Electronic Supporting Information

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PIC-based	С		Н		N		F	
GUMBOS	Theory	Found	Theory	Found	Theory	Found	Theory	Found
[PIC][NTf ₂]	49.37%	49.61%	3.79%	3.81%	6.91%	6.91%	18.76%	18.57%
[PIC][BETI]	45.86%	46.19%	3.25%	3.24%	5.94%	5.97%	26.89%	25.75%

Table S1. Elemental analysis of PIC-based GUMBOS.

Characterization by ¹³C NMR and ¹⁹F NMR

[PIC][**NTf**₂], ¹³C NMR (400MHz, [D₆] DMSO), δ (ppm): 153.52 (s), 139.18 (s), 138.39 (s), 133.30 (s), 129.76 (s), 125.55 (s), 122.15 (s), 116.86 (s), 89.51 (s), 44.79 (s), 12.26 (s). ¹⁹F NMR (250MHz, [D₆] DMSO), -79.17 (s).

[PIC][BETI], ¹³C NMR (400MHz, [D₆] DMSO), δ (ppm): 153.53 (s), 139.04 (s), 138.39 (s), 133.29 (s), 129.76 (s), 125.54 (s), 125.07 (s), 122.15 (s), 116.86 (s), 89.51 (s), 44.78 (s), 12.26 (s). ¹⁹F NMR (250MHz, [D₆] DMSO), δ (ppm): -78.99 (s), -117.85 (s).



Figure S1. POM of [PIC][NTf₂] (top) and [PIC][BETI] (bottom) nanoGUMBOS at various angles 0° (a,b) and 45° (c,d). The scale bars are 50 μ m.



Figure S2. Absorption spectra of [PIC][NTf₂] nanoGUMBOS at various concentrations.