8th Biennial International
Conference on Organic Synthesis

Balticum Organicum Syntheticum

July 6-9, 2014, Vilnius

Program and Abstract Book

SYNTHESIS OF ENANTIOENRICHED ETHYNYL GLYCINOLS VIA ACIDS CATALYZED CYCLIZATION OF *BIS*-TRICHLOROACETIMIDATES

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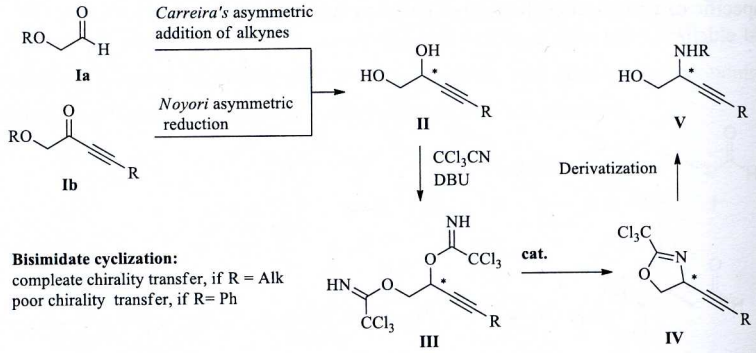
Ethynyl glycinols can be used as versatile building blocks for the synthesis of amino alcoh or amino acid containing natural products and pharmaceuticals. In our poster we present th studies of chirality transfer in Lewis acids catalysed cyclization of *bis*-trichloroacetimidate **III** to oxazolines **IV** as a route to chiral ethynyl glycinols **V**.



Enatioenriched diols **II** were prepared as starting materials via asymmetric addition of alkyne to hydroxy aldehydes **Ia** or asymmetric reduction of ketones **Ib**. Diols **II** were transformed t *bis*-imidates **III** which were subjected to set of Lewis acid providing oxazolines **IV**. Complet chirality transfer with inversion of configuration was observed in the case of *bis*-imidates **II** containing alkyl substituent at acetylene, indicating S_N2 mechanism. In the case of pheny substituent, chirality transfer was poor indicating carbenium ion intermediate formation. Oxa zolines **IV** were further transformed to 2-ethynylglycinol derivatives **V**.