Immobilization of Organic Functional Groups onto Silica

**Significance:** Functionalized vinylsilanes were prepared by hydroacylation of dimethylvinylsilane with various aldehydes in the presence of (Ph₃P)₂RhCl, 2-amino-3-picoline, and 4-(trifluoromethyl)benzoic acid (63–92% yield, 11 examples). Immobilization of 3 onto silica by using [IrCl(coe)₂]₂ and DMA·HCl gave the corresponding functionalized silica compounds with 0.58–1.04 mmol/g of loading (11 examples).

**Comment:** The silica-immobilization method ([IrCl(coe)₂]₂; DMA·HCl) has been developed by the same authors (Org. Lett. 2007, 9, 4073). Surface modification of hydrophilic glass slides with vinylsilanes gave the significantly hydrophobic glass slides as estimated from contact angle measurements.

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