

Supporting Information for

Reactions of Phosphinites with Alumina and Silica:

A New Method for Anchoring Organic and Organometallic Complexes on Oxide Surfaces

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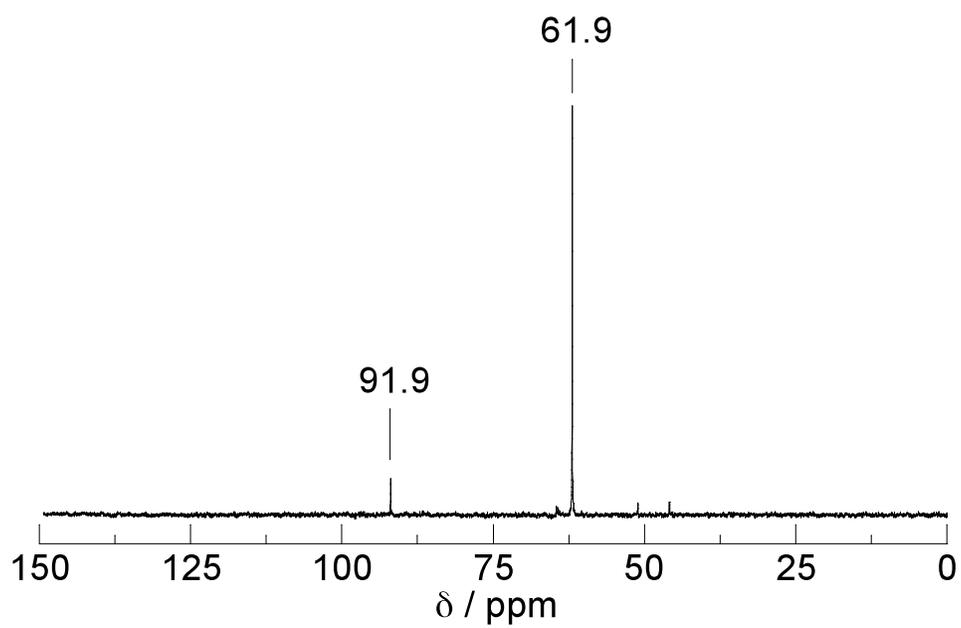


Figure S1. Solution-state $^{31}\text{P}\{^1\text{H}\}$ NMR spectrum ($\text{THF-}d_8$) of products extracted by THF from $(t\text{-Bu})_2(\text{PhO})\text{P}$ (phenyl di-*tert*-butylphosphinite) supported on γ -alumina.

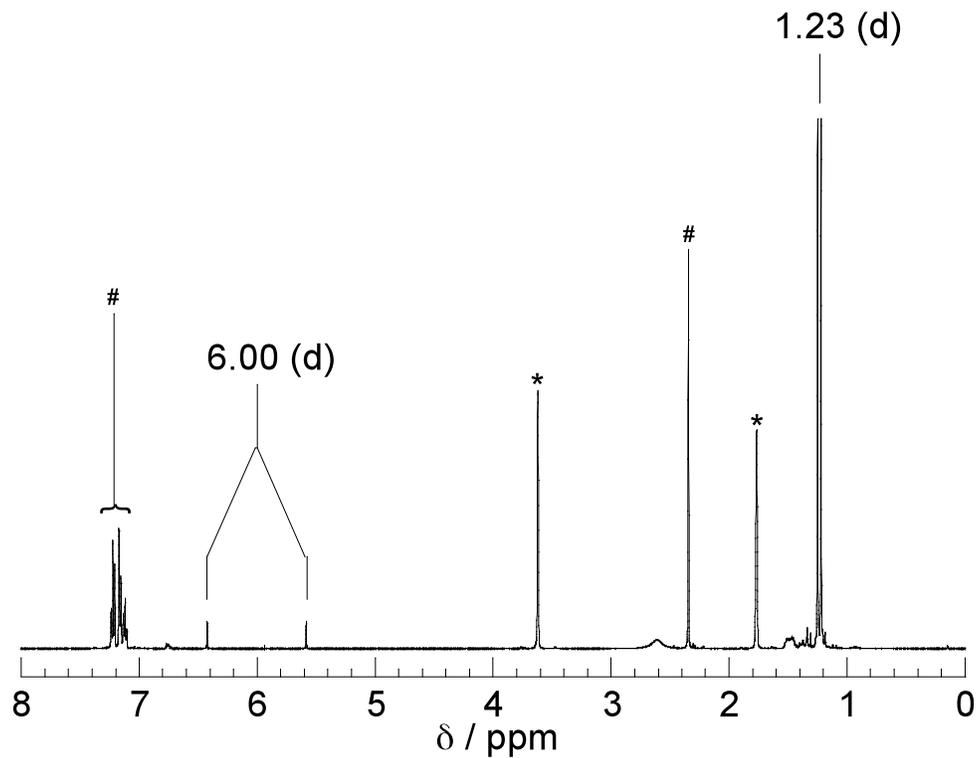


Figure S2. ¹H NMR spectrum (THF-*d*₈) of the product extracted from (*t*-Bu)₂(PhO)P supported on γ-alumina. THF signals are indicated with *. Signals at 7.08 - 7.24 ppm and the singlet at 2.34 ppm, indicated with #, are assigned to residual toluene, the solvent used to support the phosphinite on γ-alumina.

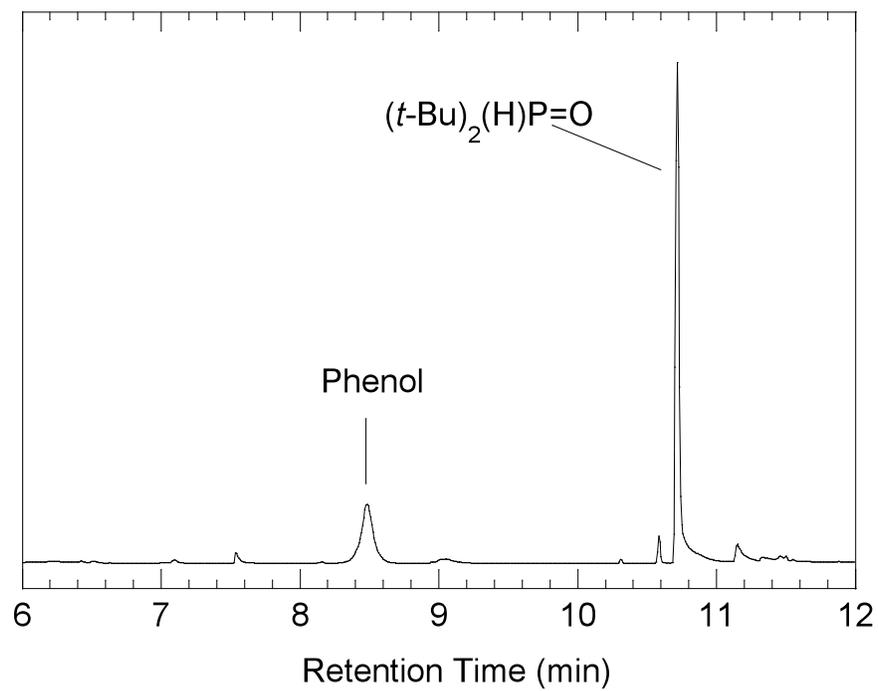


Figure S3. GC/MS trace of water washings of $(t\text{-Bu})_2(\text{PhO})\text{P}$ supported on γ -alumina

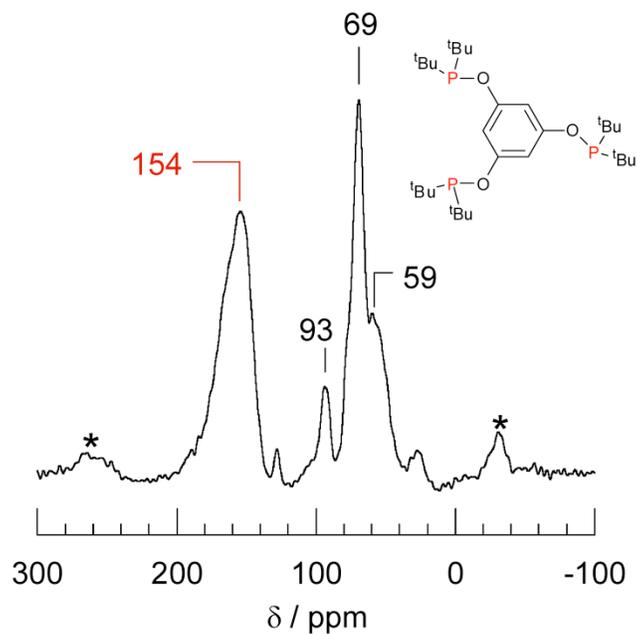


Figure S4. Solid-state ^{31}P MAS NMR spectra of partially oxidized 1,3,5- $((t\text{-Bu})_2\text{PO})_3\text{-C}_6\text{H}_3$ adsorbed on γ -alumina. Partial oxidation was achieved by exposing 1,3,5- $((t\text{-Bu})_2\text{PO})_3\text{-C}_6\text{H}_3$ to air prior to its adsorption on γ -alumina. The spectrum was recorded with 12 kHz MAS; asterisks denote spinning sidebands