

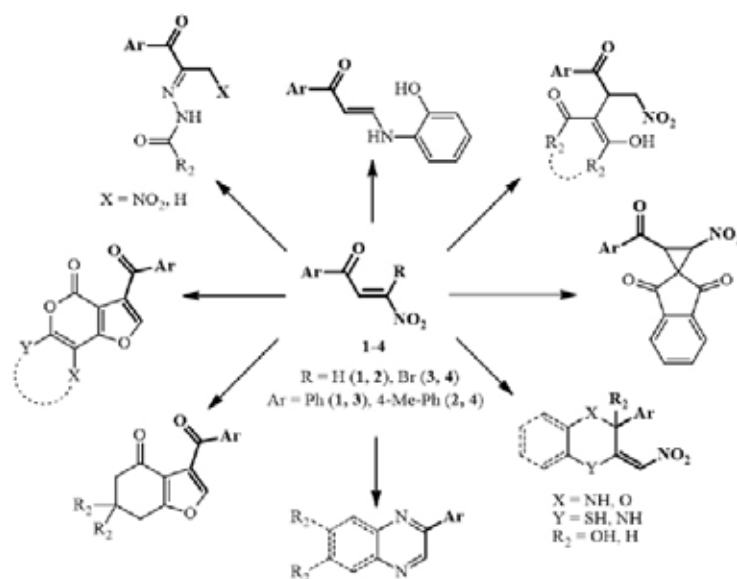
β-AROYL-CONTAINING NITRO- AND *GEM*-BROMONITROETHENES IN THE SYNTHESIS OF OPEN-CHAIN, CARBO- AND HETEROCYCLIC COMPOUNDS

Adyukov I.S., Pelipko V.V., Makarenko S.V.

*The Herzen State Pedagogical University of Russia
 191186, Russia, St. Petersburg, Moika River Embankment, 48
 e-mail: kohrgpu@yandex.ru*

The heightened reactivity of nitro- and *gem*-bromonitropropenones in reactions with nucleophilic reagents is attributed to the presence of conjugated double C=C bonds within their molecular framework [1, 2]. Additionally, the incorporation of aryl groups and halogen atoms within their molecular structures presents avenues for further transformations, facilitating formation of diverse carbocyclic and heterocyclic compounds.

We have demonstrated that the interaction of aryl-3-nitro- and 3-bromo-3-nitroprop-2-en-1-ones **1-4** with representatives of cyclic CH-acids, aromatic, and aliphatic binucleophilic reagents proceeds to form Michael adducts, which are capable of further transformation, resulting in carbocyclic and heterocyclic structures



References

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2. Sadikov K.D., Litovchenko K.M., Makarenko S.V., Berestovitskaya V.M. *Rus. J. Org. Chem.*, 2004, **40**, 1266.