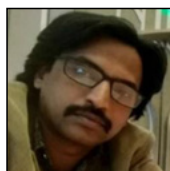


## Development of novel methodologies for the synthesis of ind-2-enone and piperidine-2, 6-dione frameworks using Baylis-Hillman adducts

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### Abstract

The present day synthetic chemistry demands development of novel carbon-carbon bond forming reactions based on the concept of environmental protection. Synthetic chemists have been working in this direction for the last several years. The Baylis-Hillman reaction is one such reaction developed in recent years, on the basis of concepts of atom economy and organo-catalysis that are most important components of environmental protection. Ind-2-en-1-one framework represents an important class of carbocyclic molecules because these derivatives are found in important natural products. Some of indenone derivatives are also known to be peroxisome proliferator activated receptor agonists, estrogen receptor binding agents, cyclooxygenase-2 inhibitors and potent reversible inhibitors of 3CP. Due to their significant medicinal importance; development of facile strategies for obtaining such frameworks has become an attractive endeavor in synthetic organic and medicinal chemistry. Therefore development of facile strategies for the synthesis of these frameworks has become a challenging task in synthetic organic chemistry. Piperidine-2, 6-dione framework is yet another medicinally important skeleton present in several biologically active and natural products such as alonimid (sedative and hypnotic activity), thalidomide (Drug to prevent morning sickness of pregnant women), streptimidone

(antibiotic), migrastatin (antitumor agent), lactimidomycin (antibiotic) and sesbanimide (antitumor). Therefore development of facile strategies for the synthesis of these frameworks has become a challenging task in synthetic organic chemistry. Hence they have developed a facile methodology using the Baylis-Hillman adducts for the synthesis of ind-2-en-1-one and piperidine-2, 6-dione framework.



### Biography

D V Lenin was born in Chilakaluripet, India. He obtained M Sc, M Phil and PhD from University of Hyderabad. Subsequently he was post-doc fellow in Technion-Israel Institute of Technology, Haifa, Israel. Later he worked in a pharma company, Suven Life Sciences, Hyderabad. Currently he is a faculty in School of Chemical Sciences, Central University of Gujarat, India.

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