INCREASING THE π -ELECTRON CONJUGATION OF CORROLES VIA SONOGASHIRA-CROSS-COUPLING

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The synthesis of *meso*-substituted A_2B and A_3 -corroles with small aromatic side chains is standard today. In contrast to this, synthesis of *meso*-functionalized alkynylcorroles is not state of the art. We report the chemical synthesis and characterization of several A_2B and A_3 -Corroles bearing TIPS-protected ethynyl-groups at the *meso*-positions, which serve as precursors for further reactions to enhance the π -electron conjugation. *Via* Sonogashira-cross-coupling the reaction of several aryliodides with the corroles was accomplished under ambient conditions and a common catalyst system within several hours.

Figure 1: A₂B (a, b) and A₃-Corroles (c) bearing TIPS-protected ethynyl-groups at the meso-positions.

^[1] Haas, M., Gonglach, S., Müllegger, S. et al. Monatsh Chem (2017). https://doi.org/10.1007/s00706-017-2114-6