Synthesis of New Polyfunctional 5,6,7,8-Tetrahydroimidazo-[1,5-*c*]pyrimidin-5-ones by the Aza-Wittig Reaction Followed by Intramolecular Cyclization and 1,3-Prototropic Shift

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Abstract—Ethyl 2-oxo-6-[(triphenyl-λ^5-phosphanylidene)aminomethyl]-1,2,3,4-tetrahydropyrimidine-5-carboxylates reacted with organic isocyanates according to the aza-Wittig pattern, and the subsequent intramolecular ring closure and 1,3-H shift resulted in the formation of ethyl 3-alkyl(aryl)amino-5-oxo-5,6,7,8-tetrahydroimidazo[1,5-*c*]pyrimidine-8-carboxylates.

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