Supplementary Material for Chemical Communications

Supplementary data

Variable temperature ^{31}P NMR (121.49 MHz) of **1** and **2** were recorded in thf-d_8, and referenced externally against 85 % H_3PO_4. Data were acquired, without sample spinning, over the temperature range 10 to –50 °C in 10 degree increments.

Temperature (°C)	Chemical Shift of Compound 1 (ppm)	Linewidth of resonance at half-height (Hz)	Chemical Shift of Compound 2 (ppm)	Linewidth of resonance at half-height (Hz)
10	-735.0	283	-774.8	367
0	-769.8	234	-810.0	323
-10	-806.5	272	-849.8	321
-20	-847.9	346	-889.6	406
-30	-889.9	461	-935.6	476
-40	-931.6	414	-978.9	495
-50	-982.3	528	-1026.5	536

For both **1** and **2** the resonance moves to higher field at lower temperature and the magnitude of the paramagnetically induced shift is increased upon lowering the temperature (*i.e.* between 10 and 0 °C there is a shift of 34.8 ppm for **1** and 35.2 ppm for **2**, whereas between –40 and –50 °C there is a shift of 50.7 ppm for **1** and 47.6 for **2**).

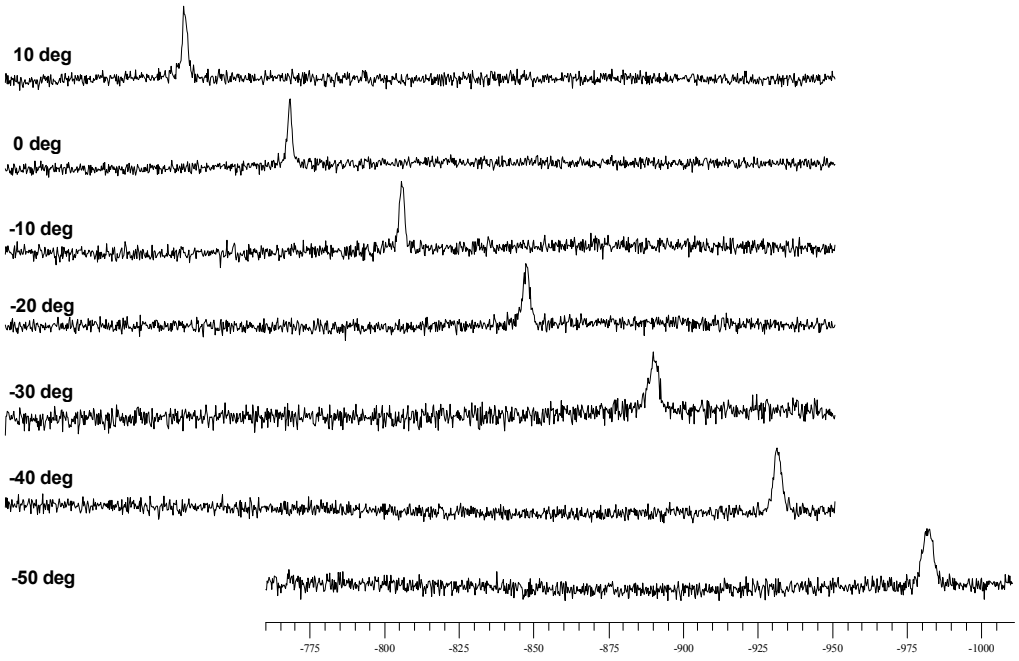

Fig.A Stacked plot of the ^{31}P NMR spectra for **1** in thf-d_8, between 10 and –50 °C.

Supplementary Material for Chemical Communications