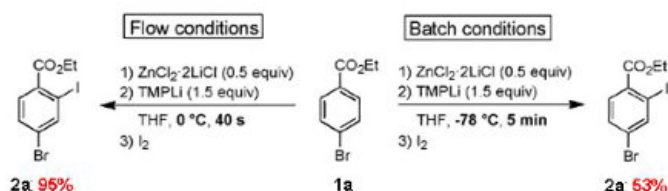
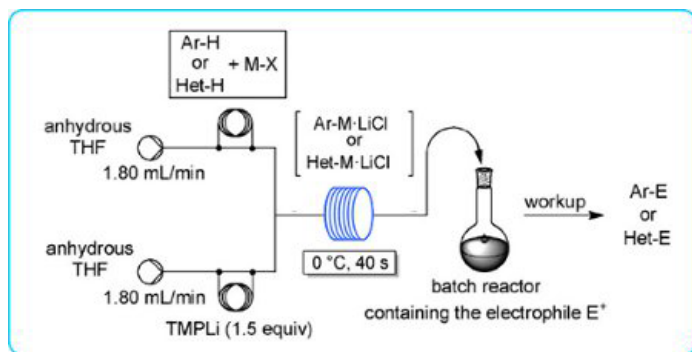


Publication 47: Practical Regioselective Flow Metalation and Trapping with Electrophiles using TMPLi



The flow metalation of various arenes and heteroarenes involving an in situ trapping with metal salts ($\text{ZnCl}_2 \cdot 2\text{LiCl}$, MgCl_2 , $\text{CuCN} \cdot 2\text{LiCl}$, $\text{LaCl}_3 \cdot 2\text{LiCl}$) under very convenient conditions (0°C , 40s) is reported. The resulting Mg, Zn, Cu, or La organic species are trapped with various electrophiles in high yields.

In several cases, unusual kinetically controlled regioselectivities are obtained.

All these flow metalations can be scaled up simply by extending the reaction time and without further optimization. The reaction scope of such flow metalations is considerably broader than that of the corresponding batch procedures.

[M. R. Becker and P.I Knochel, *Angew. Chem. Int. Ed.*, 2015, 54, 12501](#)

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