

# ACCESS TO ANNULATED PYRIDAZINES VIA INTERRUPTED FURAN-YNE CYCLIZATION

Y.A. Vasev, E.R. Nasibullina, A.S. Makarov, M.G. Uchuskin

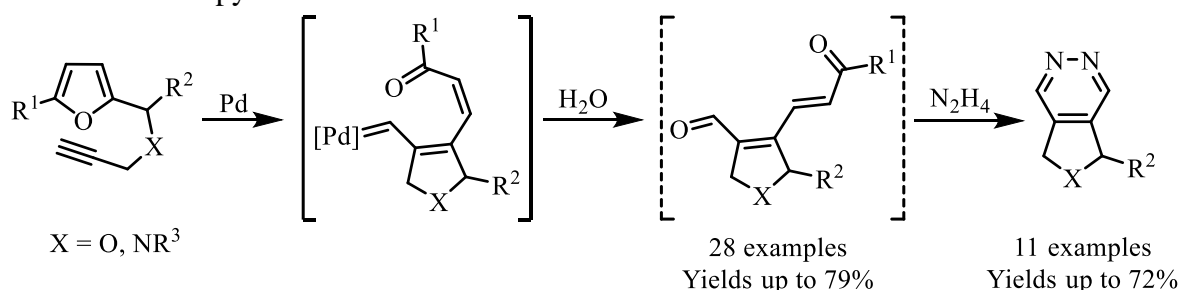
Perm State University, 614068, Perm, Bukireva, 15.

E-mail: yuryvasev@psu.ru

The dearomatization of the furan ring is an effective method for synthesizing heterocyclic compounds, by carefully adjusting the catalytic system and designing the starting material, complex functionalized products can be synthesized in a single step<sup>1, 2</sup>.

During separate studies on the furan-yne reactions of furylacetylenes leading to the phenol formation, Hashmi and Echavarren's research groups identified dicarbonyl byproducts in small amounts, these compounds are suspected to have formed due to water attacking the metal-carbene center<sup>3, 4</sup>.

Motivated by the assumption that these highly functionalized compounds might possess significant applications in the field of synthetic organic chemistry, we delved into a comprehensive exploration of the reaction mechanism and examined their reaction with hydrazine, resulting in the formation of annulated pyridazines.



Scheme 1. Synthesis of dicarbonyl compounds and pyridazines.

## References

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