

## UFI-QOSYC 1<sup>st</sup> Young Scientist Workshop

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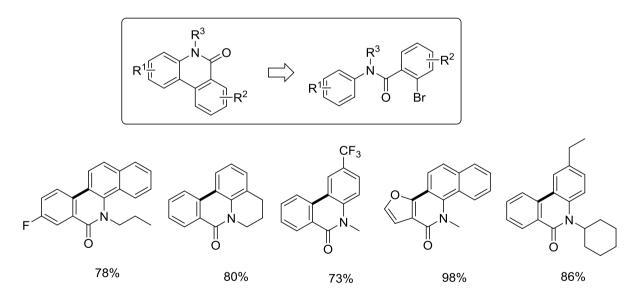


## A more efficient entry to phenanthridinones

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The presence of the phenanthridinone core in natural products and biologically active compounds has encouraged research on more efficient approaches to such valuable tricyclic framework.<sup>1</sup> Due to the lack of transmetallating agents and the atom-economy implied, palladium-catalyzed direct arylation is an appealing alternative for the ring closure step. However, the relative high amount of the catalyst employed may become a serious drawback from a practical view.<sup>2</sup> In this context, we wish to present the application of a palladacyclic complex to this reaction and the significant reduction of the catalytic amount achieved (0.05 mol%) in the successful preparation of a series of phenanthridinone derivatives.



<sup>&</sup>lt;sup>1</sup> Bhakuni, B. S.; Kumar, A.; Balkrishna, S. J.; Sheikh, J. A.; Konar, S.; Kumar, S. Org. Lett. 2012, 14, 2838-2841.

<sup>&</sup>lt;sup>2</sup> Rousseaux, S.; Gorelsky, S. I.; Chung, B. K. W.; Fagnou, K. J. Am. Chem. Soc. 2010, 132, 10692-10705.