

# **ADVANCES IN SYNTHESIS AND COMPLEXING**

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*In Two Parts*

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The present publication was designed to popularize scientific research activity in the field of chemistry and to discuss modern chemical problems on the international level. The digest is intended for scientists, students, postgraduates and for wide range of readers interested in problems in chemistry.

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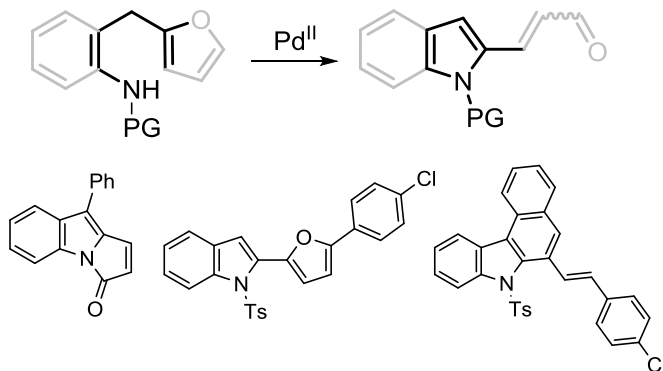
## Intramolecular oxidative amination of furans as convenient method toward substituted indoles

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Oxidative amination is known to be robust methodological solution for the straightforward synthesis of nitrogen-containing heterocycles. Originally, the first reported application of oxidative amination appeared to be the synthesis of indole derivatives [1].

Low aromatization energy of the furan ring is responsible for unordinary chemical reactivity. In particular, the furan ring may serve as a carbon-carbon double bond equivalent, thereby exhibiting typical chemical behavior of an olefin. We rationalized that benzylfurans could imitate the reactivity of *ortho*-allylaniline in oxidative amination conditions providing indole derivatives possessing highly reactive enone fragment.



Scope and limitations of the developed method, as well as synthetic potential of obtained products will be discussed.

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