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### Isothiocyanatochloromethylphosphonates and Phosphinates - Versatile Synthones for Obtaining of S (Se), N, P-Containing Heterocycles

Rustem Kamalov<sup>a</sup>; Roza Al'myanova<sup>a</sup>; Michael Pudovik<sup>a</sup>

<sup>a</sup> A. E. Arbuzov Institute of Organic and physical Chemistry, Russian Academy of Sciences, Kazan, Russia

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# ISOTHIOCYANATOCHLOROMETHYLPHOSPHONATES AND PHOSPHINATES - VERSATILE SYNTHONES FOR OBTAINING OF S (Se), N, P-CONTAINING HETEROCYCLES

RUSTEM KAMALOV, ROZA AL'MYANOVA, MICHAEL PUDOVIK  
 A. E. Arbuzov Institute of Organic and Physical  
 Chemistry, Russian Academy of Sciences, 420083  
 Kazan, Arbuzov Str. 8, Russia

Isothiocyanatochloromethyl(thio)phosphonates and (thio)-phosphinates **1** ( $X=O, S$ ;  $R^1 = OPh, CH_2Cl, NCS$ ;  $R^2 = H, Cl$ ) have been found to be convenient starting material for synthesis of a variety of S (Se), N, P-containing cyclic compounds. They react with different proton containing nucleophiles in the presence of a base with formation of saturated **2** and unsaturated **3** five membered phosphacyclanes. Diisothiocyanatodichloromethylphosphonates **1** ( $R^1 = NCS, R^2 = Cl$ ) produce with amines and thiols appropriate bicyclic compounds **4**.

