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Carboxylation and Esterification of Functionalized Arylcopper Reagents  
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## Carboxylation and Esterification of Functionalized Arylcopper Reagents



FG = ketone, ester, halogen



**Significance:** The synthesis of substituted benzoate esters from aryl iodides was performed using the insertion of active copper metal, generated from CuI-PEt<sub>3</sub> complex and lithium naphthalenide, followed by the carboxylation with CO<sub>2</sub>. The method allows preparing a number of aryl benzoates, bearing functional groups which are not compatible with standard organomagnesium chemistry.

**Comment:** Insertion of copper is a very mild method for the formation of organometallic species from aryl iodides, since it is compatible with practically any functionality. A certain drawback of arylcopper species is a lack of reactivity toward electrophiles. The given method of acid and ester formation from arylcopper by the carboxylation-alkylation sequence is preferable, giving higher yields than the conventional reaction with chloroformates.