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Two Metal–Organic Frameworks Based on a Double Azolium Derivative: Post-Modification and Catalytic Activity *Chem. Commun.* **2011**, *47*, 11005-11007.

Suzuki–Miyaura Reaction with NHC-Cu-Pd MOF Catalysts



Significance: A metal–organic framework (MOF) catalyst **2** was prepared from dicarboxylic acid H_2LCl_2 bearing two azolium components through the MOF formation with $Cu(NO_3)_2 \cdot 3H_2O$ followed by the modification with $Pd(OAc)_2$. The Suzuki–Miyaura reaction of aryl halides and arylboronic acids was carried out with **2** (10 mol%) in toluene to give the corresponding biaryl products in 81–99% yield.

Comment: MOF catalyst **2** was recovered by filtration and reused five times without loss of catalytic activity. A catalyst prepared from H_2LCl_2 , CuCl₂, and Pd(OAc)₂, which has a different MOF structure, exhibited much lower catalytic activity (4-methoxybiphenyl: 43%) than **2**, highlighting the important roles of the framework structures in determining the catalytic performance.

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Key words

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