

## Curriculum Vitae

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Personal:

Date of Birth : 1<sup>st</sup> August 1978

### Educational Qualifications:-

#### • **Masters of Science –( M.Sc.) -**

Completed the M.Sc. degree from Pune University , India in May-2000 with 67.8% in the **Drug Chemistry** .It's a recently started course to help the student to pursue a career in Medicinal Chemistry. In syllabi we had special papers with reference to the organic chemistry syllabi.

Some of the special papers studied are;

Drug Development :- This paper gives the knowledge of Biochemistry , Microbiology , Genetics , Analytical methods , to understand the basic aspects in drug development or design and its interactions with biological systems.

Drug Design:- This paper gives idea about the various methods used in the drug design process. Some topics covered under this subject are QSAR , Molecular Modeling , Asymmetric synthesis , Combinatorial Chemistry , Enzymatic Chemistry.

Chemotherapy:- This combines all the aspects of how the studies and the drug designing to development was done for various diseases. Some topics covered under this topic are anti-bacterials , anti-fungal cardiovascular drugs , NSAID , SAID , Gastro-intestinal drugs , anti-cancer drugs , anti-HIV drugs etc.

Natural Products:- This gives idea about the various natural products and their synthetic chemistry. Some natural products studied are Taxols , Grisveofulvin , Prostaglandins Cephalosporins , Penicillins etc.

Spectroscopic Methods of Structure Determination:- This covers the topics of various methods used in compound structure determination. Topics covered are IR , UV , NMR , Mass .

Organometallic Chemistry .

Heterocyclic Chemistry .

Synthetic Chemistry .

**Practical Training :-**

Synthetic Chemistry – Various organic reactions like Grignard , FC , synthesis of heterocycles , Hydroboration etc..

Microbiology – Antibiotic activity determination , penicillin assay , antibiotic identification , MIC determination , etc..

Biochemistry– Enzyme activity determination , Enzyme inhibition ,DNA isolation,etc.

**II ) Bachelor of Science :- ( B.Sc.)**

Completed my B.Sc degree in June 1998 with 71%. Specialisation at the undergraduate degree level was in Chemistry. It covered subjects like Industrial chemistry , Analytical chemistry , physical chemistry , Inorganic chemistry , Organic chemistry..My group at the undergraduate level was Chemistry , Biology , Zoology.

**C ) Research Experience :-**

1) As a **Research Associate in ASTRAZENECA RESEARCH FOUNDATION INDIA** under the supervision of Dr. Bachally Srinivasa and Dr.Anand Kumar .

**Abstract –**

Basic target was to create Molecular Diversity by environment friendly methods for HTS to get the antibacterial, antifungal , anti TB. For the rapid synthesis various methodologies used were

MICROWAVE ASSISTED CHEMICAL SYNTHESIS , SOLID PHASE ORGANIC SYNTHESIS , CONVENTIONAL CHEMISTRY.

A short summary of the work done in AstraZeneca is mentioned below.

- a) Combinatorial Synthesis of **Oxazoliniones** via **Microwave** technology.
- b) Combinatorial Synthesis of **Amino thiazolyl Pyrones and Amino thiazolyl Coumarins** via Microwave technology.
- c) Combinatorial synthesis of **Dihydropyrimidines via Microwave** technology.
- d) Synthesis of **Amides** in Ultraclave( from MILESTONES GmbH) as a novel method.
- e) Worked on **LANTERNS** from **Mimotopes in Solid Phase Organic Synthesis..**
- f) Worked on use of **Enzymes** in Microwave assisted organic reactions.
- g) Worked on the projects involving reactions like Litiation,GR ,Hydroboration,Wittig reaction, etc..
- g) Handling of, HPLC , IR , Elemental Analyzer, ULTRACLAVE MW Oven.

**Since** – July 2000 – November –2001

2) As a **Research Associate** in New Drug Discovery Research of **Ranbaxy Pharmaceuticals** the topmost pharmaceutical company in India.

**Abstract –**

Working on the 14- membered **Macrolides (Ketolides)**. The basic idea is to find out and synthesize a better ketolide as an antiinfective agent .For this I will be using computational chemistry and QSAR as the guiding tool to synthesize a good active molecule. Also synthesized some NCE.

**Since** – December 1<sup>st</sup> 2001 – Till date.

**D ) Projects Completed: -**

- 1) A Project was completed as a course curriculum in the SUN PHARMACEUTICAL company, Ahmednagar (INDIA). Project covered the study of various operations carried out in the company like Production R & D work , Production plants , Maintainance , etc..
- 2)A term paper was formulated on “**COMBINATORIAL CHEMISTRY AS A TOOL IN DRUG DISCOVERY**”.
- 3) A seminar was given on “ **Alternative Systems of Medicine In Drug Development** ”

**E ) Publications :-**

- a) Combinatorial Synthesis of **Oxazoliniones** via **Microwave** technology. ( In the process of preparing manuscript for submission in the **Molecules**.)
- b) Combinatorial Synthesis of **Amino thiazolyPyrones and Amino thiazoly Coumarins** via Microwave technology ( In the process of preparing manuscript for submission in **Tetrahedron Letters**.)
- c) Oral abstract presented at **IUPAC Symposia** ,Christchurch ,New Zeleand.( In the process.) by Dr.Laxmi Adhikari (post doctoral colleague at AstraZeneca Research Foundation, India) on Green Chemistry. I would be representing the presentation as 2<sup>nd</sup> author.

**F ) Cocurricular activities :-**

- 1) Topped at the B.Sc degree level in the Science Division in SSGM college, Maharashtra (India).
- 2) Was placed Runner Up at the M.Sc. level in Ahmednagar college ( India ).in Drug Chemistry .
- 3) Participated at various National Level Competition in Gymnastics from the schools to inter-university level.

**G ). References :**

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