

Additions and Corrections

R. R. Burch, E. L. Muetterties, and V. W. Day: Dehydrogenation of 1,3-Cyclohexadiene by $\{\text{HRh}[\text{P}(\text{O}-i\text{-C}_3\text{H}_7)_3]_2\}$. Preparation, Dynamic NMR, and X-ray Crystal Structure of $[\eta^3\text{-CH}_2\text{C}_6(\text{CH}_3)_5]\text{Rh}[\text{P}(\text{O}-i\text{-C}_3\text{H}_7)_3]_2$ **1982**, 1, 188.

The simulations of the AB portion of NMR spectra for the ABX spin system reported in Table I contain an in-

Table I. Temperature Dependence of the ABX Pattern Observed in the $^{31}\text{P}\{^1\text{H}\}$ NMR Spectra for $[\eta^3\text{-CH}_2\text{C}_6(\text{CH}_3)_5]\text{Rh}[\text{P}(\text{O}-i\text{-C}_3\text{H}_7)_3]_2$ ^{a, b}

temp, °C	chem shifts, ppm		coupling constants, ^c Hz		
	P_A	P_B	J_{AB}	J_{AX}	J_{BX}
-110	154.57	156.93	82.04	260.98	383.45
-100	154.27	156.52	82.61	260.25	386.37
-90	153.99	156.14	82.78	260.98	387.83
-75	154.19	155.91	83.52	260.98	389.29
-65	154.07	155.44	82.96	247.86	377.62
-45	153.67	154.90	82.48	259.52	395.12
-25	153.31	154.05	82.20	260.87	397.65
-10	153.21	153.72	83.25	261.38	399.79
-5	152.57	153.35	83.00	266.18	395.36
0	152.28	152.56	83.29	261.30	401.61
+10	152.53	152.84	82.85	260.91	403.51
+15	152.51	152.69	82.89	260.72	404.28
+20	152.99	152.75	83.15	260.25	405.32
+35	152.97	152.33	82.95	266.09	401.68
+50	152.90	151.79	82.56	261.23	404.40
+65	152.82	151.52	82.90	261.20	411.94
+80	152.76	150.94	82.12	261.93	412.93

^a Spectra below -75°C were recorded in toluene- d_6 / C_6H_{12} (1:3). Other spectra were recorded in toluene- d_8 .

^b These temperature-dependent spectral changes were fully reversible. ^c Chemical shifts and coupling constants were determined by simulation of the observed spectra.

correct set of data for several of the entries. This mistake was a consequence of the fact that ABX spin systems are not uniquely determined by the AB portion. The correct set of data is in this new version of Table I. We emphasize that these corrected data are *fully consistent* with the equilibrium proposed (eq 6, pp 193-4). The reader should accordingly reinterpret footnote 42b as follows. The DNMR ^{31}P spectra show that the smaller J_{PRh} coupling constant is temperature invariant and the other increases with temperature but remains the larger of the two J_{PRh} coupling constants. It therefore follows that the shorter rhodium-phosphorus bond distance in the η^3 form of the molecule is also the shorter in the η^5 excited-state form. (We thank Dr. Gregory S. Girolami for pointing out the mistake in Table I.)