

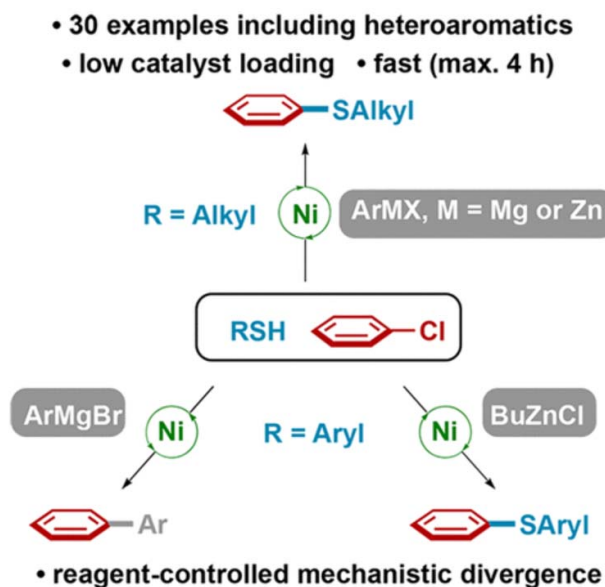
CROSS-COUPLING OF CHLORO(HETERO)ARENES WITH THIOLATES EMPLOYING A Ni-PRECATALYST

Paul H. Gehrtz^a, Valentin Geiger^b, Tanno Schmidt^b, Laura Sršan^b and Ivana Fleischer^b

^aDepartment of Organic Chemistry, Weizmann Institute of Science, 76100, Israel

^bInstitute of Organic Chemistry, Eberhard-Karls University Tübingen, 72076, Germany

A general and efficient Ni-catalyzed coupling of challenging aryl chlorides and in situ generated aliphatic and aromatic thiolates is described.^[1] The employed on-cycle, air-stable defined Ni precatalysts allow for transformation of a broad scope of substrates. A variety of functional groups and heterocyclic motifs as well as structurally varied thiols are tolerated at unprecedented moderate catalyst loadings (0.5 – 2 mol%) and reaction temperatures (rt – 60 °C). Depending on reaction conditions, aryl thiols can selectively undergo C–S or C–C couplings.



[1] *Org. Lett.* **2019**, *21*, 50 – 55.