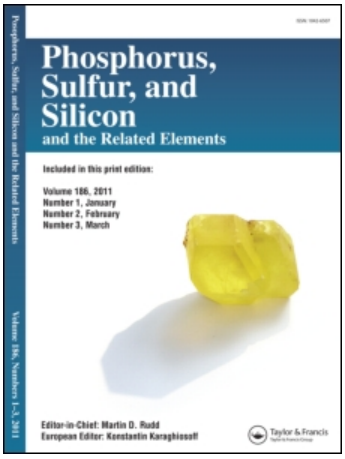

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Synthesis of Hexaisopropyltriamidephosphite: Myth or Reality?

Anatoliy P. Marchenko[a]; Georgyi N. Koidan; Yurii M. Pustovit[a]; Mark I. Povolotskii[a]; Aleksandr N. Chernega[a]; Aleksandr M. Pinchuk[a]
[a] Institute of Organic Chemistry National Academy of Sciences of Ukraine, Kyiv, Ukraine

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Synthesis of Hexaisopropyltriamidephosphite: Myth or Reality?

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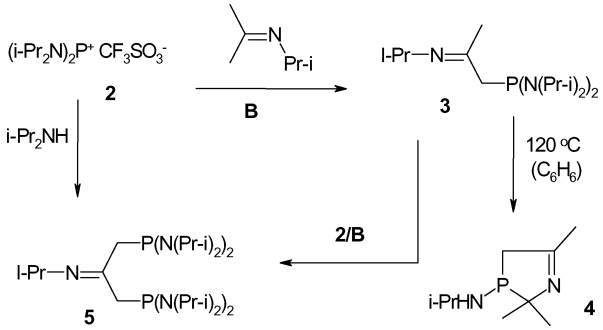
Institute of Organic Chemistry National Academy of Sciences of Ukraine, Murmanska Str. 5, Kyiv, 02094 Ukraine

Results of our work allowed us to assert that the methods for synthesis of triamide (i-$Pr_2N)_3P$ **1** described are wrong.[1–4] It was shown that diamidohalogenphosphites (i-$Pr_2N)_2PHlg$ (Hlg = Cl,Br,I) do not react with di(isopropyl)amine even under harsh conditions such as heating up to 240°C in various solvents. At the same time, less sterically hindered phosphenium cation **2** easily react with di(isopropyl)amine, affording diphosphine **5** instead of the expected triamide **1**. The diphosphine **5** is also formed in the reaction of the phosphenium cation **2** with ketimine i-PrN = CMe_2, with the reaction running via formation of monophosphine **3**.



In conclusion we must note that an approach to triamide **1** has to be found yet.

Address correspondence to Georgyi N. Koidan, Institute of Organic Chemistry National Academy of Sciences of Ukraine, Murmanska Str.5, Kyiv, 02094 Ukraine.

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