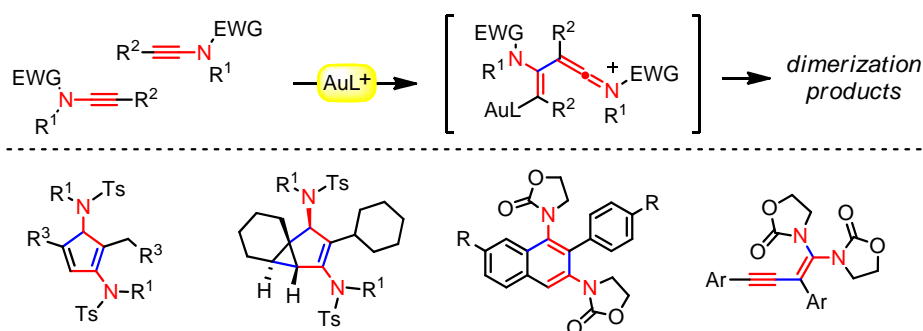


# Gold(I)-Catalyzed Dimerization of Ynamides<sup>1</sup>

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Ynamides are easy to access and have become important substrates in a variety of organic reactions.<sup>2</sup> The inherent polarization of the triple bond increases its reactivity and allows for highly regioselective transformations.<sup>3</sup>

We have recently shown that in the presence of a gold(I) catalyst the ynamides can play the role of both the nucleophile and the electrophile in homodimerizations leading to non-symmetric products. This intermolecular alkyne dimerization goes through a common keteniminium intermediate which can further evolve to a variety of cyclic and acyclic products.

<sup>1</sup> Kramer, S.; Odabachian, Y.; Overgaard, J.; Rottländer, M.; Gagosz, F.; Skrydstrup, T. *Angew. Chem. Int. Ed.* **2011**, Early view.

<sup>2</sup> Recent reviews on ynamides: (a) Evano, G.; Koste, A.; Jouvin, K. *Angew. Chem. Int. Ed.* **2010**, *49*, 2840. (b) DeKorver, K. A.; Li, H.; Lohse, A. G.; Hayashi, R.; Lu, Z.; Zhang, Y.; Hsung, R. P. *Chem. Rev.* **2010**, *110*, 5064.

<sup>3</sup> (a) Schotes, C.; Mezzetti, A. *Angew. Chem. Int. Ed.* **2011**, *50*, 3072. (b) Davies, P. W.; Cremonesi, A.; Martin, N. *Chem. Commun.* **2011**, 379. (c) Kramer, S.; Madsen, J. L. H.; Rottländer, M.; Skrydstrup, T. *Org. Lett.* **2010**, *12*, 2758. (d) Kramer, S.; Dooleweerd, K.; Lindhardt, A. T.; Rottländer, M.; Skrydstrup, T. *Org. Lett.* **2009**, *11*, 4208.