

RECENT STUDIES OF (+)-3-CARENE TRANSFORMATIONS WITH THE RETENTION OF THE NATIVE FRAMEWORK

Serghei Curlat

*Institute of Chemistry, 3, Academiei str., Chisinau MD-2028, Republic of Moldova
e-mail: serejakhp@gmail.com; phone (+373 22) 73 97 54; fax (+373 22) 73 99 54*

Abstract. This review presents last decade and some past especially relevant studies in the field of (+)-3-carene synthetic transformations. The paper discusses exclusively the transformations of (+)-3-carene, proceeding with the retention of the native bicyclic carbon skeleton. The data concerning the features of epoxidation and oxidation reactions of (+)-3-carene, the synthesis of sulphur- and selenium-containing derivatives and their use in asymmetric synthesis are given. It also describes methods for producing amino derivatives of (+)-3-carene, substituted heterocycles based on it, reactions for the preparation of aziridines, azido-alcohols and azidoamines, as well as chiral phosphites as bidentate ligands.

Keywords: (+)-3-carene, epoxidation, sulphide, aminoalcohol, azidoalcohol, aziridine.

Received: 23 July 2019/ Revised final: 09 September 2019/ Accepted: 15 September 2019
