This article was downloaded by:

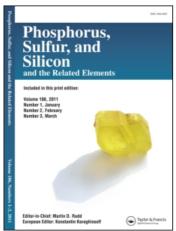
On: 28 January 2011

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

# The New Synthetic Route to the Dyalkylacylphosphites

Rafael A. Cherkasov<sup>a</sup>; Arcady I. Kuramshin<sup>a</sup>; Helen A. Kuramshina<sup>a</sup> Kazan State University, Russia

Online publication date: 27 October 2010

 $\textbf{To cite this Article Cherkasov}, Rafael A.\ , Kuramshin, Arcady I.\ and Kuramshina, Helen A. (2002) \ 'The New Synthetic Route to the Dyalkylacylphosphites', Phosphorus, Sulfur, and Silicon and the Related Elements, 177: 8, 1985$ 

To link to this Article: DOI: 10.1080/10426500213315 URL: http://dx.doi.org/10.1080/10426500213315

### 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.

Phosphorus, Sulfur and Silicon, 2002, Vol. 177:1985 Copyright © 2002 Taylor & Francis 1042-6507/02 \$12.00 + .00

DOI: 10.1080/10426500290094927



### THE NEW SYNTHETIC ROUTE TO THE DYALKYLACYLPHOSPHITES

Rafael A. Cherkasov, Arcady I. Kuramshin, and Helen A. Kuramshina Kazan State University, Russia

(Received July 29, 2001; accepted December 25, 2001)

The unsaturated carboxylic acids' esters usually react with the dialkylphosphites according to the A<sub>N</sub> mechanism. We have observed the acrylic and cinnamic acids' methyl esters  $\pi$ -coordinated react with the dialkylphosphoric acids forming the dyalkylacylphosphites (I).

#### **SCHEME 1**

The compounds (I) easily oxidize or sulphuridize giving phosphates or thiophosphates (II).

This work is supported by the joint program of CRDF and Russian Ministry of Education, "Basic Research & High Education" (grant REC 007); and Russian Ministry of Education program "The Investigations of the High School at the Frontier of the Science & Techniques" (grant 0.2.01.009).

Address correspondence to Rafael A. Cherkasov, Kazan State University, Chemistry Department, 420008, Kremlyovskaya 18, Kazan, Russia.

E-mail: rafael.cherkasov@ksu.ru