

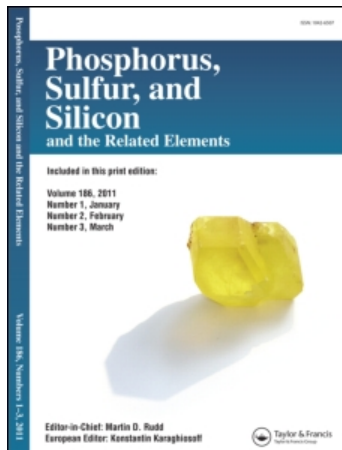
This article was downloaded by:

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>

### Synthesis and Rearrangement of N-P<sup>III</sup>-Phosphorylated Carboxylic Acid Amides

D. M. Malenko<sup>a</sup>; L. I. Nesterova<sup>a</sup>; A. D. Sinita<sup>a</sup>

<sup>a</sup> Institute of Organic Chemistry, National Academy of Sciences, KIEV, UKRAINE

**To cite this Article** Malenko, D. M. , Nesterova, L. I. and Sinita, A. D.(1996) 'Synthesis and Rearrangement of N-P<sup>III</sup>-Phosphorylated Carboxylic Acid Amides', Phosphorus, Sulfur, and Silicon and the Related Elements, 111: 1, 102

**To link to this Article:** DOI: 10.1080/10426509608054731

**URL:** <http://dx.doi.org/10.1080/10426509608054731>

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.

## SYNTHESIS AND REARRANGEMENT OF N-P<sup>III</sup>-PHOSPHORYLATED CARBOXYLIC ACID AMIDES.

D.M. MALENKO, L.I. NESTEROVA, A.D. SINITSIA  
Institute of Organic Chemistry, National Academy of Sciences,  
Kiev 252660, 5 Murmanskaya St, Ukraine

Reactions of carboxylic acid lactams with tervalent phosphorus chlorides, leading to N- and/or O- derivatives have been investigated. Synthetic methods for imidoylphosphites and phosphonates, mono- and bisphosphorylated azadienes have been developed. Prototropic migrations in azaallylic triad, phosphorus atom migrations in N-C-O triad and imidoylphosphite-imidoylphosphonate rearrangement were found. It was encountered, that chlorination of amidophosphites containing one to three trihalogen acetamide groups is accompanied by chlorine or N-acylamide group shift and leads to cyclic and spirocyclic phosphoranes with 1,3,2-<sup>5</sup>-oxazaphosphetanic cycle.