

Supplementary Materials: Palladium(II)-Acetylacetonato Complexes with Mesoionic Carbenes: Synthesis, Structures and Their Application in the Suzuki-Miyaura Cross Coupling Reaction

Lara Hettmanczyk, Bianca Schmid, Stephan Hohloch and Biprajit Sarkar

Table of Contents

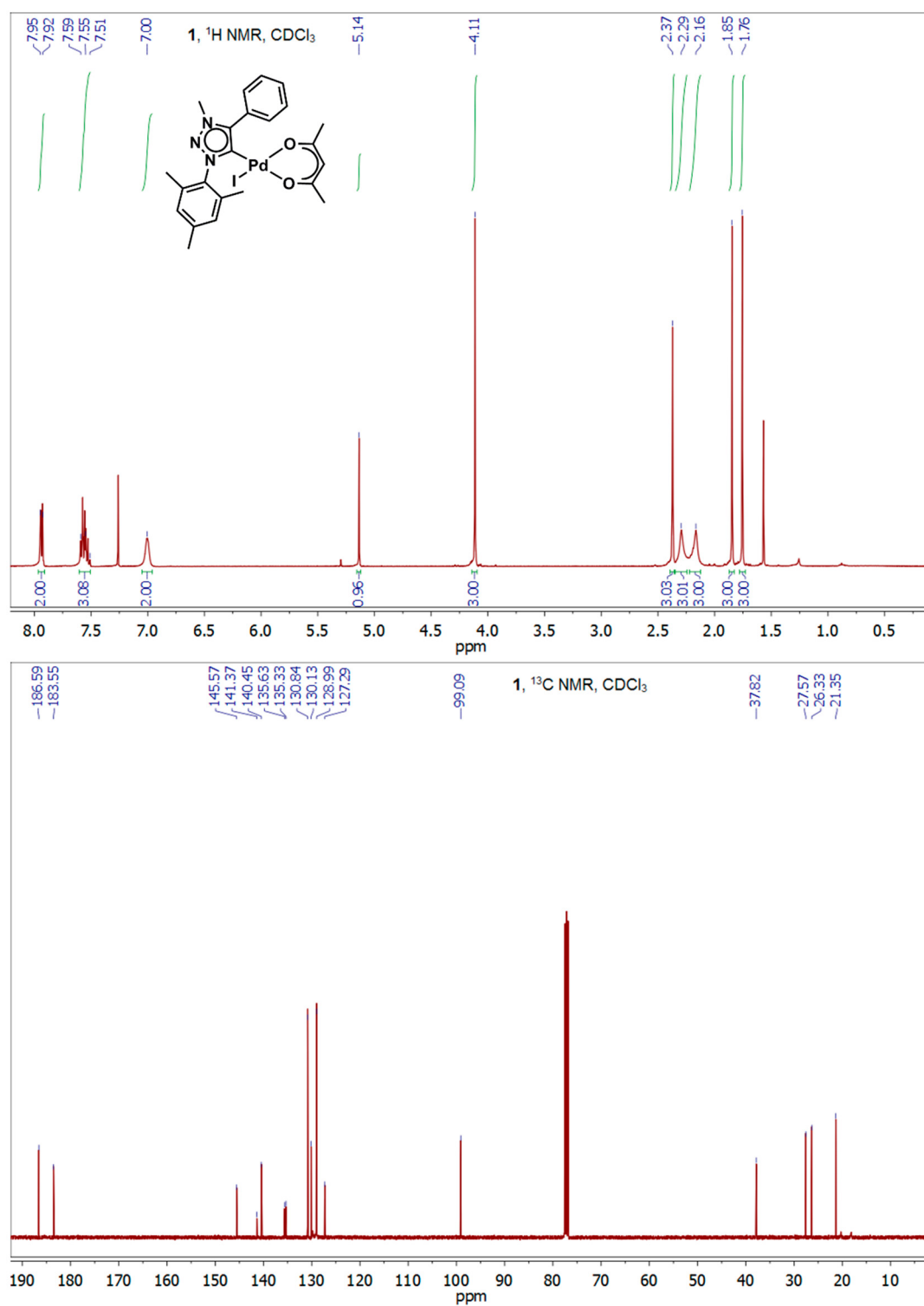
Crystallographic Data	S1
Table S1. Parameters for the Data Collection and Structure Refinement for Complexes 1 and 3. ¹ ...	S1
¹ H- and ¹³ C-NMR spectroscopy	S2
Figure S1. ¹ H- (top) and ¹³ C-NMR (bottom) spectra of Complex 1 in CDCl ₃	S2
Figure S2. ¹ H- (top) and ¹³ C-NMR (bottom) spectra of Complex 2 in CDCl ₃	S3
Figure S3. ¹ H- (top) and ¹³ C-NMR (bottom) spectra of Complex 3 in CDCl ₃	S4

Crystallographic Data

Table S1. Parameters for the Data Collection and Structure Refinement for Complexes 1 and 3.¹

	1	3
Chemical formula	C ₂₃ H ₂₆ IN ₃ O ₂ Pd	C ₃₂ H ₄₄ IN ₃ O ₂ Pd
<i>M_r</i>	609.77	736.00
Crystal system, space group	orthorhombic, <i>Pcba</i>	monoclinic, <i>P2₁/n</i>
Temperature (K)	140(2)	140(2)
<i>a</i> , <i>b</i> , <i>c</i> (Å)	15.085(3), 15.908(4), 19.706(4)	10.241(5), 17.108(8), 18.463(9)
α , β , γ (°)	90.00, 90.00, 90.00	90, 99.587(9), 90
<i>V</i> (Å ³)	4728.9(18)	3190(2)
<i>Z</i>	8	4
Density (g/cm ³)	1.713	1.533
<i>F</i> (000)	2400	1488
Radiation type	Mo $\kappa\alpha$	Mo $\kappa\alpha$
μ (mm ⁻¹)	2.114	1.581
Crystal size (mm)	0.43 × 0.21 × 0.09	0.45 × 0.18 × 0.10
meas. refl.	36620	21058
indep. ref.	4153	7250
obsvd. [<i>I</i> > 2 σ (<i>I</i>)] refl.	2328	5121
<i>R</i> _{int}	0.1795	0.0506
<i>R</i> [<i>F</i> ² > 2 σ (<i>F</i> ²)], <i>wR</i> (<i>F</i> ²), <i>S</i>	0.0603, 0.1732, 1.039	0.0480, 0.1253, 1.067
$\Delta Q_{\max}$, $\Delta Q_{\min}$ (e Å ⁻³)	1.169, -1.515	2.230, -0.816
CCDC	965893	1015507

¹ Collected on a Bruker Smart AXS diffractometer using Mo $\kappa\alpha$ radiation (λ = 0.71073 Å).

¹H- and ¹³C-NMR Spectroscopy**Figure S1.** ¹H- (top) and ¹³C-NMR (bottom) spectra of Complex 1 in CDCl₃.

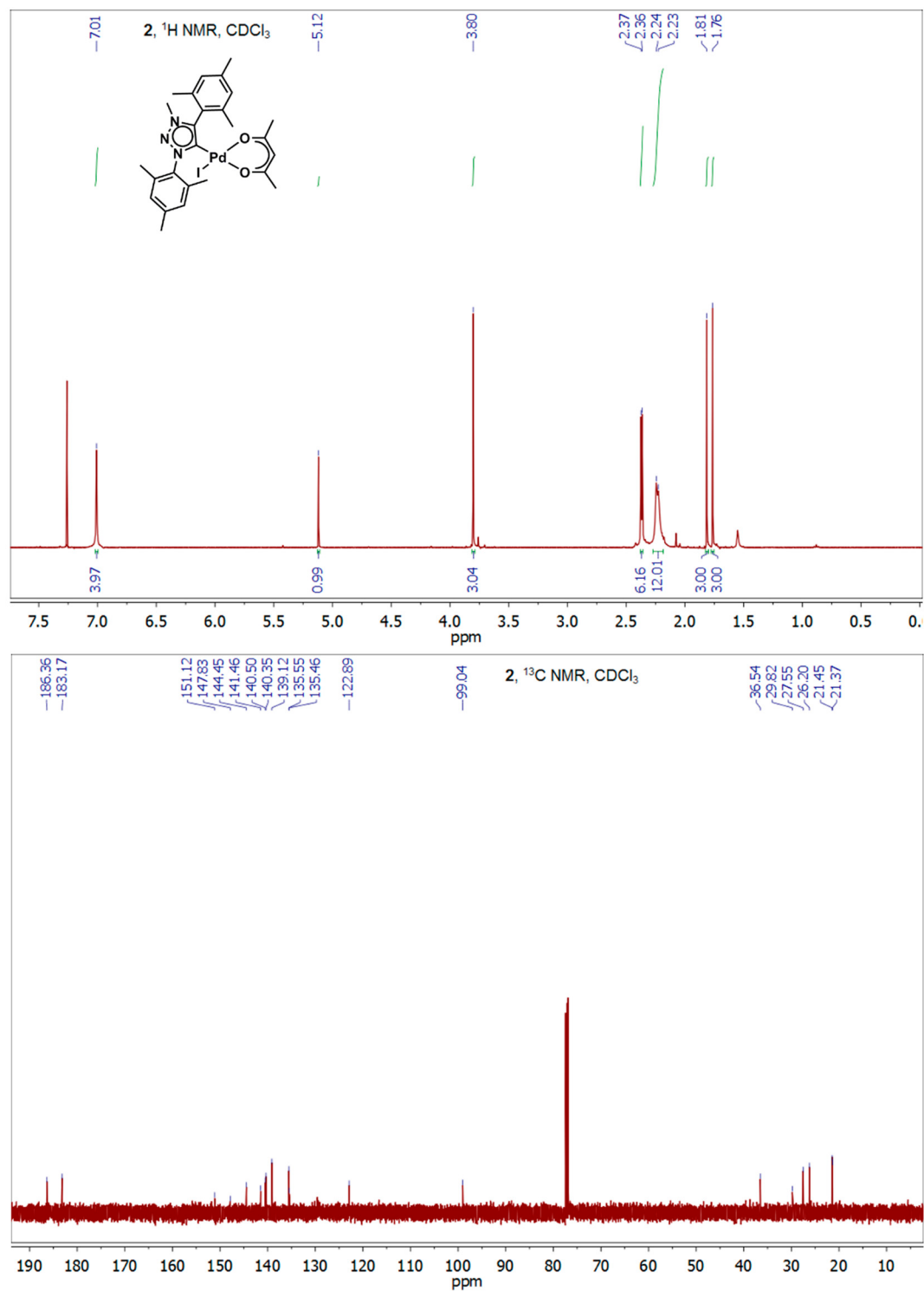


Figure S2. ^1H - (top) and ^{13}C -NMR (bottom) spectra of Complex 2 in CDCl_3 .

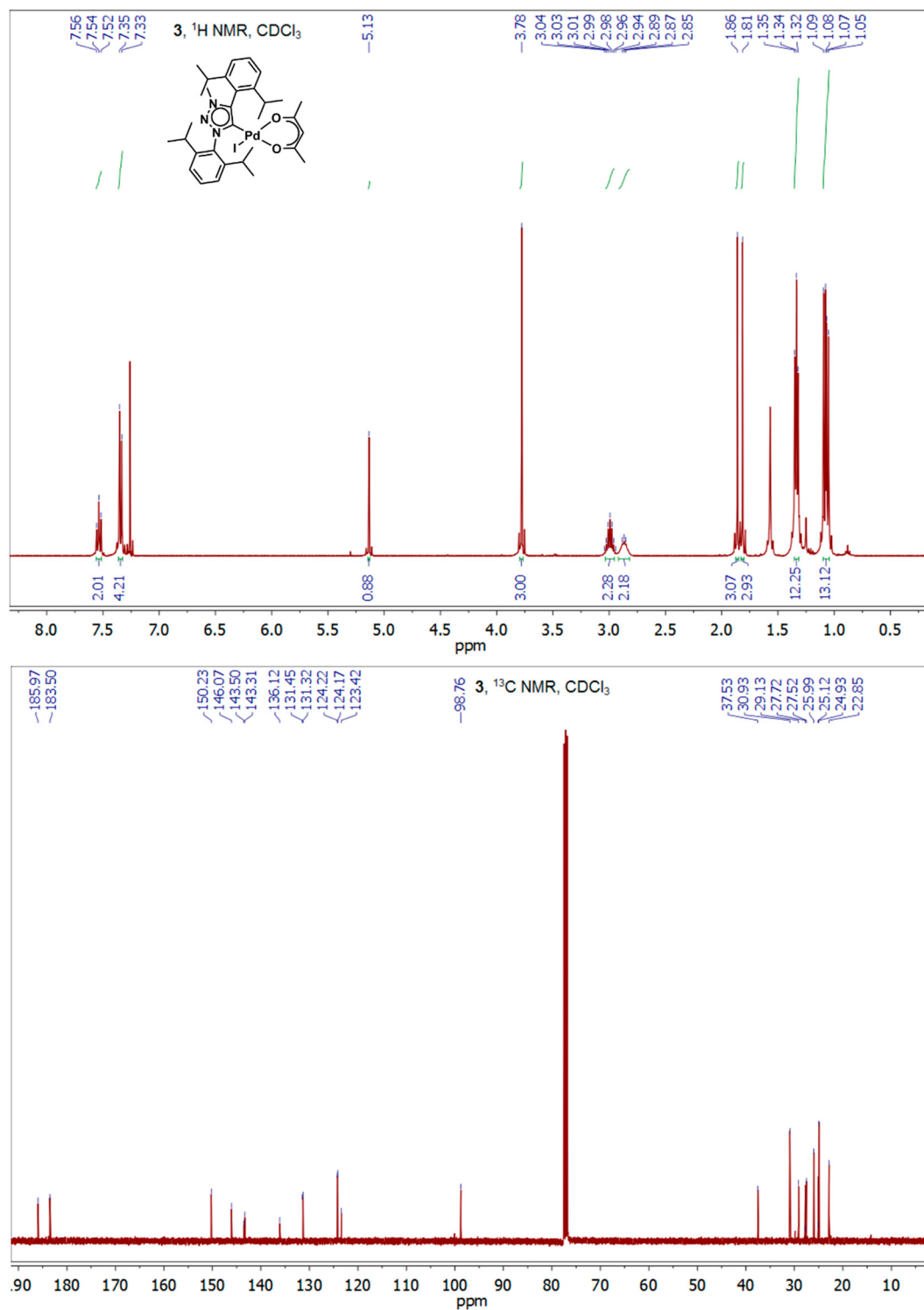


Figure S3. ¹H- (top) and ¹³C-NMR (bottom) spectra of Complex 3 in CDCl₃.