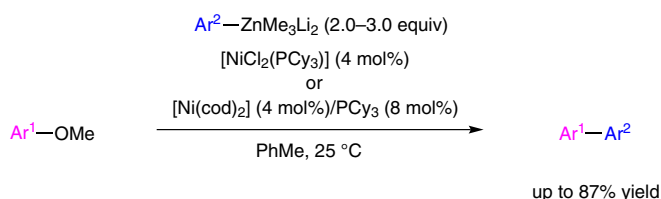


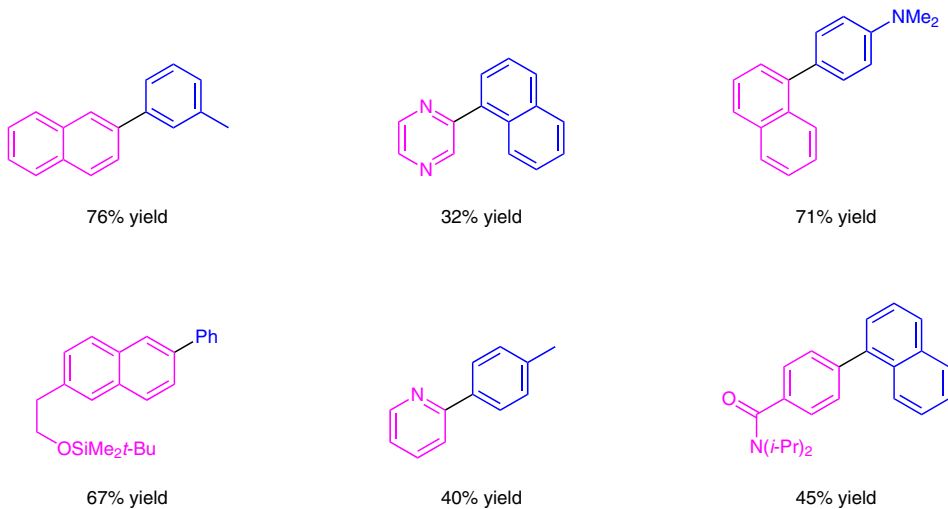
C. WANG,\* T. OZAKI, R. TAKITA, M. UCHIYAMA\* (RIKEN, ADVANCED SCIENCE INSTITUTE, SAITAMA AND THE UNIVERSITY OF TOKYO, JAPAN)  
Aryl Ether as a Negishi Coupling Partner: An Approach for Constructing C–C Bonds under Mild Conditions  
*Chem. Eur. J.* **2012**, *18*, 3482–3485.

## Negishi Cross-Coupling Using Aryl Ethers as Coupling Partners



$\text{Ar}^1$  = (substituted) Naph, pyrazyl, pyridyl, 4-CON(*i*-Pr)<sub>2</sub>C<sub>6</sub>H<sub>4</sub>  
 $\text{Ar}^2$  = (substituted) Ph, *p*-/*m*-anisyl, *p*-/*o*-/*m*-Tol, biphenyl, Naph

### Selected examples:



**Significance:** The first nickel-catalyzed cross-coupling of aryl ethers with aromatic zincates via C–O bond cleavage is described. The corresponding biaryls are obtained in moderate to good yields. Electron-rich coupling partners furnish higher product yields than reagents containing electron-withdrawing groups.

**Comment:** It is noteworthy that, besides the methoxy moiety, this methodology may be extended to ethyl and isopropyl ethers as well. Furthermore, this protocol allows a facile conversion of chiral substrates into the corresponding biaryls without racemization.

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Synfacts 2012, 8(6), 0655 Published online: 16.05.2012  
DOI: 10.1055/s-0031-1291110; Reg-No.: P04812SF

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Category

Metal-Mediated  
Synthesis

Key words

zinc

nickel

aryl ethers

C–O activation

cross-coupling

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*of the month*

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