# A Pd-Catalyzed Cross-Coupling of Cyclopropylmagnesium Bromide with Aryl Bromides/Triflates Mediated by Substoichiometric Zinc Halide Additives. 

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## Materials and Methods.

All reactions, unless specified otherwise, were performed in oven-dried glassware under nitrogen atmosphere. All reagents and solvents were purchased from commercial sources and used as received, unless otherwise indicated. Thin layer chromatography was conducted with E. Merck silica gel 60 F-254 glass-backed plates of $0.25-\mathrm{mm}$ thickness and visualized with UV light or stained with phosphomolybdic acid ( $5 \%$ in EtOH). ${ }^{1} \mathrm{H}$ and ${ }^{13} \mathrm{C}$ NMR spectra were recorded on Bruker ( 400 or 500 MHz for ${ }^{1} \mathrm{H}, 100$ or 125 MHz for $\left.{ }^{13} \mathrm{C}\right)$ spectrometers in $d$-chloroform $\left(\mathrm{CDCl}_{3}\right)$ or $d$-DMSO $\left(\left(\mathrm{CD}_{3}\right)_{2} \mathrm{SO}\right)$ with chloroform or DMSO as an internal reference, unless otherwise stated.

## NMR Spetra



















