

European Chemistry Congress

June 16-18, 2016 Rome, Italy

The interaction of 1-nitro- and 1-bromo-1-nitro-3,3,3 trifluoro(chloro)propenes with phenylazide

Alena Kuzhaeva

National Mineral Resources University, Russia

One of the methods of obtaining functionalized heterocycles is the 1,3-dipolar cycloaddition reaction involving nitroalkenes as dipolarophiles containing a trihalogenmethyl group at β -position in their structure. 1,3 - dipolar cycloaddition of phenylazide to 1 - nitro- and 1 - bromo - 1 - nitro - 3,3,3 - trifluoro(chlorine)propenes was carried out through the intermediate formation of regioisomeric triazolines, which under the reaction conditions underwent intramolecular transformation (denitration, dehydrogenation, dehydrohalogenation) culminating in the formation of the corresponding triazoles with or without nitro-group. The structure of obtained compounds is proved by modern physical-chemical research methods and the formation of these compounds does not contradict with reference data on such adducts obtaining in reaction of 1,3-dipolar cycloaddition with the same structure type nitroalkenes which contain CO_2R and $\text{P}(\text{O})(\text{OR})_2$ groups instead of the $\text{C}(\text{Hlg})_3$ substitute in their structure.

Biography

Alena Kuzhaeva has completed her PhD from Herzen State Pedagogical University, Russia. She works in the National Mineral Resources University (Mining University) at the Department of General and Physical Chemistry. She has published more than 40 papers in reputed journals.

kaarlo@mail.ru

Notes: