

**Supporting Information (IR,  $^1\text{H}$  and  $^{13}\text{C}$  NMR data for compounds listed in entries 4-9, 12-14, 19, 21 of Table 1)**

**(4-Chlorophenyl)-methyl phenyl selenide (entry 4)**

IR 1595, 1577  $\text{cm}^{-1}$ ;  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )  $\delta$  7.42-7.45 (m, 2H), 7.28-7.33 (m, 3H), 7.20 (d,  $J$  = 8.4 Hz, 2H), 7.1 (d,  $J$  = 8.4 Hz, 2H), 4.04 (s, 3H);  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )  $\delta$  137.7, 134.3 (2C), 132.9, 130.5 (2C), 130.2, 129.4 (2C), 128.9 (2C), 128.0, 31.8.

**(4-Methoxyphenyl)-methyl phenyl selenide (entry 5)**

IR 1608, 1577  $\text{cm}^{-1}$ ;  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )  $\delta$  7.43-7.46 (m, 2H), 7.22-7.26 (m, 3H), 7.12 (d,  $J$  = 8.4 Hz, 2H), 6.77 (d,  $J$  = 8.4 Hz, 2H), 4.06 (s, 2H), 3.75 (s, 3H);  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )  $\delta$  158.6, 133.5 (2C), 130.6, 130.0 (2C), 129.8, 129.0 (2C), 127.3, 113.9 (2C), 55.3, 31.8.

**(1-Naphthyl)-methyl phenyl selenide (entry 6)**

IR 1596, 1577  $\text{cm}^{-1}$ ;  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )  $\delta$  7.99 (d,  $J$  = 8.1 Hz, 1H), 7.63-7.75 (m, 1H), 7.61 (d,  $J$  = 8.1 Hz, 1H), 7.34-7.43 (m, 4H), 7.10-7.17 (m, 5H), 4.44 (s, 2H);  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )  $\delta$  134.6, 134.4, 134.3 (2C), 131.7, 131.2, 129.4 (2C), 129.2, 128.4, 127.9, 127.6, 127.5, 126.5, 125.7, 124.5, 30.6.

**(3,4-Methylenedioxyphenyl)-methyl phenyl selenide (entry 7)**

IR 1608, 1577  $\text{cm}^{-1}$ ;  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )  $\delta$  7.35-7.42 (m, 2H), 7.14-7.16 (m, 3H), 6.64 (s, 1H), 6.51-6.54 (m, 2H), 5.82 (s, 2H), 3.95 (s, 2H);  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )  $\delta$  148.0, 146.9, 133.9 (2C), 132.7, 130.8, 129.4 (2C), 127.8, 122.4, 109.7, 108.6, 101.4, 32.7.

**(1-Methyl-1-phenyl)-methyl phenyl selenide (entry 8)**

IR 1600, 1577  $\text{cm}^{-1}$ ;  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )  $\delta$  7.17-7.44 (m, 10H), 4.45 (q,  $J$  = 7.11 Hz, 1H), 1.72 (d,  $J$  = 7.11 Hz, 3H);  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )  $\delta$  144.0, 135.8 (2C), 130.2, 129.2 (2C), 128.7 (2C), 128.2, 127.3 (2C), 126.5, 42.9, 22.6.

**2-Phenylethyl phenyl selenide (entry 9)**

IR 1600, 1575  $\text{cm}^{-1}$ ;  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )  $\delta$  7.49-7.52 (m, 2H), 7.06-7.25 (m, 8H), 3.57 (t,  $J$  = 7.8 Hz, 2H), 3.05 (t,  $J$  = 7.8 Hz, 2H);  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )  $\delta$  139.3, 131.9 (2C), 131.8 (2C), 131.4, 129.6 (2C), 129.1, 128.1 (2C), 127.4, 39.9, 33.4.

**(1-Ethylcarboxylate)-methyl phenyl selenide (entry 12)**

IR 1726  $\text{cm}^{-1}$ ;  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )  $\delta$  7.57-7.63 (m, 2H), 7.28-7.33 (m, 3H), 4.14 (q,  $J = 7.2$  Hz, 2H), 3.52 (s, 2H), 1.23 (t,  $J = 7.2$  Hz, 3H);  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )  $\delta$  171.3, 133.9 (2C), 132.1, 129.6 (2C), 128.3, 61.7, 28.0, 14.5.

**Cyclooctyl phenyl selenide (entry 13)**

IR 1577  $\text{cm}^{-1}$ ;  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )  $\delta$  7.54-7.57 (m, 2H), 7.26-7.36 (m, 3H), 3.51-3.60 (m, 1H), 1.45-2.10 (m, 14H);  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )  $\delta$  134.7 (2C), 130.8, 129.3 (2C), 127.5, 45.3, 33.0 (2C), 27.5 (2C), 26.3 (2C), 26.2.

**1-Cyclohexenyl phenyl selenide (entry 14)**

IR 1573  $\text{cm}^{-1}$ ;  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )  $\delta$  7.54-7.61 (m, 2H), 7.23-7.26 (m, 3H), 5.73-5.88 (m, 2H), 3.94-3.97 (m, 1H), 1.25-2.31 (m, 6H);  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )  $\delta$  134.5 (2C), 131.9, 131.3, 129.6 (2C), 128.1, 127.6, 41.6, 29.8, 25.3, 20.0.

**t-Butyl phenyl selenide (entry 19)**

IR 1577  $\text{cm}^{-1}$ ;  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )  $\delta$  7.62-7.65 (m, 2H), 7.27-7.36 (m, 3H), 1.40 (s, 9H);  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )  $\delta$  138.6 (2C), 130.9, 129.0 (2C), 128.8, 43.5, 32.6 (3C).

**Acetyl phenyl selenide (entry 21)**

IR 1726  $\text{cm}^{-1}$ ;  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ )  $\delta$  7.50-7.53 (m, 2H), 7.35-7.39 (m, 3H), 2.46 (s, 3H);  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ )  $\delta$  197.2, 136.1 (2C), 129.7 (2C), 129.3, 129.0, 34.4.