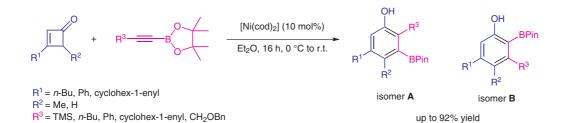
Ni-Catalyzed Alkyne Cycloaddition to Give Boronic Esters



Selected examples:

OH

$$n$$
-Bu

 n -Bu

Significance: A new nickel-catalyzed benzannulation of cyclobutenones with alkynylboronates to yield aromatic boronic esters has been disclosed. Furthermore, a one-pot cycloaddition—coupling protocol has been developed, whereby the nickel catalyst performs firstly the benzannulation and afterwards the cross-coupling.

Comment: Alkynylboronates bearing $\mathrm{sp^3}$ -based substituents show high selectivity for isomer **A**, whereas those bearing $\mathrm{sp^2}$ -based substituents mainly favor isomer **B**.

SYNFACTS Contributors: Paul Knochel, Andreas K. Steib Synfacts 2011, 6, 0653-0653 Published online: 19.05.2011 **DOI:** 10.1055/s-0030-1260362; **Reg-No.:** P05611SF