

# **Supplementary Materials: *P*-Fluorous Phosphines as Electron-Poor/Fluorous Hybrid Functional Ligands for Precious Metal Catalysts: Synthesis of Rh(I), Ir(I), Pt(II), and Au(I) Complexes Bearing *P*-Fluorous Phosphine Ligands**

Shin-ichi Kawaguchi, Yuta Saga, Yuki Sato, Yoshiaki Minamida, Akihiro Nomoto and Akiya Ogawa

## **NMR Spectra**

Copies of  $^1\text{H}$  NMR,  $^{19}\text{F}$  NMR, and  $^{31}\text{P}$  NMR spectra of complexes (2–5).













































