Supplementary Information

Extractive desulfurization of fuel using N-butylpyridinium-based ionic liquids

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1. The ^{1}H NMR and ^{13}C NMR data of three pyridinium-based ILs

[C_4Py][SCN]: ^{1}H NMR(d_6-DMSO) : 0.92(t, 3H), 1.30(m, 2H), 1.91(m, 2H), 4.64 (t, 2H), 8.18(t, 2H), 8.62(t, 1H), 9.13(d, 2H); ^{13}C NMR(d_6-DMSO) : 145.94, 145.21, 130.08, 128.58, 61.06, 33.14, 19.25, 13.80.

[C_4Py][$N(CN)_2$]: ^{1}H NMR(d_6-DMSO) : 0.92(t, 3H), 1.30(m, 2H), 1.91(m, 2H), 4.62 (t, 2H), 8.17(t, 2H), 8.61(t, 1H), 9.10(d, 2H); ^{13}C NMR(d_6-DMSO) : 145.92, 145.19, 128.55, 119.57, 61.07, 33.11, 19.24, 13.76.

[**C_4Py][NTf_2]:** ^{1}H NMR(d_6-DMSO) : 0.92(t, 3H), 1.31(m, 2H), 1.91(m, 2H), 4.61 (t, 2H), 8.16(t, 2H), 8.61(t, 1H), 9.10(d, 2H); ^{13}C NMR(d_6-DMSO) : 145.90, 145.19, 128.54, 121.01, 61.07, 33.11, 19.20, 13.67.