
Dr. G. Senthil Kumar		Key skills
	Mobile: +91 9894096325	• Total synthesis
	Mail: chem.senthil@gmail.com	• Synthetic methodology
	LinkedIn: www.linkedin.com/in/dr-senthil-kumar-gopal	• Heterocyclic chemistry
		• Chemical biology
		• Drug discovery

Professional summary

- An organic chemist with 4+ years of professional research experiences gains enormous exposure in synthetic chemistry projects at academic and industrial backgrounds
- Handled 1000+ reactions at wet research laboratories with a success rate of more than 85 % desired product formation using various synthetic methods
- Substantial experience with contemporary techniques involved in organic synthesis, purifications, structural interpretation of complex structures and research report writing
- Working experience on multiple projects individually as well as together with a team of chemists to ensure productivity on a timely basis
- Involved cross-functional activities like troubleshooting chemical process, order and purchase of raw materials, and make weekly reports for various synthetic targets to the client with satisfying results
- Overall gained experiences and an enthusiasm to learn and undertake recent challenges execute me the ability to achieve innovative solutions for any synthetic targets with minimum supervision

Professional experiences

Associate scientist: *R & D (synthesis), Laxai life sciences private limited, Hyderabad, India (December 2018 – August 2020)*

- Carried out several contract research projects (both FTE and FFS program) with multi-stage synthetic targets (up to 19 steps) for major pharmaceutical clients leading to long term relationships
- Delivered heterocyclic and asymmetric synthetic targets for various therapeutic activities within the timeline for client satisfaction
- Broad understanding of official business established by working experience with diverse cross-functional teams like AR&D, quality control, supply chain, lab maintenance and safety

Project leader: *R & D (synthesis), Analytica chemie Inc., Bengaluru, India (April 2016 – August 2018)*

- Attained 30+ multi-stage synthetic targets of drug impurities and pharmacopeial reference standards independently and assisted multiple projects for junior scientists
- Experienced with complex organic structure syntheses of heterocycles, alkaloids, steroids, terpenoids, and carbohydrates based impurity standards for pharmaceutical clients
- Trained junior chemists for industrial laboratory research and managed their laboratory activity

Postdoctoral researcher: *Shanghai Jiao Tong University, China (April 2015 – July 2015)*

Research title: Synthesis of cholesterol grafted hetero fused azo benzene compounds

- Accumulated more knowledge about azo benzene derived steroid compounds for photoswitching properties to target cancer cells in the human body
- Designed a synthetic scheme to achieve cholesterol grafted azo benzene derived compounds

Academic qualifications

Ph.D. (Organic Chemistry) *Bharathiar University, Coimbatore, India (January 2010 – October 2014)*

Research title: Synthesis and biological aspects of quinoline based heterocycles (highly commanded)

- Reported first synthesis of hydrazine substituted chloroquinoline compounds through nucleophilic substitution of 2,4-dichloroquinolines, and chloroquinoline substituted complex structural analogs of spiro compounds *via* 1,3-dipolar cycloaddition reaction
- Six relevant research articles published in universal peer-reviewed SCI journals
- Assisted M. Phil. scholars and trained postgraduate students for their academic laboratory research

M.Phil. (Organic Chemistry) *Bharathiar University, Coimbatore, India (October 2008 – January 2010)*

Research title: Solvent free one-pot synthesis of benzo[h]quinolines (highly commanded)

M.Sc., (Chemistry (Organic)) *VIT University, Vellore, India*

Research title: Synthesis and studies on Claisen rearrangement in 3-hydroxy-1,2-benzisoxazoles

Technical expertise

- Ability to handle various metal catalysts and air moisture sensitive reactions
- Strong experience with projects related to highly polar compounds
- Good laboratory practice and capability to perform milligram to kilogram batch reactions
- Strong experience with purification techniques, such as combi flash and reverse phase column chromatography, preparative thin-layer chromatography, and recrystallization
- Good knowledge in spectral characterization techniques (mass, IR, ^1H , ^{13}C and 2D NMR)
- Expertise in essential computer programs (scifinder, MS office, chemdraw and e-lab notebook)

Research interests

- Synthetic methodology and total synthesis of bioactive molecules
- Transition metals catalyze coupling reactions
- Complex synthesis of nitrogen and oxygen heterocycles
- Multi-disciplinary chemistry involving photophysical and chemical biology of organic compounds

Publications

Complete list at <https://scholar.google.com/citations?user=pAUr9JYAAAAJ>

References Available upon request