Reactions of Isoquinolinium Salts with Hydroxylamine Derivatives, 1st Communication. N-(Nitrophenyl) Substituted Compounds

H. Möhrle*, R. Nießen
Institut für Pharmazeutische Chemie, Heinrich-Heine-Universität, Universitätsstr. 1, D-40225 Düsseldorf

Herrn Prof. Dr. H. D. Martin zum 60. Geburtstag gewidmet


Hemiaminal, N-Hydroxyaminal, E/Z-Enamine, Ring-Chain Isomerism, Aminoalkylation

N-(Nitrophenyl) substituted isoquinolinium salts reacted with nucleophiles of the hydroxylamine type to different products depending on the electron withdrawing strength of the substituent. Mononitro compound 8 produced only the cyclic hydroxylamine 9a, the trinitro-derivative 5 solely the ring cleaved oximes. The dinitro substance 1 held an intermediate position and gave rise to a labile cyclic hydroxylamine and a more stable ring opened Z-enamine; hydroxylamine ethers generated cyclic products which showed in dimethylsulfoxide ring chain isomerism with the tautomers.

* Sonderdruckanforderungen an Prof. Dr. H. Möhrle.