The conformational analysis of 3-hydroxytetrahydro-1,3-oxazines by NMR spectroscopy. Ali, Sk. Asrof; Hashmi, Syed M. A.; Wazeer, Mohammed I. M.. Chemistry Department, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia. Spectrochimica Acta, Part A: Molecular and Biomolecular Spectroscopy (1999), 55A(7-8), 1445-1452. Publisher: Elsevier Science B.V.

Abstract

The stereochem. of the preferred conformers of several 3-hydroxytetrahydro-1,3-oxazines has been established by NMR spectroscopy. Strong anomeric effect stabilizes the conformation having equatorial orientation of the lone pair on nitrogen. Nitrogen inversion process was found to be the rate limiting process in the conformational equil.