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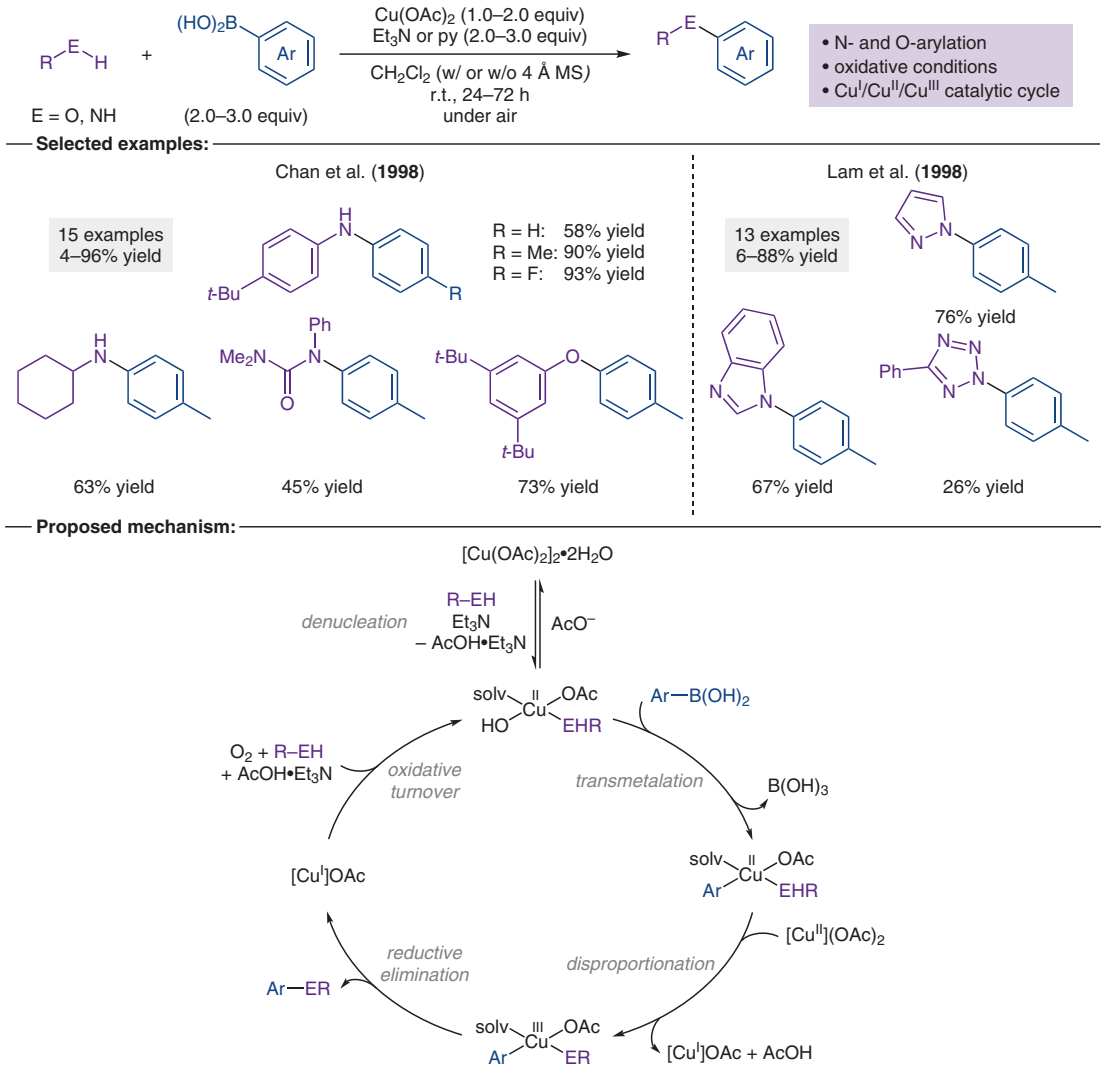
New Aryl/Heteroaryl C–N Bond Cross-coupling Reactions via Arylboronic Acid/Cupric Acetate Arylation
*Tetrahedron Lett.* **1998**, *39*, 2941–2944, DOI: 10.1016/S0040-4039(98)00504-8.
D. M. T. CHAN*, K. L. MONACO, R.-P. WANG, M. P. WINTERS (STINE-HASKELL RESEARCH CENTER DUPONT, NEWARK, USA)
New N- and O-Arylations with Phenylboronic Acids and Cupric Acetate
*Tetrahedron Lett.* **1998**, *39*, 2933–2936, DOI: 10.1016/S0040-4039(98)00503-6.

# The Chan–Evans–Lam Coupling




**Significance:** In 1998, Chan and Lam as well as Evans (*Tetrahedron Lett.* **1998**, *39*, 2937) independently reported a copper(II)-promoted oxidative cross-coupling of aryl boronic acids and heteroatomic nucleophiles such as amines and alcohols to form C($sp^2$)–heteroatom bonds. The reaction proceeds with stoichiometric amounts of copper under oxidative conditions (air or $O_2$) at room temperature.

**Comment:** Over the past decades, the Chan–Evans–Lam coupling has been thoroughly investigated and reaction conditions were significantly enhanced to turn this reaction into a catalytic process. C($sp^2$)–S, C($sp^2$)–P and C($sp^2$)–halogen bond formations have been achieved. Studies for the elucidation of the mechanism have been recently described (J. C. Vantourout et al. *J. Am. Chem. Soc.* **2017**, *139*, 4769).

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