

**Peracid induced ring opening of some isoxazolidines and oxidation of saturated 1,3-oxazines to new heterocyclic nitrones.**

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**Abstract**

The regiochem. of peracid-induced ring opening of a no. of isoxazolidines is investigated. The mechanism of the ring opening reaction and the effects of substituents on the regiochem. behavior have been discussed. The oxidn. process gives an equil. mixt. of nitronone and its six-membered ring hydroxylamine tautomer, the ratio of which is found to depend on the substituents. The tautomeric cyclic hydroxylamine has been converted to a new class of nitrones by oxidn. with mercury(II) oxide or p-benzoquinone. One of the cyclic hydroxylamines lacking hydrogen at the  $\alpha$ -carbons has been oxidized to nitroxide spin label.