

## RHODIUM-CATALYZED REARRANGEMENT OF 2-FURYL TETHERED 1-TOSYL-1,2,3-TRIAZOLES

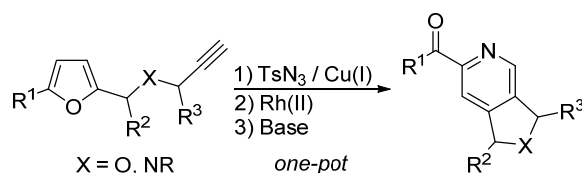
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Intermolecular reaction of alkylfurans with 1-sulfonyl-1,2,3-triazoles under rhodium catalysis leads to electrophilic addition of iminocarbene species to a furan ring followed by transannulation to form pyrrole derivatives [1]. At the same time, intramolecular reaction of rhodium-iminocarbenes with furans have been described to provide only products of electrophilic heteroaromatic substitution [2, 3].

We discovered that intramolecular reaction of furans with triazole-derived azavinyl carbenoids could lead to substituted pyridines through sequential dearomatization/ring-opening/electrocyclization/aromatization.



Optimization and mechanistic details as well as the scope, limitations of the developed synthetic protocol toward substituted pyridine and synthetic utility of the obtained products will be discussed.

[1] B. T. Parr, S. A. Green, H. M. Davies, *J. Am. Chem. Soc.* **2013**, *135*, 4716-4718;

[2] Z. F. Xu, X. Yu, D. Yang, C. Y. Li, *Org. Biomol. Chem.* **2017**, *15*, 3161;

[3] B. Seo, W. H. Jeon, J. Kim, S. Kim, P. H. Lee, *J. Org. Chem.* **2015**, *80*, 722;