

Supplementary Materials: Non-Selective Dimerization of Vinyl Silanes by the Putative [(Phenanthroline)PdMe] Cation to 1,4-Bis(Trialkoxysilyl)Butenes

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General Remarks: Chemicals and solvents were purchased from commercial suppliers and were used as received except as follows: alkoxyvinylsilanes and styrene were degassed. (Phen)PdMe₂ was prepared according to a literature procedure [54]. Reactions were carried out under argon gas in a J-Young NMR tube.

Typical Procedure for Catalytic Dimerization Reactions: In the case of cross-dimerization with styrene, one equivalent of styrene was also added. In a J-Young NMR tube, (Phen)PdMe₂ (3 mg, 100 μmol) was dissolved in CD₂Cl₂ (0.5 mL) and B(C₆F₅)₃ (5 mg, 100 μmol) subsequently added. To this mixture was added, via syringe, the appropriate alkoxyvinylsilane (1 mmol). The progress of the reaction was monitored over the course of 24 h using ¹H NMR spectroscopy. Definitive assignment is hampered by closely overlapping peaks in the ¹H NMR spectra and tentative assignments are made based on previously reported NMR data of related compounds.











