



## **PROCESS FOR PREPARATION OF CHIRAL GAMMA-LACTAMS**

TECHNOLOGY AVAILABLE FOR TRANSFER

### **TECHNOLOGY**

The technology offers a novel and efficient single step process of synthesizing highly functionalized chiral gamma-lactam bearing three contiguous stereocenters, in diastereomerically and enantiomerically pure form.

The process has been developed at the Chemistry Department of Indian Institute of Technology, Kanpur.

### **APPLICATIONS**

- Synthesis of functional core of drugs.
- Synthesis of drugs based on chiral GABA scaffold (e.g. Pregabalin (Lyrica)).
- Synthesis of drug like molecules which have  $\gamma$ -lactam core.

### **INTELLECTUAL PROPERTY**

Patent pending

### **COMPETITIVE ADVANTAGES**

- Single step process
- Enantioselective synthesis of both the enantiomers of the products just by altering the chirality of the substrates
- Avoids tedious process of separation of enantiomers
- Utilises starting materials which can be easily synthesised
- The process provides quantitative chemical yields up to > 99% of the products with almost enantiospecificity ee > 99%.
- The product shows antitubercular activity
- Avoids use of any hazardous or toxic material.
- Process is low cost and takes less time for synthesis

### **LICENSING OPPORTUNITY**

BCIL is looking for a suitable company involved in production of pharmaceutical compounds.

#### CONTACT:

MANAGER (IP AND TECHNOLOGY TRANSFER CELL)  
BIOTECH CONSORTIUM INDIA LIMITED  
V Floor, Anuvrat Bhawan  
210, Deen Dayal Upadhyaya Marg  
New Delhi:110 002

Phone: +91-11-23219064-67, 23219053 (Direct) Fax: +91-11-23219063  
Email: info.bcil@nic.in Website: www.bcil.nic.in