Supplementary information

Aryl triflates: Useful coupling partners for the direct arylation of heteroaryl derivatives *via* Pd-catalyzed C-H activation/functionalization.

Julien Roger,[a] Henri Doucet,*[a]

[a] Institut Sciences Chimiques de Rennes, UMR 6226 CNRS-Université de Rennes "Catalyse et Organometalliques", Campus de Beaulieu, 35042 Rennes, France. Fax: +33-(0)2-23-23-69-39; Tel: +33-(0)2-23-23-63-84; E-mail: henri.doucet@univ-rennes1.fr

2-*n*-Butyl-5-phenylfuran (1)

^{1}H (300 MHz) NMR spectra: δ = 0.97 (t, *J* = 7.5 Hz, 3 H), 1.32 (sext., *J* = 7.5 Hz, 2 H), 1.63 (quint., *J* = 7.5 Hz, 2 H), 2.71 (t, *J* = 7.5 Hz, 2 H), 6.09 (d, *J* = 3.2 Hz, 1 H), 6.58 (d, *J* = 3.2 Hz, 1 H), 7.19-7.67 (m, 5 H).

1-(5-Phenylfuran-2-yl)-propan-2-one (2)

^{1}H (200 MHz) NMR spectra: δ = 2.24 (s, 3 H), 3.79 (s, 2 H), 6.32 (d, *J* = 2.8 Hz, 1 H), 6.63 (d, *J* = 2.8 Hz, 1 H), 7.28-7.43 (m, 3 H), 7.64-7.73 (m, 2 H).

5-Phenylthiophene-2-carbonitrile (4)

^{1}H (200 MHz) NMR spectra: δ = 7.23 (d, *J* = 3.9 Hz, 1 H), 7.38-7.42 (m, 3 H), 7.54 (m, 3 H).

2-Phenylbenzooxazole (7)

^{1}H (200 MHz) NMR spectra: δ = 7.32-7.70 (m, 6 H), 7.83 (m, 1 H), 8.30 (m, 2 H).

2-Naphthalen-2-yl-benzooxazole (10)

^{1}H (200 MHz) NMR spectra: δ = 7.30-7.40 (m, 2 H), 7.45-7.70 (m, 3 H), 7.70-8.00 (m, 4 H), 8.32 (d, *J* = 8.1 Hz, 1 H), 8.80 (s, 1 H).

2-(4-Methoxyphenyl)-benzooxazole (11)

^{1}H (200 MHz) NMR spectra: δ = 4.08 (s, 3 H), 7.39 (m, 2 H), 7.50 (d, *J* = 8.2 Hz, 2 H), 7.59 (m, 1 H), 7.80 (m, 1 H), 8.18 (d, *J* = 8.2 Hz, 2 H).