INCREASING THE $\pi$-ELECTRON CONJUGATION OF CORROLES VIA SONOGASHIRA-CROSS-COUPLING

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The synthesis of $meso$-substituted A2B and A3-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 A2B and A3-Corroles bearing TIPS-protected ethynyl-groups at the $meso$-positions, which serve as precursors for further reactions to enhance the $\pi$-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.