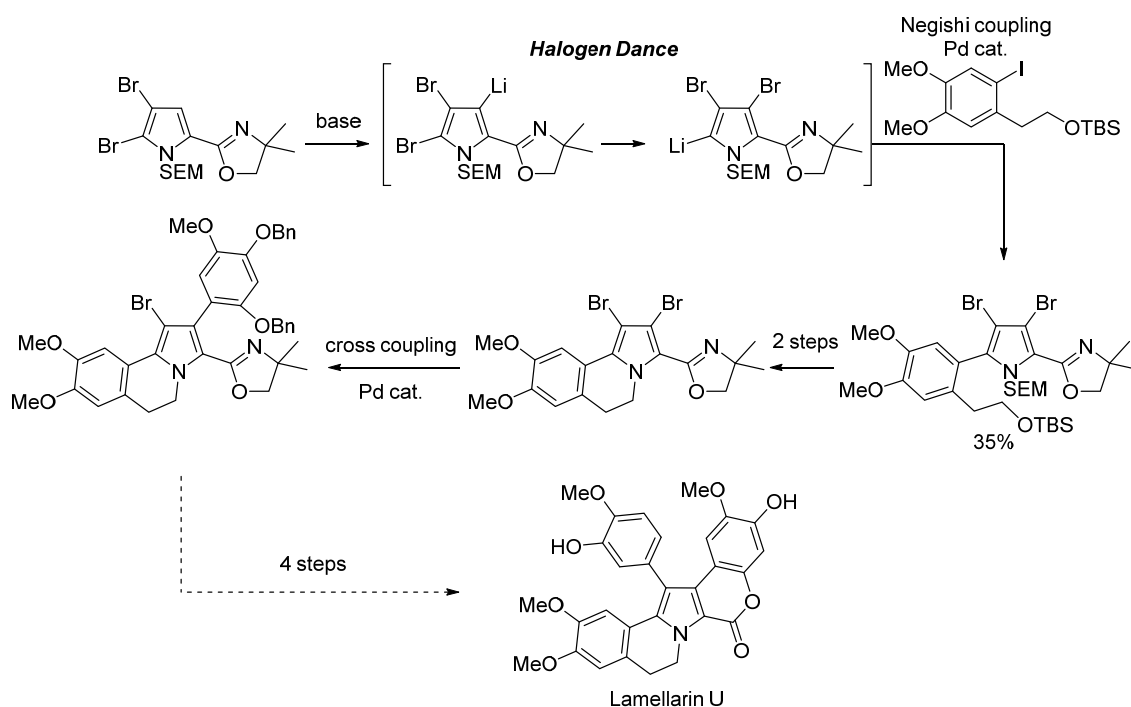


SYNTHETIC STUDIES ON LAMELLARINS

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Synthetic studies on lamellarins are described. The tricyclic skeleton of lamellarins was constructed by a one-pot halogen dance/Negishi coupling [1] of the bromopyrrole derivative. In this reaction, the bromo group on the α -position migrates to the β -position. The resulting organolithium species were transmetalated to the corresponding zinc species, which were then arylated through Negishi coupling in one pot. We applied this reaction to the dibromopyrrole derivative to achieve the regiocontrolled synthesis of multiple arylated pyrroles such as lamellarins which exhibit significant biological activities.



[1] (a) Okano, K.; Sunahara, K.; Yamane, Y.; Hayashi, Y.; Mori, A. *Chem. Eur. J.* **2016**, *22*, 16450. (b) Hayashi, Y.; Okano, K.; Mori, A. *Org. Lett.* **2018**, *20*, 958.