issue in synthesis was resolved by designing alternate synthetic scheme involving high coverage intermediate
- Diazepine series: Issue of purity was resolved by one-pot coupling and cyclisation to give building blocks with >95% purity
- Non-available raw material: Synthesized 1.6kg of material which was used to synthesize 135 building blocks
- New building blocks: Designed, novel patentable 1000 building blocks as α-helix mimetic and were approved by team
- Instrumentally accomplished the synthesis of Posaconazole a 34 step sequence antifungal compound successfully
- Hold credentials in achieving POC in 5-lipoxygenase Inhibitor program, jointly in collaboration with GSK
- Successfully designed several compounds in the medicinal chemistry areas using structure and ligand based design
- Introduced various effective procedure to combat incidences and conducted inspections to provide safety related issues and recommendations to make zero accident zone while working as the Head of Environment, Health and safety in the Chemistry Department
- Investigated chemical & products, leading to a cost savings on raw material with minimal capital project input, recommending new/modified research projects – analyzing reports and advising changes required in the current approach

Dec 1998 - Jun 2010: Ranbaxy Research Laboratories Ltd as Senior Research Scientist, Department of Chemistry

Developed internal drug-discovery projects to strengthen in-house discovery pipeline whilst working in the integrated medicinal chemistry teams both in collaboration with multinational pharma companies (GSK).

Key Deliverables:

- Successfully designed novel chemical entities and their most feasible as well as economical synthetic routes
- Made a leadership contribution in strategic planning of chemical patent protection, construction and management of spending budgets for researchers
- Acted as one of the key member of Safety, Health and Environment Team and was in charge of the lab safety procedures
- Involved in designing, planning and implementing key experiments. Influence direction, efficiency and success of Project by providing timely and valuable insights.
- Executed multi-step synthesis with purification and characterization of organic molecules and maintained high quality, independent work with creative problem-solving skills

BEHAVIOURAL SKILLS

- Strong team orientation; highly collaborative with other departments and team members and mentors, Solutions and results-oriented focus, experience on Hands-on approach; resourceful and open to diverse points of view and open innovation and culture.
- Good skills in synthetic Research and Development with strong computer, scientific and organizational skills.
- Monitoring scope, cost and quality of the project and engaging stakeholders (both external and internal) as appropriate for successful project completion in accordance with planned program timelines.
- Solution orientation, proactively identify risks, derive workaround options and mange project issues to not effect deliverables.

- Responsible for bringing the project to closure, holding Stage gate reviews and activities, and capturing and using relevant lessons learned.
- A good track record of innovation and impact on programs, with direct contributions to company's goal and direction.
- Experience of preparation and presenting at internal and external audits in all aspects of analytical work.
- Creative personality, and strong problem-solving skills. Taking decisions that require developing new options to solve chemistry problems
- Excellent team player with good communication skills. Able to present rationale, key/important data, issues and accomplishments of the chemistry efforts to other members of the department in team/group meetings
- Evaluating and manage the whole research program costs and schedule beforehand, monitoring progress and schedule of the progress of work.
- Strong commitment to team work and strong desire to achieve. Ability to learn new techniques, perform multiple tasks simultaneously, keep accurate records, follow instructions, and comply with company policies always.
- Potential for technical proficiency, scientific creativity and independent thought. Ability to work effectively in a team.
- To gathering, document, and analyse information from competitive sources such as patents and conference meetings, seminars etc. and using this information to guide program strategy.
- Documenting results, preparing reports, and presenting the work in meetings and to seniors.

EDUCATION CREDENTIALS

- **Master of Business Administration (MBA) in Pharmaceutical Management** from ICFAI University India, July 2022
- **Post Graduate Diploma in Pharmaceutical Technology from ICFAI Completed in April 2022**
- **Executive Program in Pharmaceutical Global Business** from NCK Pharma Solutions Pvt. Ltd 2020.
- **Master of Business Administration (MBA) – Project Management**, Sikkim Manipal University, 2012
- Completed a course on **Basics in Patenting** from WIPO Geneva in 2011;
- Completed **Diploma in Management** from IGNOU in 2004; specialization in Operations Management
- Completed **Post Graduate Diploma in Marketing Management, Operations Management and Finance Management** from IGNOU, New Delhi.
- **Doctor of Philosophy (Ph.D.) in Chemistry**, Department of Organic and Bioorganic Chemistry, University of Delhi and University of Liverpool United Kingdom, 1999
    - Thesis: "Novel Synthetic and Biotransformation Studies on Heterocyclic Compounds and Phytochemical Investigations on Piper Species"
- **Master of Science (Specialization-Organic Chemistry),** Department of Chemistry, University of Delhi, 1993
- **Bachelor of Science (Honours) Chemistry,** Hans Raj College, University of Delhi, 1991
- **Post Graduate Diploma in Management** from IGNOU New Delhi in 2005

SUPERVISORY WORK & TRAININGS IMPARTED

- Guided one Candidate in 2002 for a Project work for the **MSc Pharmaceutical Chemistry** from Lucknow University, India
- Supervised three NIPER Hyderabad Students for their **M Pharm Course work** for one year in 2012-14.
- Guide/supervisor for a Project work for **B Tech (Chemical Engineering)** candidate from Thapar Institute of Engineering and Technology, Patiala in 2013.
- **Chairman of Environment, Health & Safety of Daiichi Sankyo India Pharma Pvt Ltd for 4 years.**
    - Provided safe working environment for the whole chemistry Department and maintained and wrote new SOPs and guidelines related to safety and waste disposal procedures of Cyanides & heavy metals, including mercury and palladium
    - Wrote a guideline for all the safe handling, storage, disposal and protective equipment being used for all the hazardous chemicals in the department
- **Facilitated all the trainings related to safety, including**:
    - Chemical Management, Eye Protection, Protective Equipment and Fire Safety to all the Chemist, Research Scientists and seniors.
    - Bio hazardous Waste Management training; Biological safety Cabinets Trainings; Blood Borne Pathogens; Chemical Safety Training; Compatible Chemical Storage Training; Emergency Response and Rescue Planning;
    - Ergonomics in Pharmaceutical Industry; Fire Safety Training; Fume Hood Safety Training; On-site Emergency Planning Training; Training Principal Investigators; Waste Minimization trainings

STRENGTHS

- Result oriented, hardworking, positive attitude, and work in any environment and circumstances to meet the organization goals.

- Result oriented and prioritizing of work and necessary follow up capability.
- Adaptability to adjust and work in all environments effectively and quickly.
- Take up any challenging assignment keeping in view of day-to-day advancement in industry.
- High motivation, hardworking, very sincere, ambition and reliability.
- Basic excel and data analytics
- Presentation & Communication
- Operating Network:
    - Within Function
    - Outside Function: CMC, SCM
    - External: CRO, Contracted Vendors, clients etc.

FELLOWSHIPS AND AWARDS

- Received various certificates in Behavioural trainings and learnings imparted by expert agencies on
    - Communication, Decision Making, Strategic Thinking, Project Management, Leadership Skills and Risk Taking
- Achieved "**Innovation Award"** from Daiichi Sankyo India Pharma Pvt. Ltd in 2013 by developing a shorter single pot reaction route towards the synthesis of spiro compounds which helped in the reduction of synthetic steps from 450 to 180 for 45 BBs

- Recognized for winning the "**Team of the Year**" Award from Daiichi Sankyo India Pharma Pvt. Ltd in 2013 for synthesising maximum number of BBs and thereby increasing the productivity by decreasing the cost and achieving the organization's goals.

- Won "**Special Appreciate Award for Team Excellence**" for getting the Proof of concept in Asthma & COPD program (joint alliance with GSK and Ranbaxy) from Ranbaxy Research Laboratories Ltd In 2009
- Qualified the "**National Eligibility Test (NET)"** for Lectureship/Assistant Professorship
    - Conducted by Agricultural Scientists Recruitment Board (ASRB), New Delhi (India), held in December 1998 in the professional subject: Organic Chemistry
- Won second prize for best poster presentation in National Seminar on Perspectives in Interfacial Areas of Chemistry and Biology held at the Department of Chemistry, University of Delhi (India) in 1998
- Received Senior Research Fellowship from Council of Scientific and Industrial Research (CSIR) New Delhi (India)
- Recipient of Junior Research Fellowship from Danish International Development Agency (DANIDA)

PUBLICATIONS, PATENTS& BOOK CHAPTER

~20 Publications to Credit in National and International Journals

- 3-[3-(4-Bromophenyl)-1-phenylpyrazol-5-yl]-2H-1-benzopyran-2-one. *Acta Crystallographica* C51 (1995) 2406-240
- Hydrolytic reactions on polyphenolic perpropanoates by porcine pancreatic lipase immobilized in microemulsion based gels. *Bioorganic & Medicinal Chemistry Letters* 6 (1996) 2269-2272
- Novel biotransformations on peracylated polyphenolics by lipases immobilized in based gels and on carbohydrates by Candida antartica lipase. *Pure and Applied Chemistry* 68 (1996) 1309-1314
- Synthesis, antimicrobial and antiviral activities of novel polyphenolic compounds. *Indian Journal of Chemistry* 35B (1996) 220-232
- Anti-invasive activity of alkaloids and polyphenolics in vitro. *Bioorganic & Medicinal Chemistry* 5 (1997) 1609-1619
- 3-Cyano-6-(2'-methoxyphenyl)-4-methylthio-2H-pyran-2-one. *Acta Crystallographica* C53 (1997) 1442-1444
- 3-[3-(4-Bromophenyl)-1-(4-methoxyphenyl) pyrazol-5-yl] acetonitrile. *Acta Crystallographica* C53 (1997) 1885-1887
- 6-Acetyl-3, 4-dihydro-2, 2-dimethyl-2H-benzopyran, 3, 7-diyl Diacetate. *Acta Crystallographica* C54 (1998) 361-363
- 3-[1-(4-Chlorophenyl)-3-(4-methoxyphenyl) pyrazol-5-yl] acetonitrile. *Acta Crystallographica* C54 (1998) 844-846
- Synthesis and anti-invasive activity of novel 1, 3- diarylpropenones. *Indian Journal of Chemistry* 37B (1998) 628-643
- Mechanism of biochemical action of substituted 4-methylbenzopyran-2-ones. Part I. Dioxygenated 4-methylbenzopyran-2-ones: as superb antioxidant and radical scavenging agents. *Bioorganic & Medicinal Chemistry* 6 (1998) 833-839
- Chemical constituents of Taxus canadensis. *Indian Journal of Chemistry* 37B (1998) 828- 831
- Polyphenols and alkaloids from Piper species. *Phytochemistry* 49 (1998) 1069-1078

- Biocatalytic resolution of racemic 6-acetyl-3, 4-dihydro-3-hydroxy-7-methoxy-2, 2- dimethyl-2H-l-benzopyran. *Indian Journal of Chemistry* 38B (1999) 1231-1233
- 3-Cyano-4-(N, N-dimethylamino)-6-phenyl-2H-pyran-2-one. *Acta Crystallographica* E57 (2001) 108-110
- Chemical transformations on 6-aryl-3-cyano-4-methylthio-pyran-2(H)-ones: Synthetic and structural studies on novel-N-phenylpyrazoles and N-phenylpyrazolylcoumarins. *Indian Journal of Chemistry* 41B (2002) 360-367
- Synthesis, Characterization and In vitro Anti-invasive Activity. Screening of Polyphenolic and Heterocyclic Compounds. *Bioorganic & Medicinal Chemistry* 11 (2003) 913-929
- Efficient One Step Synthesis of a Key Intermediate for the Synthesis of Azole Antifungals Using the Mitsunobu Protocol. *Synthetic Communications*, 35 (2005)2939-2943
- COX inhibitors for airway inflammation*. Expert Opinion on Therapeutic Targets*, 16 (2012), 195-207

LIST OF PATENTS PUBLISHED: 29 (Major therapeutic areas includes- antiinfectives and inflammation) Separate list attached.
Published an Indian Patent (IN202021011202) on: "Process for the Preparation of Cevimeline" in September 2021 from Solara Active Pharma Sciences Ltd.

BOOK CHAPTER: Wrote a chapter in a book: "Obstructive Airway Diseases: Role of Lipid Mediators" Publisher: CRC press, Taylor and Francis Group, 2011; Chapter Name: Leukotriene Receptor Antagonist and FLAP inhibitors

INTERNATIONAL & NATIONAL SYMPOSIA PARTICIPATED IN, AND TITLES OF PAPERS PRESENTED:

- 18th RSC/SCI Medicinal Chemistry Symposium September 13-16, 2015 Churchill College, Cambridge University, United Kingdom (UK)
- 17th RSC/SCI Medicinal Chemistry Symposium 8-11 September 2013, Churchill College, Cambridge University, Cambridge, United Kingdom (UK)
- 2nd Medicinal Chemistry In-House Symposium held at Ranbaxy Research Laboratories Ltd on 7th September 2007. Presented a poster on "Novel, Selective and Potent inhibitors of Syk kinase for Rheumatoid Arthritis."
- Medicinal Chemistry In-House Symposium held at Ranbaxy Research Laboratories Ltd on 5th May 2006. Oral presentation on the "Design, Synthesis and SAR of Potent and Selective 5-Lipoxygenase Inhibitors" Presented a poster on "Design, Synthesis and Biological evaluation of RBx-10017440 and its analogues as Potent and Selective Inhibitors of Human 5-Lipoxygenase"
- Advanced STN searching for Chemistry & Patent information, organized by Chemical Abstract Society, held at The Ambassador Hotel, New Delhi from 18-19th November 2004
- Second Summer School Medicinal Chemistry, held at University of Regensburg, Germany, from 5-7th October 2004
- One Day workshop on Patents organized by Indian Pharmaceutical Association, held at India Habitat Centre New Delhi on 4th September 2004
- IUPAC International Conference on Biodiversity and Natural Products: Chemistry and Medical Applications, held at New Delhi from 26-31st January 2004
- STN Seminar: Patent Information - Key to IPR Decisions, organized by Chemical Abstract Society, held at The Ambassador Hotel New Delhi, on October 10 2003
- 5th International Symposium. Three Day Drug Discovery Course, held at SCI Tech Centre, Mumbai, from January 29-31st, 2003
- STN Seminar on Searches in Chemistry, organized by Chemical Abstract Society, held at The Ambassador Hotel, New Delhi on June 24th 2002
- 53rd Indian Pharmaceutical Congress 2001, held at Indian Agricultural Research Institute (IARI), PUSA, New Delhi from December 21-23rd, 2001
- International Symposium on Trends in Medicinal Chemistry and Biocatalysis, held at the Department of Chemistry, University of Delhi (India) from January 26-29, 2000.
- First National Symposium on Green Chemistry, held at the Department of Chemistry, University of Delhi (India) from January 11-13th, 1999. Biocatalytic resolution of chroman-3-ols.
- National Seminar on Perspectives in Interfacial Areas of Chemistry and Biology, held at the Department of Chemistry, University of Delhi (India) from January 20-22, 1998.Asymmetric epoxidation of unsaturated ketones employing PLL in non-aqueous media
- Annual Danish Chemical Society Meeting, held at the Department of Chemistry, Odense University (Denmark) on June 12th, 1997.Biologically active alkaloids from Piper species.
- Mini Symposium on Natural Product Chemistry, held at the Department of Chemistry, University of Copenhagen Universitetsparken, Copenhagen (Denmark) on June 10, 1997.
- National Conference on Chemistry and Biology of Herbal Medicine, held at the Central Drug Research Institute (CDRI), Lucknow (India) from January 30-31, 1997.Biologically active alkaloids from Piper species.
- 84th Session of the Indian Science Congress Association on Frontiers in Science and Engineering and their Relevance to National Development, held at the University of Delhi, Delhi (India) from January 3-8th, 1997.
- 10th IUPAC International Conference on Organic Synthesis, held at the Indian Institute of Science, Bangalore (India) from December 11-16th, 1994

- International Symposium on Perspectives in Bioorganic Chemistry, held at Department of Chemistry, University of Delhi (India) from December 8-9, 1994. Enzyme-catalysed enantio-/regioselective reactions on polyhydroxy compounds. Phytochemical investigation of Taxus canadensis.
- Asian Symposium on Super Critical Fluid Extraction Technology for Natural Products, held at Indian Institute of Technology, New Delhi (India) from September 27-29, 1994

IT SKILLS

- ISIS Draw, Chem Draw; Discovery Gate, Biovia Structure drawing Software
- Reaxys database for chemistry solutions, Sci-finder, STN Searches.
- ACD Chemfolder, ACD Chem sketch, Structure Design, ACD LOG D Suite.
- Nugenesis, Activity Base-IDBS, Adis Insight for database search; Empower software.
- Cortellis Insight Bb Thomson Reuters: Scientific Intelligence; Spot fire; MS Project
- Search engines for various patent data bases.

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