Supporting Information

Synthesis of First Sulphur-Containing Platinum(II) Alkenylarylalkynyl Complexes by Photoirradiation

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1H NMR and $^{31}$P NMR spectra for compounds: 2a-2d

General

1) 2a  
2) 2b  
3) 2c  
4) 2d

General:

NMR spectra were recorded with a JEOL JNM-ECX 400 or JEOL JNM-ECS 400FT NMR spectrometer in deuterated chloroform solvent. 1H NMR spectra were referenced to internal TMS, and $^{31}$P NMR spectra were referenced to external trimethylphosphite. Deuterated chloroform have trace amount of water and peak observed near 1.57 ppm. Platinum complexes (2a, 2c, 2d) have trace amount of hexane (peak observed near 0.88 ppm) and complex 2b have trace amount of dichloromethane (peak observed at 5.28 ppm).^1

Reference

Platinum(II) Complex 2a

$^1$H NMR (400 MHz, CDCl$_3$)
Platinum(II) Complex 2a

$^1$H NMR (400 MHz, CDCl$_3$)

(Expanded in $E/Z$ isomers region)
Platinum(II) Complex 2a

$^{31}P$ NMR (161.83 MHz, CDCl$_3$)

X: parts per Million : Phosphorus$^{31}$
Platinum(II) Complex 2b

$^1H$ NMR (400 MHz, CDCl$_3$)

X: parts per Million: Proton
Platinum(II) Complex 2b

$^31$P NMR (161.83 MHz, CDCl$_3$)

X: parts per Million: Phosphorus$^{31}$
Platinum(II) Complex 2c

$^1$H NMR (400 MHz, CDCl$_3$)

X: parts per Million : Proton
Platinum(II) Complex 2c

$^{31}$P NMR (161.83 MHz, CDCl$_3$)

X: parts per Million: Phosphorus$^{31}$
Platinum(II) Complex 2d

$^1$H NMR (400 MHz, CDCl$_3$)

X: parts per Million: Proton
Platinum(II) Complex 2d

$^{31}$P NMR (161.83 MHz, CDCl$_3$)