

# DE NOVO THREE-COMPONENT SYNTHESIS OF META-SUBSTITUTED ANILINES

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*Meta*-substituted anilines reside in a relatively less explored chemical space compared to *ortho*- and *para*-substituted counterparts. In most cases, accessing *meta*-substituted anilines requires indirect synthetic strategies involving prefunctionalization of the parent molecule.

A number of alternative strategies toward *meta*-substituted anilines utilize non-benzoid matrices for *de novo* synthesis of functionalized arenes. These instruments generally have higher flexibility for targeting specific substitution sites. In the course of our research we developed an original method for the synthesis of *meta*-substituted anilines based on metal- and additive-free multicomponent reaction of commercially available or one-step accessible substituted methylvinyl ketones, *N*-acylpyridinium salts and primary/secondary alkyl- and arylamines<sup>1</sup>.

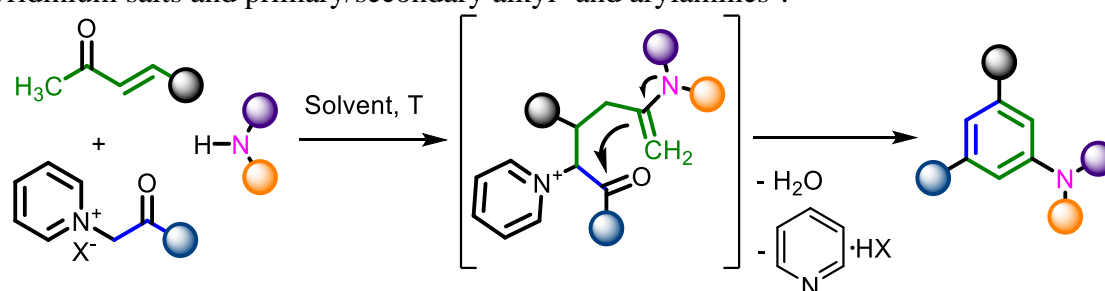


Fig. 1. Synthesis of *meta*-substituted anilines

Optimization details as well as scope, limitations and synthetic applications of the developed method will be discussed.

## References

1. *De novo* three-component synthesis of *meta*-substituted anilines / A. S. Makarov, A. N. Bakiev, D. A. Eshmemeteva // Organic Chemistry Frontiers. – 2023. – Vol. 10, Iss. 11. – P. 2760–2765.

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