Specific Features of the Reaction of 2-Nitro- and 2-Bromo-2-Nitroethenylphosphonates with Furan

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Abstract — Investigation of the reactions of phosphorylated 2-nitro- and 2-bromo-2-nitroethenes with furan showed that bis(2-chloroethyl) 2-nitroethenylphosphonate reacts with this heterocycle according to the pathway of diene condensation, while in the case of 2-bromo-2-nitroethenylphosphonate by two pathways, the complete diene synthesis accompanied by aromatization, and the electrophilic substitution at C^2-atom of the furan with the subsequent partial dehydrohalogenation.