BOOK OF ABSTRACTS

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Furyl-tethered amines as intermediates in synthesis of 1,2-annulated pyrroles

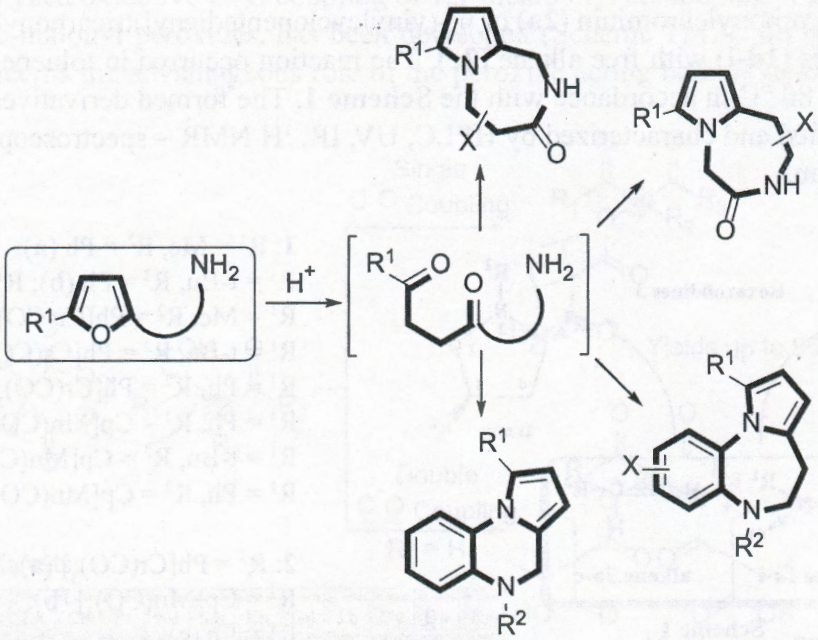
Zelina E. Y. [a], Nevolina T. A. [a], Sorotskaya L. N. [b], Uchuskin M. G. [a]

[a]Perm State University, Bukireva 15, Perm, 614990, Russia

[b]Kuban State Technological University, Moskovskaya 2, Krasnodar, 350072, Russia

E-mail: zelina.e@mail.ru

Substituted furans are widely used as starting compounds in the synthesis of biologically active molecules. In the presence of Bronsted acid furans containing amine functionality can undergo ring opening/intermolecular Paal-Knorr reaction affording annulated nitrogen-containing heterocycles [1]. Based on this reactivity of furan substrates, we developed simple and efficient synthetic protocols toward pyrrolo[1,2-a][1,4]diazepines, pyrrolo[1,2-d][1,4]diazepines, pyrrolo[1,2-a][1,5]benzodiazepines and pyrrolo[1,2-a]quinoxalines.



Scope and limitations of this type of the amine-tethered furans rearrangements to azaheterocycles will be discussed.

References

[1] Trushkov, I.V.; Uchuskin, M.G.; Butin, A.V. *Eur. J. Org. Chem.* 2015, *14*, 2999.

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