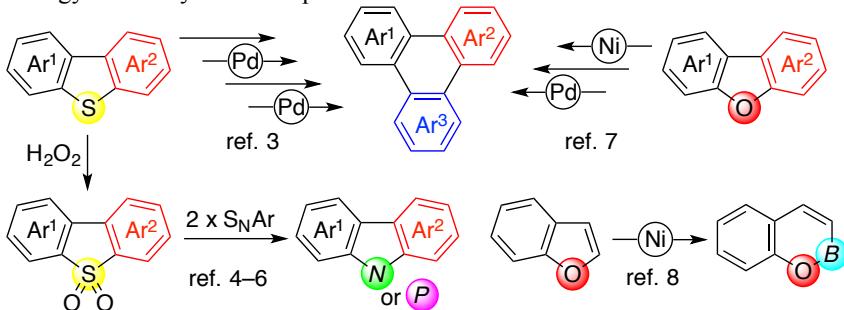


Aromatic Metamorphosis: Conversion of Heteroaromatic Core into Different Ring

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Aromatic skeletons are usually considered as being unbreakable due to their aromatic resonance energy. Compared with exocyclic modifications of aromatic compounds, little is known about substitutions of endocyclic atoms through partial disassembly of the cyclic skeletons and subsequent ring reconstruction. I will talk about our endeavours to establish “aromatic metamorphosis”,^{1,2} where heteroaromatic compounds such as dibenzothiophenes,^{3–6} dibenzofurans,⁷ and benzofurans⁸ are transformed into different ring systems using a multi-step strategy or ideally in one step.



References

1. K. Nogi, H. Yorimitsu, *Chem. Commun.* **2017**, 53, 4055 (Feature Article).
2. H. Yorimitsu, D. Vasu, M. Bhanuchandra, K. Murakami, A. Osuka, *Synlett* **2016**, 27, 1765 (Account).
3. D. Vasu, H. Yorimitsu, A. Osuka, *Angew. Chem. Int. Ed.* **2015**, 54, 7162.
4. M. Bhanuchandra, K. Murakami, D. Vasu, H. Yorimitsu, A. Osuka, *Angew. Chem. Int. Ed.* **2015**, 54, 10234.
5. M. Onoda, Y. Koyanagi, H. Saito, M. Bhanuchandra, Y. Matano, H. Yorimitsu, *Asian J. Org. Chem.* **2017**, 6, 257.
6. M. Bhanuchandra, H. Yorimitsu, A. Osuka, *Org. Lett.* **2016**, 18, 384.
7. Y. Kurata, S. Otsuka, N. Fukui, K. Nogi, H. Yorimitsu, A. Osuka, *Org. Lett.* **2017**, 19, 1274.
8. H. Saito, S. Otsuka, K. Nogi, H. Yorimitsu, *J. Am. Chem. Soc.* **2016**, 138, 15315.