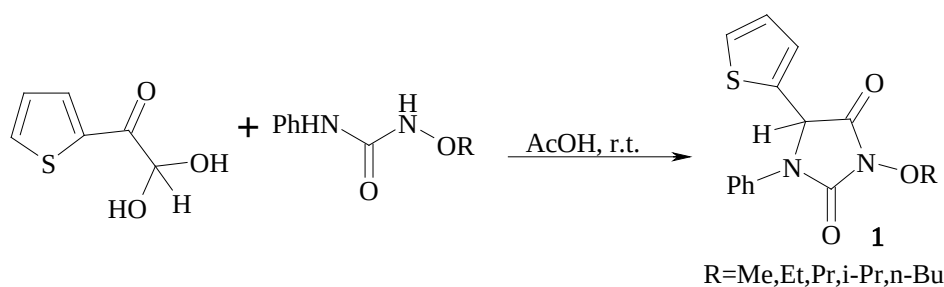
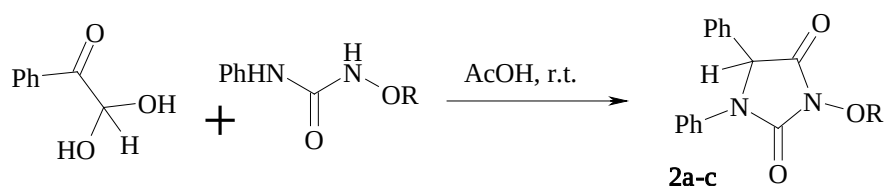


SYNTHESIS OF NEW KINDS OF *N*-ALKOXYHYDANTOINSShtamburg V.G.¹ Anishchenko A.A.,² Kravchenko S.V.³, Mazepa A.V.⁴, Klots E.A.¹¹Ukrainian State University of Science and Technologies, Dnipro, Science ave., 8,
stamburg@gmail.com;²Oles Honchar Dnipro National University, 49045, Science ave., 72,³Dnipro State Agrarian and Economic University, 49600, Dnipro, Efremov st., 25,
svtailor@ukr.net;⁴A.V. Bogatsky Physico-Chemical Institute of NAS of Ukraine, 6500, Odesa, Lyustdorfs'ka
doroha st., 86.

The relevance of the products which can be obtained by the *N*-alkoxy-*N'*-arylureas interaction with the arylglyoxals and ninhydrin is significant because of the importance of imidazolidin-2-ones and hydantoin among pharmaceutical materials. We had found that 2-thienylglyoxal selectively reacted with *N*-alkoxy-*N'*-phenylureas in acetic acid at room temperature yielding only the unknown 3-alkoxy-1-phenyl-5-(2-thienyl)hydantoin **1**.



Phenylglyoxal reacts with *N*-alkoxy-*N'*-phenylureas in acetic acid at room temperature in most cases giving only 3-alkoxy-1,5-bis(phenyl)hydantoin **2**.

R=Et (a), n-Bu (b), n-C₈H₁₇(c)

Phenylglyoxal interacts with *N*-alkoxy-*N'*-(4-nitrophenyl)ureas, yielding only 3-alkoxy-*cis*-4,5-dihydroxy-1-(4-nitrophenyl)-5-phenylimidazolidin-2-ones **3**.

