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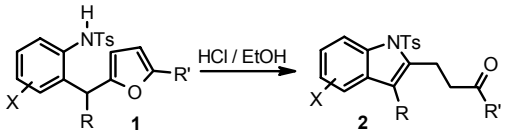
Poster Presentation

2-Aminoaryldifurylmetane Derivatives for Indoles Synthesis

Sergey K. Smirnov, Anna V. Didenko, Tatyana A. Stroganova, Alexander V. Butin

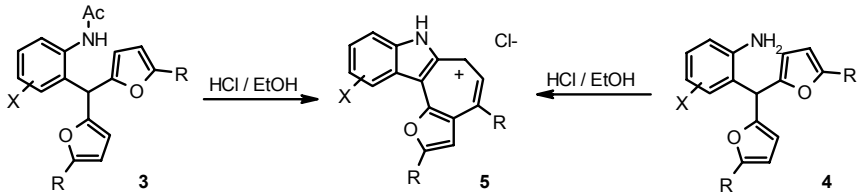
Research Institute of Heterocyclic Compounds Chemistry of Kuban State University of Technology
Moskovskaya st. 2, Krasnodar, 350072, Russian Federation
e-mail: alexander_butin@mail.ru

Earlier we reported that 2-tosylaminobenzylfurans **1** on treatment with ethanolic solution of hydrogen chloride were transformed into indole ketones **2** in high yields [1].



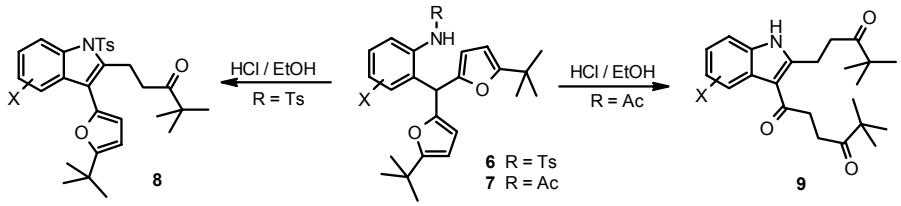
R = Alk, Ar; R' = Me, Et

Later we determined that recyclization of 2-aminoaryldifurylmethane derivatives **3** and **4** accompanied by secondary cyclization and resulted in tetracyclic indole derivatives **5** formation.



R = Me, Et

We could avoid secondary cyclization using bulky *tert*-butyl substituent at the position 5 of furan ring and as a result obtained indole ketones **8** bearing furan ring at the position 3 of indole unit.



It was established that the treatment of acetyl derivatives **7** with HCl gas in ethanol under refluxing resulted in a cleavage of another furan ring without subsequent cyclization.

1. Butin A.V., Stroganova T.A., Lodina I.V., Krapivin G.D. *Tetrahedron Lett.* **2001**, *42*, 2031.

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