A5 15:00 -15:15

Syntheses and Structures of $[Pt(N_3)_2(dppf)]$ and $[Pt(CN_4C_6H_{11})_2(dppf)]$(dppf = $Fe(\eta^5-C_5H_4PPh_2)_2$)

김완성, 한원석, 이순원
성균관대학교 이과대학 화학과

$PdCl_2(dppf)_2$ (**1**) reacted with Me_3SiN_3 in a refluxing tetrahydrofuran solution to give a bis(azido) platinum(II) complex $Pd(N_3)_2(dppf)_2$ (**2**). Compound **2** could also be prepared from the reaction of compound **1** and NaN_3 in dichloromethane at room temperature. Compound **2** reacted with cyclohexylisocyanide ($C_6H_{11}NC$) in dichloromethane at room temperature to give a stetrically congested compound $[Pt(CN_4C_6H_{11})_2(dppf)]$ (**3**), which has two *C*-bonded tetrazolate rings ($CN_4-C_6H_{11}$) and one bidentate dppf ligand. Crystallographic data for **2**: triclinic space group $P\bar{1}$, a = 10.957(1) Å, b = 12.377(1) Å, c = 15.236(1) Å, α = 107.776(7)°, β = 94.098(7)°, γ = 114.408(6)°, Z = 2, $R(wR_2)$ = 0.0425(0.1079). Crystallographic data for **3**: monoclinic space group $P2_1/c$, a = 15.537(2) Å, b = 16.806(2) Å, c = 20.591(3) Å, β = 100.23(1)°, Z = 4, $R(wR_2)$ = 0.0533(0.0977).