

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>

New Watersoluble Phosphocontaining Cyclodextrins Derivatives

Galina I. Kurochkina^a; Alexey E. Glazyrin^a; Alexey N. Syrtzev^a; Leonid O. Kononov^b; Mikhail K. Gratchev^a; Edward E. Nifantiev^a

^a Moscow State Pedagogical University, Russia ^b N. D. Zelinsky Institute of Organic Chemistry RAS, Russia

Online publication date: 27 October 2010

To cite this Article Kurochkina, Galina I. , Glazyrin, Alexey E. , Syrtzev, Alexey N. , Kononov, Leonid O. , Gratchev, Mikhail K. and Nifantiev, Edward E.(2002) 'New Watersoluble Phosphocontaining Cyclodextrins Derivatives', *Phosphorus, Sulfur, and Silicon and the Related Elements*, 177: 8, 2057

To link to this Article: DOI: 10.1080/10426500213391

URL: <http://dx.doi.org/10.1080/10426500213391>

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.

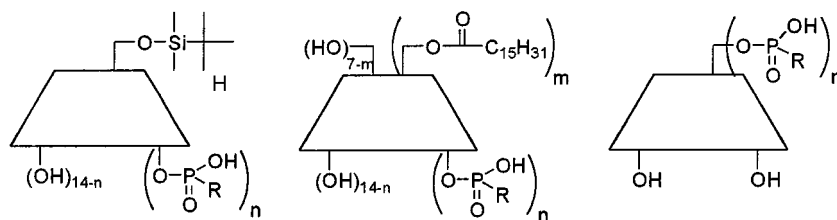
The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any 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.

NEW WATERSOLUBLE PHOSPHOCONTAINING CYCLODEXTRINS DERIVATIVES

Galina I. Kurochkina,^a Alexey E. Glazyrin,^a Alexey N. Syrtzev,^a
 Leonid O. Kononov,^b Mikhail K. Gratchev,^a
 and Edward E. Nifantiev^a
 Moscow State Pedagogical University, Russia^a and
 N. D. Zelinsky Institute of Organic Chemistry RAS, Russia^b

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

Cyclodextrins (c.ds.) are of the great interest for the supramolecular chemistry, because they exhibit an unique ability for the bonding with many organic substances forming inclusion compounds of "guest-host" type. Among the c.ds. derivatives those that are water soluble, contain polar ionic heads, and, additionally, can ensure an enlarged internal hydrophobic cavity, are of special interest. In the present work the syntheses of new original phosphocontaining c.ds., possessing high water solubility and the ability to form stable inclusion compounds in water-organic phase, are reported.



where: R=OH, CH₃

SCHEME 1

The new prospects of the application of phosphorylated c.ds. for the solution of some urgent tasks of supramolecular chemistry are discussed.

Authors are grateful to Federal Program "Integracia" (2001, Grants #204, 205) for the financial support of this work.

Address correspondence to Mikhail K. Gratchev, Department of Chemistry, Moscow State Pedagogical University, Nesvizski per. 3, Moscow 119021, Russia.