

This article was downloaded by:

On: 29 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>

Mesomeeuc Phosphonium Ylides and Betaines Containing Imidazole Cycle

B. S. Drach^a; V. S. Brovaretz^a; O. R. Smolii^a

^a Institute of Bioorganic Chemistry of the Ukrainian Academy of Sciences, Kiev, USSR

To cite this Article Drach, B. S. , Brovaretz, V. S. and Smolii, O. R.(1990) 'Mesomeeuc Phosphonium Ylides and Betaines Containing Imidazole Cycle', *Phosphorus, Sulfur, and Silicon and the Related Elements*, 51: 1, 248

To link to this Article: DOI: 10.1080/10426509008040782

URL: <http://dx.doi.org/10.1080/10426509008040782>

PLEASE SCROLL DOWN FOR ARTICLE

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

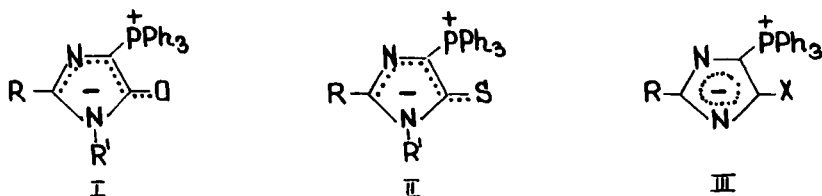
This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

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.

MESOMERIC PHOSPHONIUM YLIDES AND BETAINES CONTAINING IMIDAZOLE CYCLE

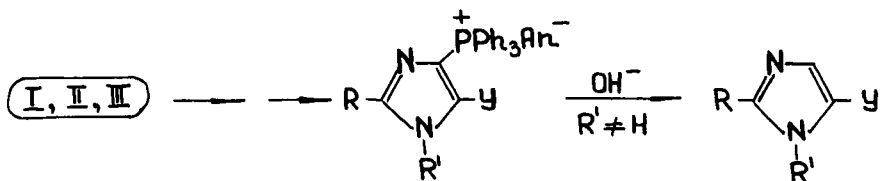
B.S.DRACH, V.S.BROVARETZ, and O.B.SMOLII
 Institute of Bioorganic Chemistry of the Ukrainian
 Academy of Sciences, Murmanskaya Str. 5, Kiev 252094,
 USSR

Three types of high-polar phosphonium compounds (I-III) containing imidazole cycle were obtained from the readily available acylaminomethylphosphonium salts (1).



R = Alk, Ar, Het; R' = H, Alk; X = H, OAcyl, SAlk, SAcyI

In spite of mesomeric character, these compounds react with electrophilic reagents in a regioselective manner. Depending on the nature of endo- and exocyclic nucleophilic centers they can show properties either of typical ylides or betaines. Many of them are valuable precursors in synthesis of new types of substituted imidazoles (IV,V).



R' = H, Alk; Y = H, SAlk, SAr, SHet, SO₂Alk

(1) O.B.Smolii, V.S.Brovaretz, V.V.Pirozhenko, B.S.Drach,
 Zh. Obshch. Khim., 58, 2635 (1988).