

## DRUGS & INTERMEDIATES



- Felodipine
- Donepezil
- Doxazocine mesylate
- Isradipine
- Solanesol isolation
- Coenzyme Q10

### MAJOR CLIENTS

- Sami Labs, India
- Nicolas Piramal, India
- Civent, USA
- Dabur Research Foundation, India

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## DRUGS & INTERMEDIATES

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### VISION AND GOAL

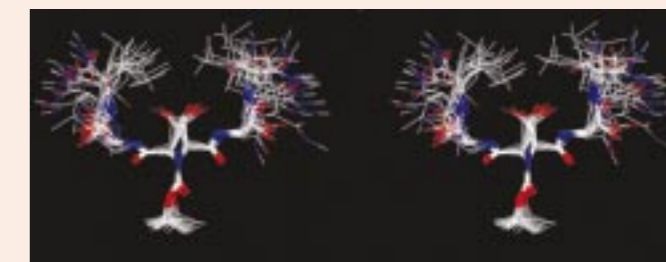
- To develop new drugs for various diseases, with special emphasis on asthma, HIV, TB, cancer and tropical diseases like malaria.
- To carry out excellent basic research in the area of synthetic organic chemistry, especially asymmetric synthesis and total synthesis of natural products with an ultimate aim to develop new drugs, drug intermediates, processes and technologies.



- To develop new designer molecules to supplement the traditional methods of finding bioactive molecules from nature.

### CORE COMPETENCIES AND ACTIVITIES

- Synthesis of nonnatural peptides, nonnatural saccharides and other designer molecules.



Structures of  $C_2$ -symmetric iminosugar based peptides  
(*J. Org. Chem.* **2002**, *67*, 2093-2100).



Structures of carbo- $\beta$ -peptides  
(*J. Am. Chem. Soc.* **2003**, *125*, 13670-13671).

- Solid/solution phase organic synthesis useful to make combinatorial libraries.
- Synthetic route identification/process development of lead molecules.
- Synthesis of NCEs for their biological evaluation for lead generation.

### CURRENT RESEARCH AREAS

- Total synthesis of structurally complex natural products
- Development of new synthetic methodologies
- Peptidomimetics, peptide conformations and secondary structures, structure-activity relationship studies, molecular modeling and drug design, software development
- Design and synthesis of new molecules, studying their three-dimensional structures and properties like transporting ions or molecules across membranes, anion binding by directed hydrogen-bonding interactions, and development of artificial receptors to carry out in vitro studies of various molecular recognition processes.

### TECHNOLOGIES AVAILABLE

- (S)-Timolol maleate
- Naltrexone hydrochloride
- Misoprostol
- Amlodipine maleate