

This article was downloaded by:

On: 28 January 2011

Access details: *Access Details: Free Access*

Publisher *Taylor & Francis*

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Phosphorus, Sulfur, and Silicon and the Related Elements

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713618290>

Intramolecular Rearrangements of α -Acylamino-Phosphites

F. I. Guseinov^a; R. N. Burangulova^a; G. U. Klimentova^a

^a Department of Organic Chemistry, Kazan State Technological University, Kazan, Russia

To cite this Article Guseinov, F. I. , Burangulova, R. N. and Klimentova, G. U.(1999) 'Intramolecular Rearrangements of α -Acylamino-Phosphites', *Phosphorus, Sulfur, and Silicon and the Related Elements*, 147: 1, 479

To link to this Article: DOI: 10.1080/10426509908053719

URL: <http://dx.doi.org/10.1080/10426509908053719>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

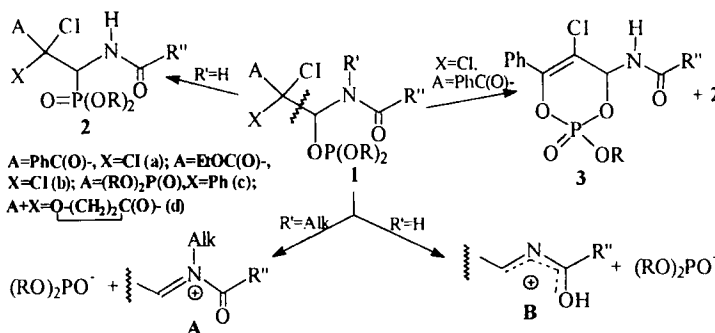
The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Intramolecular Rearrangements of α -Acylamino-Phosphites

GUSEINOV F.I., BURANGULOVA R.N. and KLIMENTOVA G.U

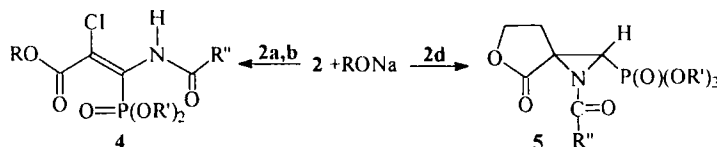
Department of Organic Chemistry, Kazan State Technological University 420015,
 K.Marx str., 68, Kazan, Russia

For the first time we have found out the regularity of rearrangements in a number of α -acylamino phosphites. Phosphites (1) transform to phosphonates (2) if there is a proton at nitrogen atom, in the case of alkyl substituent this rearrangement does not take place.



Carbonylsubstituted phosphites undergo intramolecular Perkow's reaction and phosphite-phosphonate rearrangement at the same time to form phosphonate (2) and phosphorinene (3) [1]. We suppose the dissociative mechanism of this rearrangement to take place due to relatively greater stability of B than A cation.

We have also shown that it is possible to use compounds (2) for the synthesis of unsaturated phosphonates (4) and phosphorus containing aziridines (5).



References

- [1] Guseinov F.I., Burangulova R.N. Zh. Obsh. Khim., **67**, No 1, 163 (1997).