Cyclic nitrone-ethene cycloaddition reactions. Perzanowski, Herman P.; Al-Jaroudi, Said S.; Wazeer, Mohamed I. M.; Ali, Sk. Asrof. Chemistry Dep., King Fahd University Petroleum Minerals, Dhahran, Saudi Arabia. Tetrahedron (1997), 53(34), 11869-11880.

Abstract

Addn. reactions of ethene onto several cyclic nitrones afforded [n.3.0]heterobicycloalkanes devoid of any substituents in the ring skeleton. These fused ring systems with a bridgehead nitrogen, capable of undergoing nitrogen inversion, allowed us to det. the stereochem. of the ring fusion and the thermodn. stability of the cis, trans isomers. Some of the cycloadducts on peracid induced ring opening gave a new series of nitrones capable undergoing further cycloaddn. reactions.