Supporting Information

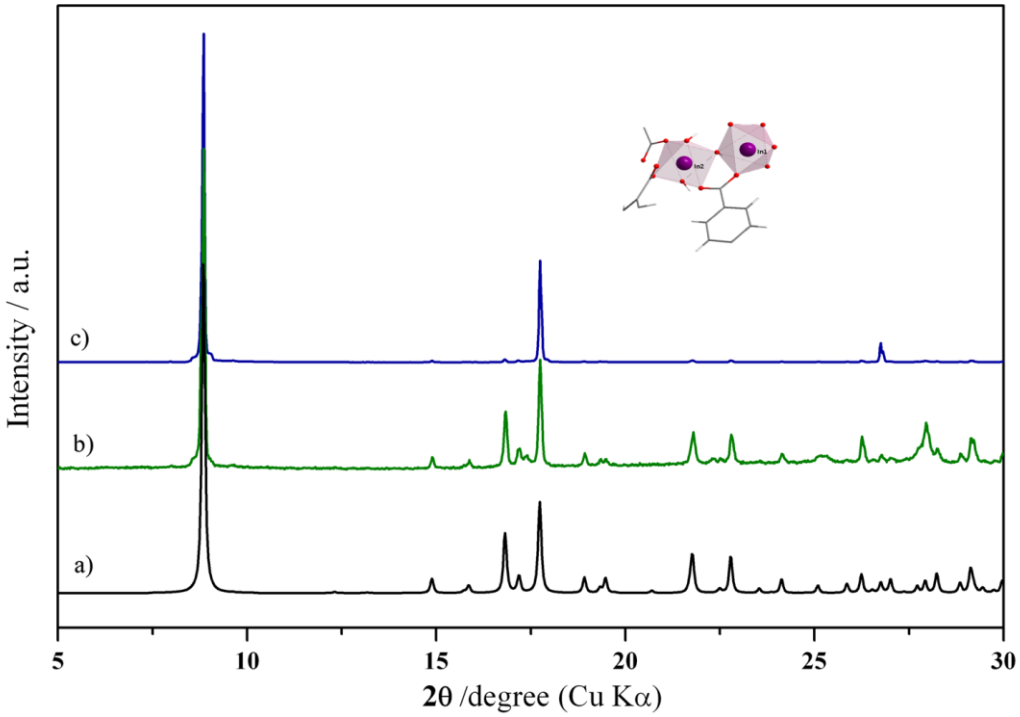

Fig. S1 Normalized PXRD patterns of **InPF-1**: a) simulated PXRD, b) Experimental PXRD, c) PXRD after first run of cyanosilylation catalysis.

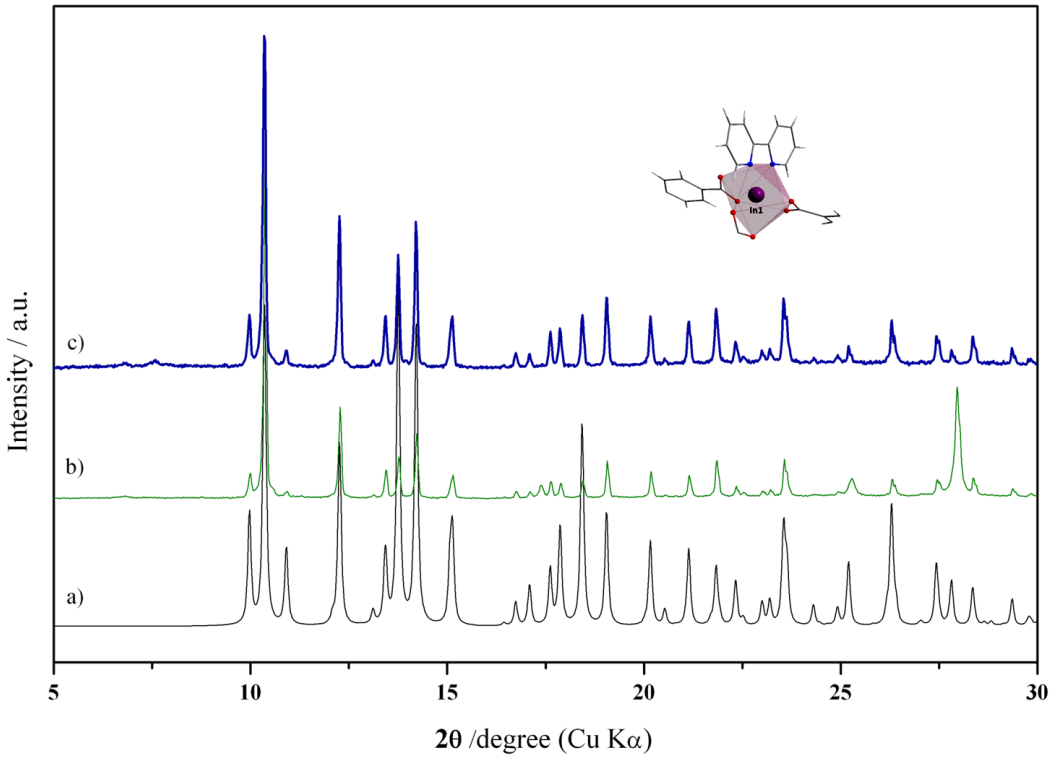

Fig. S2 Normalized XRD patterns of **InPF-2**: a) simulated PXRD, b) Experimental PXRD, c) PXRD after first run of cyanosilylation catalysis.

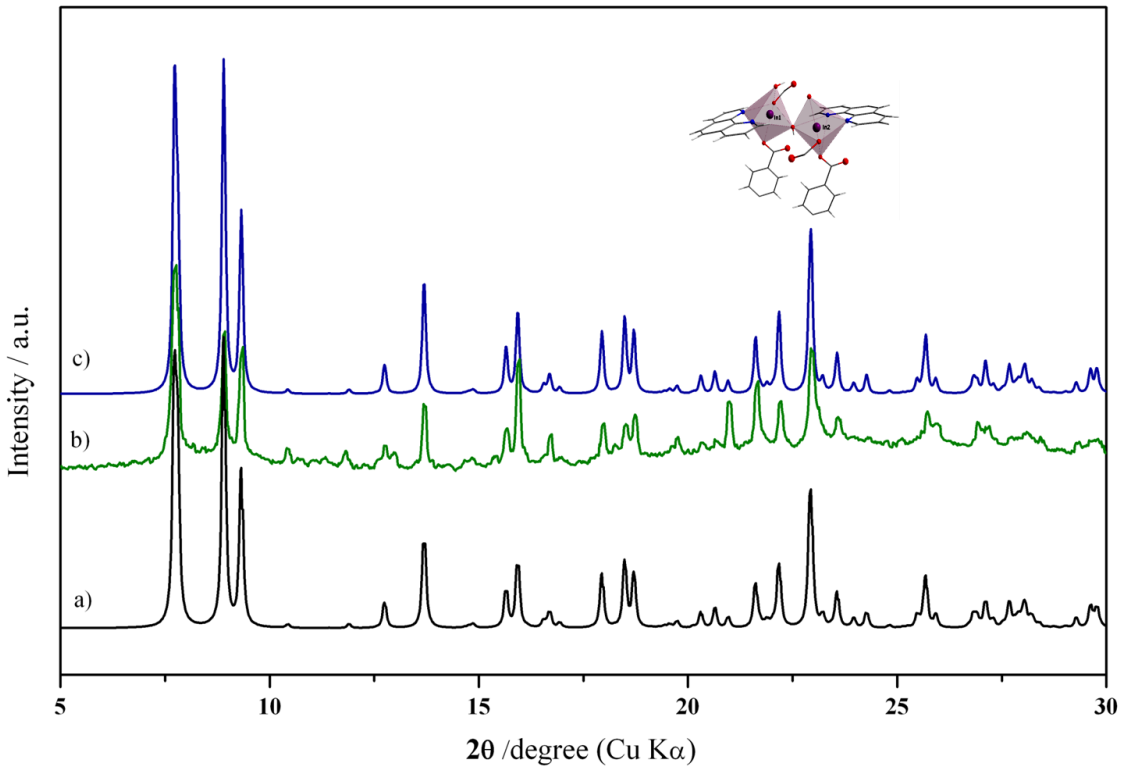

Fig. S3 Normalized XRD patterns of **InPF-3**: a) simulated PXRD, b) Experimental PXRD, c) PXRD after first run of cyanosilylation catalysis.

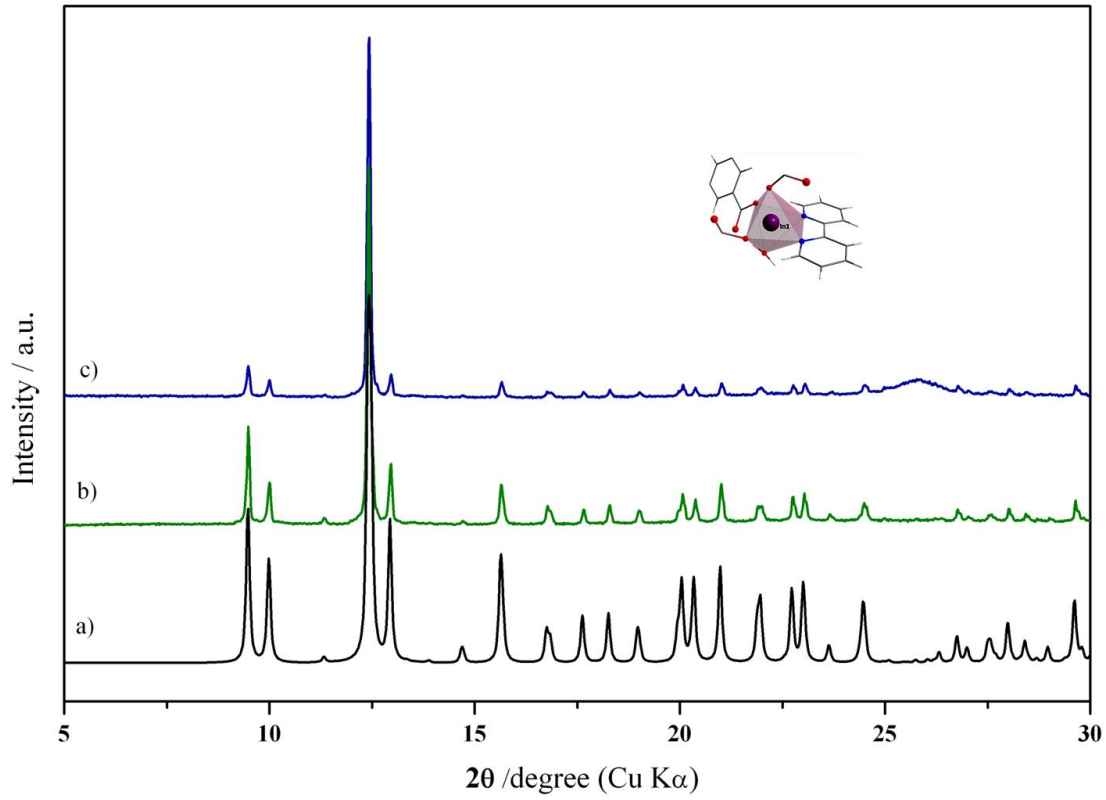

Fig. S4 Normalized XRD patterns of **InPF-4**: a) simulated PXRD, b) Experimental PXRD, c) PXRD after first run of cyanosilylation catalysis.

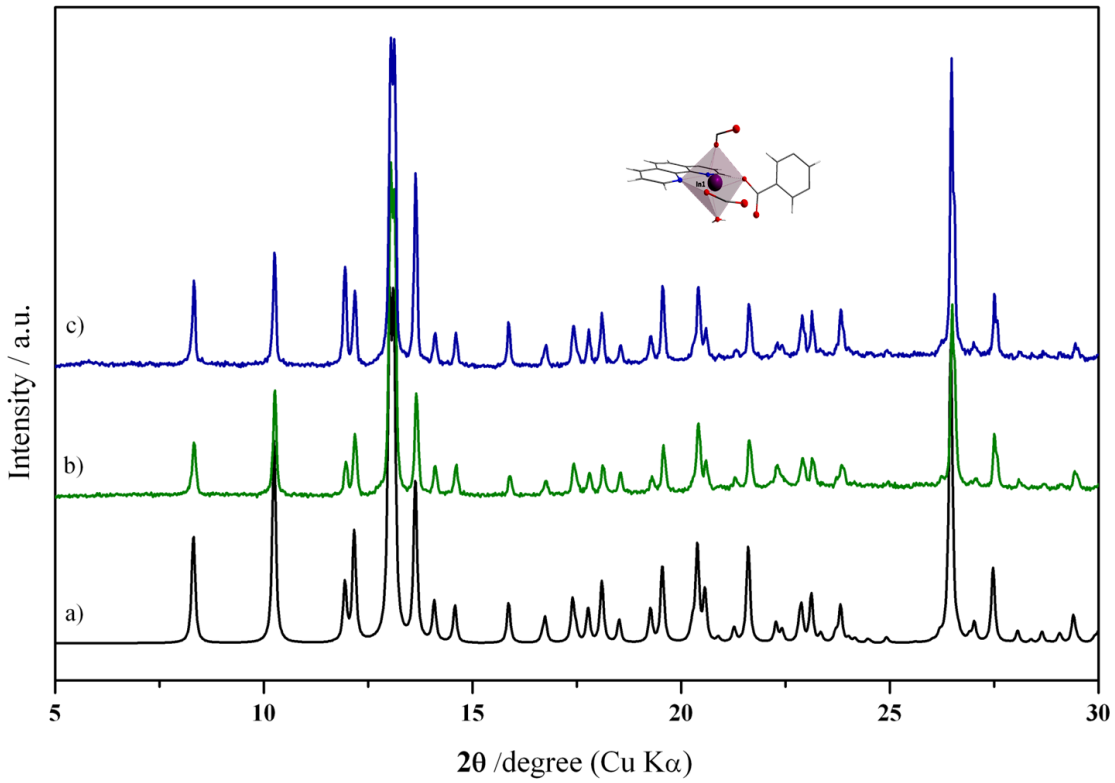

Fig. S5 Normalized XRD patterns of **InPF-5**: a) simulated PXRD, b) Experimental PXRD, c) PXRD after first run of cyanosilylation catalysis.

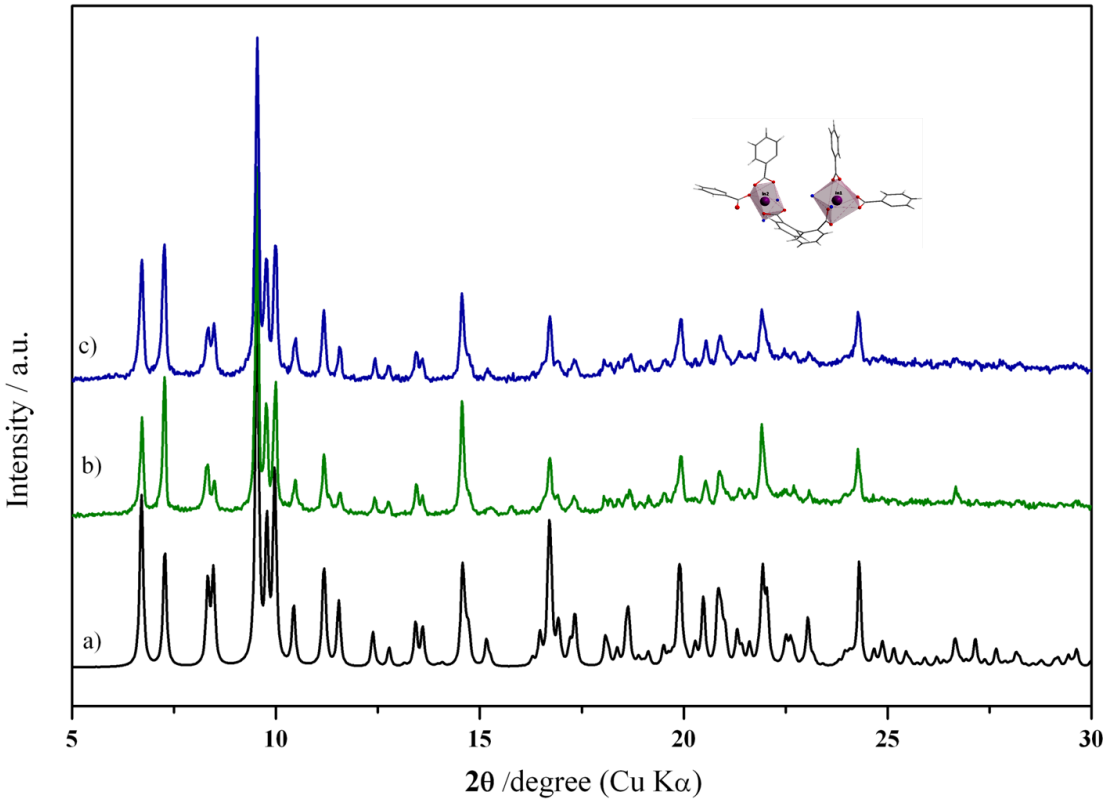

Fig. S6 Normalized XRD patterns of **InPF-6**: a) simulated PXRD, b) Experimental PXRD, c) PXRD after first run of cyanosilylation catalysis.

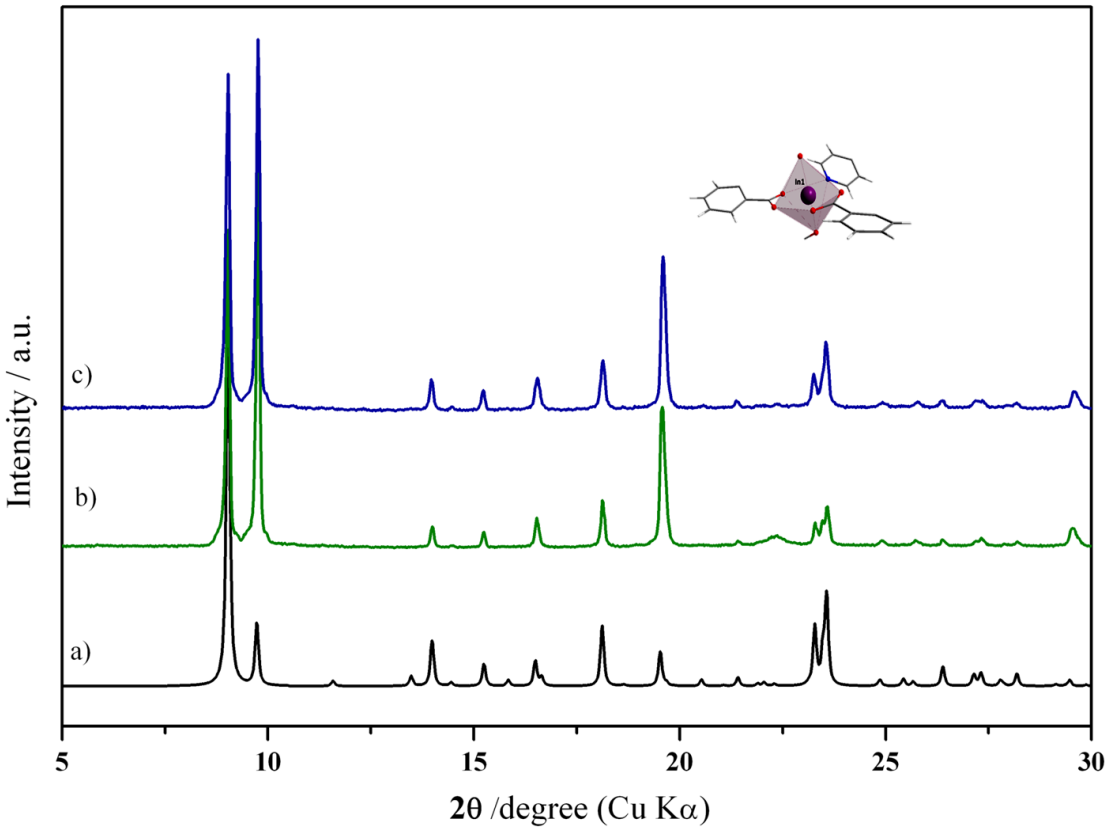

Fig. S7 Normalized XRD patterns of **InPF-7**: a) simulated PXRD, b) Experimental PXRD, c) PXRD after first run of cyanosilylation catalysis.

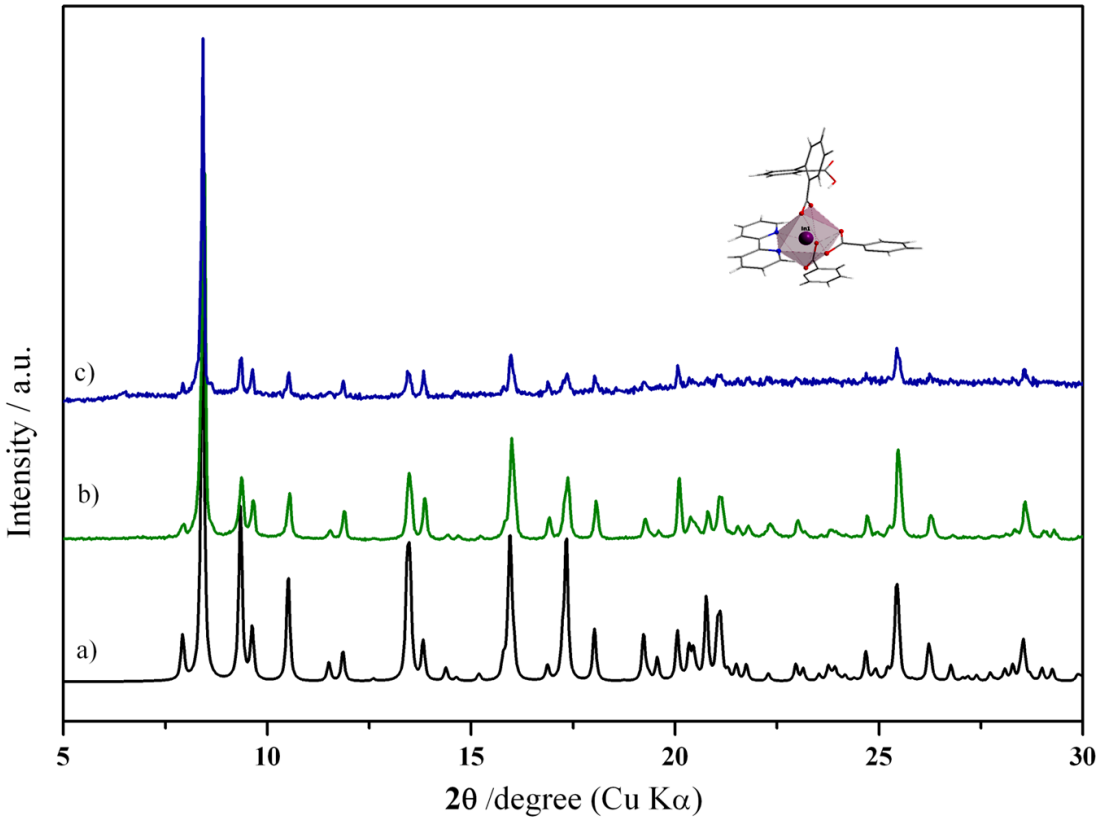

Fig. S8 Normalized XRD patterns of **InPF-8**: a) simulated PXRD, b) Experimental PXRD, c) PXRD after first run of cyanosilylation catalysis.

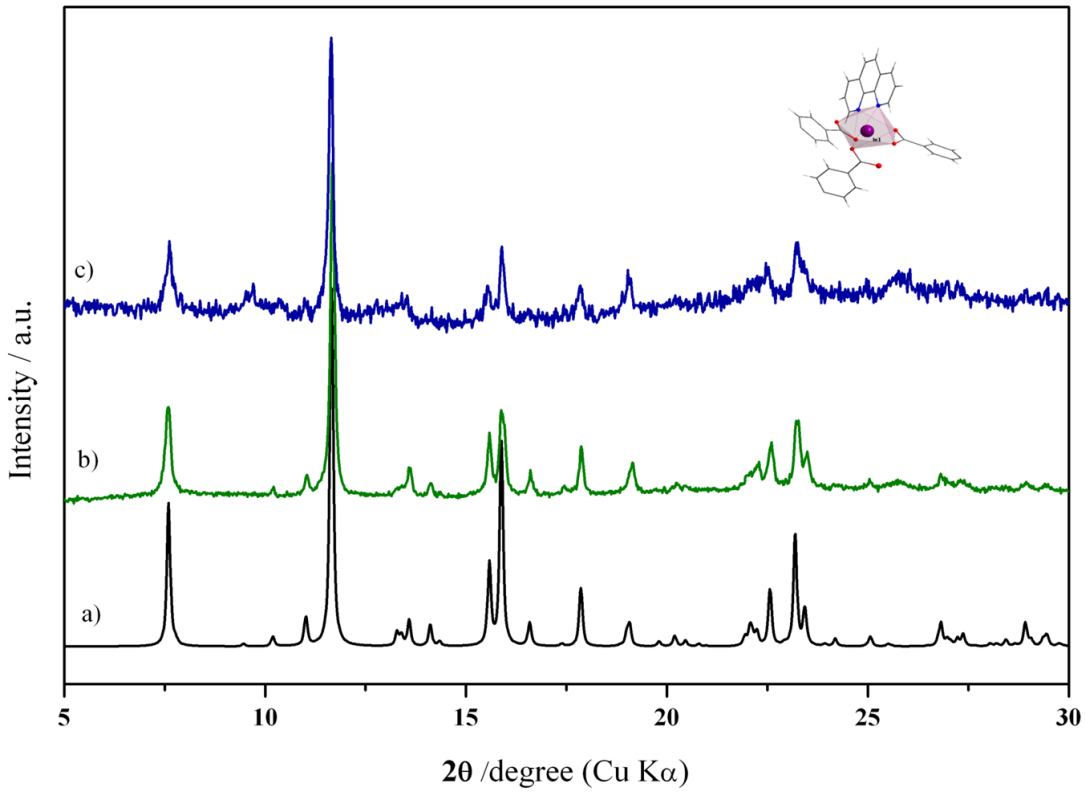

Fig. S9 Normalized XRD patterns of **InPF-9**: a) simulated PXRD, b) Experimental PXRD, c) PXRD after first run of cyanosilylation catalysis.

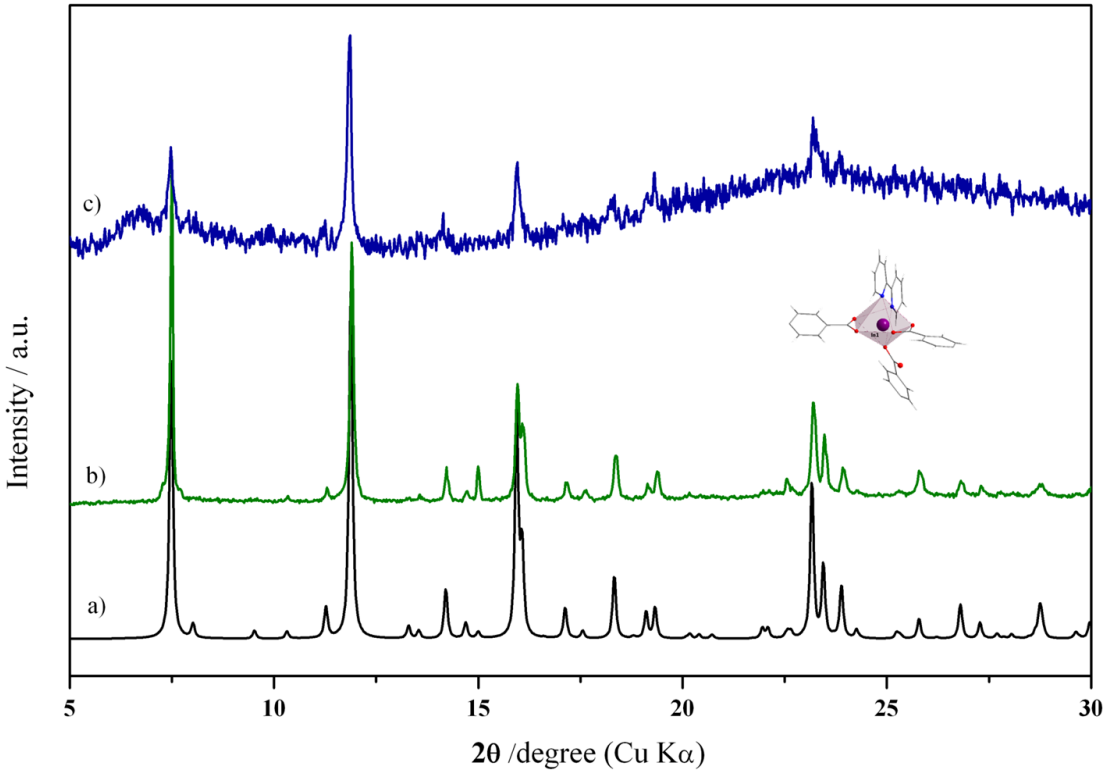

Fig. S10 Normalized XRD patterns of **InPF-10**: a) simulated PXRD, b) Experimental PXRD, c) PXRD after first run of cyanosilylation catalysis.

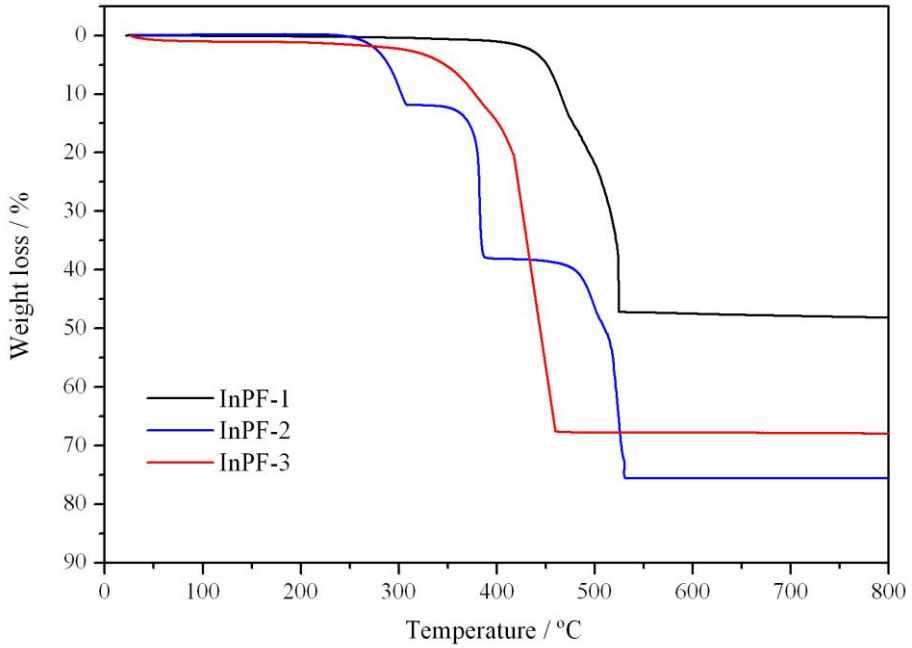

Figure S11. TGA profiles of **InPF-1**, **InPF-2** and **InPF-3** compounds performed under N_2 (flow of 50 mL.min-1) with a heating rate of 10 ºC/min.

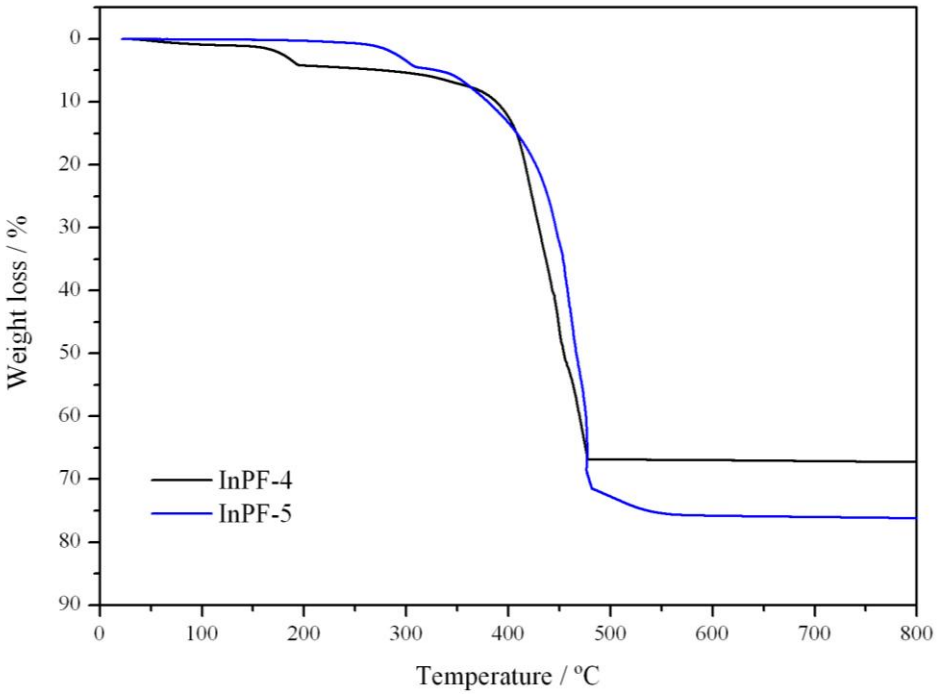

Figure S12. TGA profiles of **InPF-4** and **InPF-5** compounds performed under N_2 (flow of 50 mL.min-1) with a heating rate of 10 ºC/min.

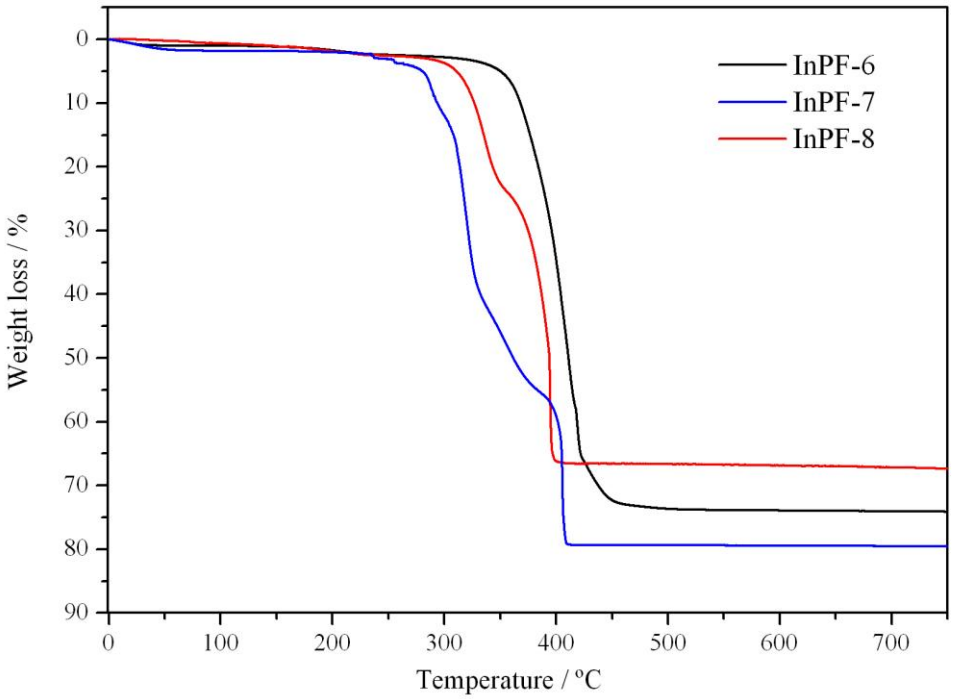

Figure S13. TGA profiles of **InPF-6**, **InPF-7** and **InPF-8** compounds performed under N_2 (flow of 50 mL.min-1) with a heating rate of 10 ºC/min.

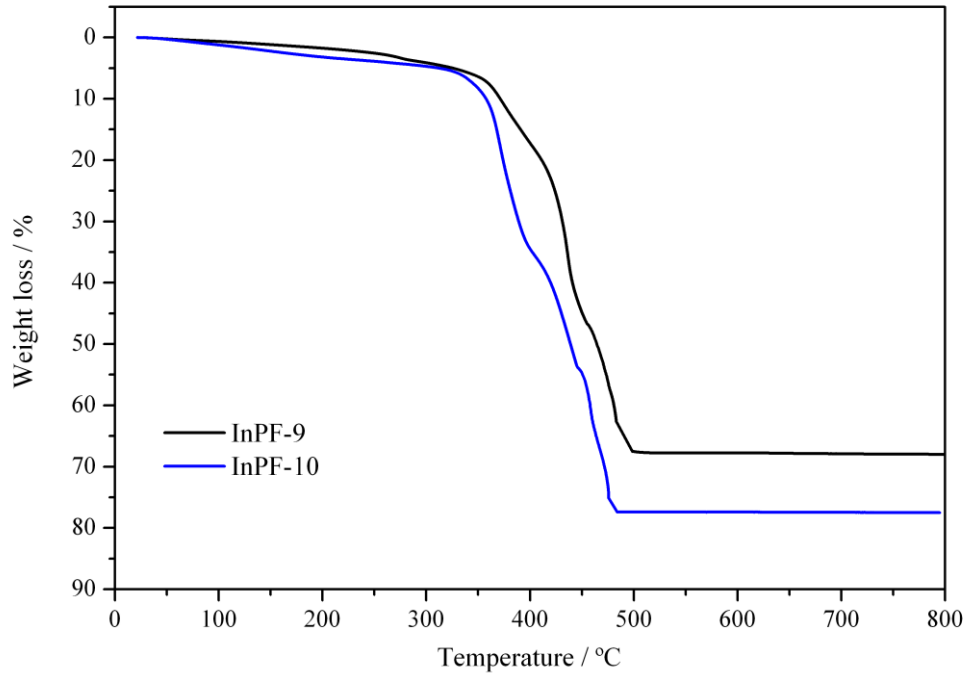

Figure S14. TGA profiles of **InPF-9** and **InPF-10** compounds performed under N_2 (flow of 50 mL.min-1) with a heating rate of 10 ºC/min.

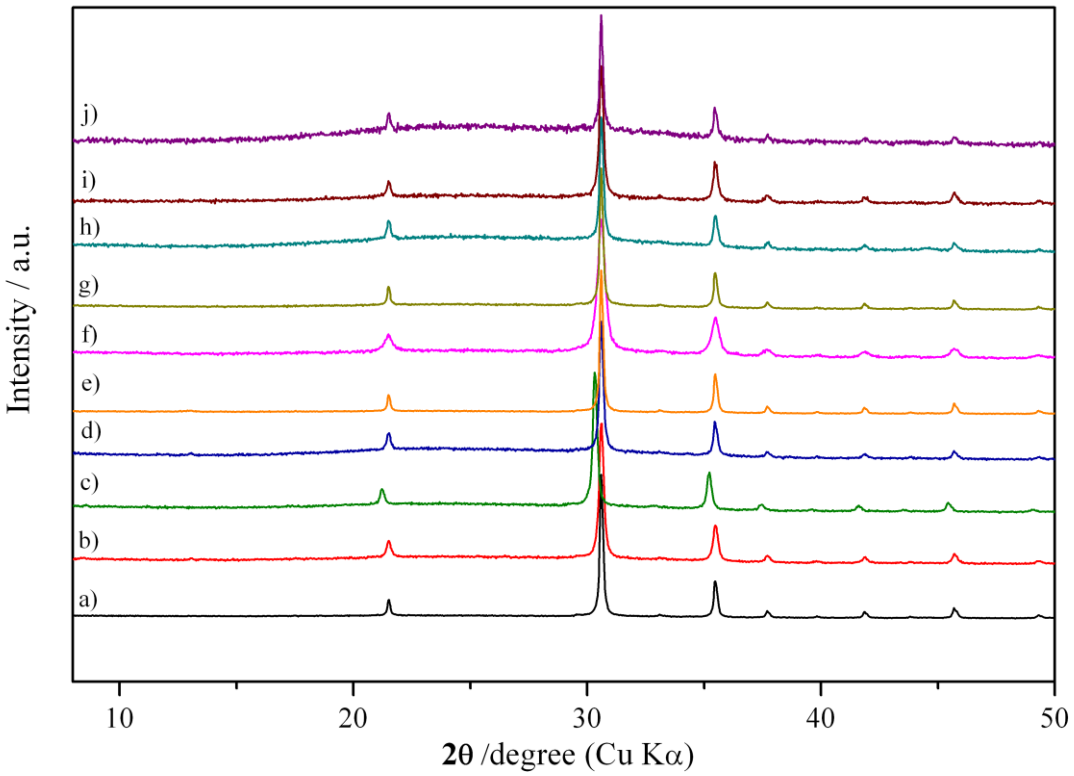

Figure S15. PRXDF profiles for TGA residues of indium catalysts: a) **InPF-1**, b) **InPF-2**, c) **InPF-3**, d) **InPF-4**, e) **InPF-5**, f) **InPF-6**, g) **InPF-7** h) **InPF-8** i) **InPF- 9** and j) **InPF-10**. The final residue at 800ºC for all catalysts is pure In_2O_3 (ICSD_640179), confirmed by XRPD.

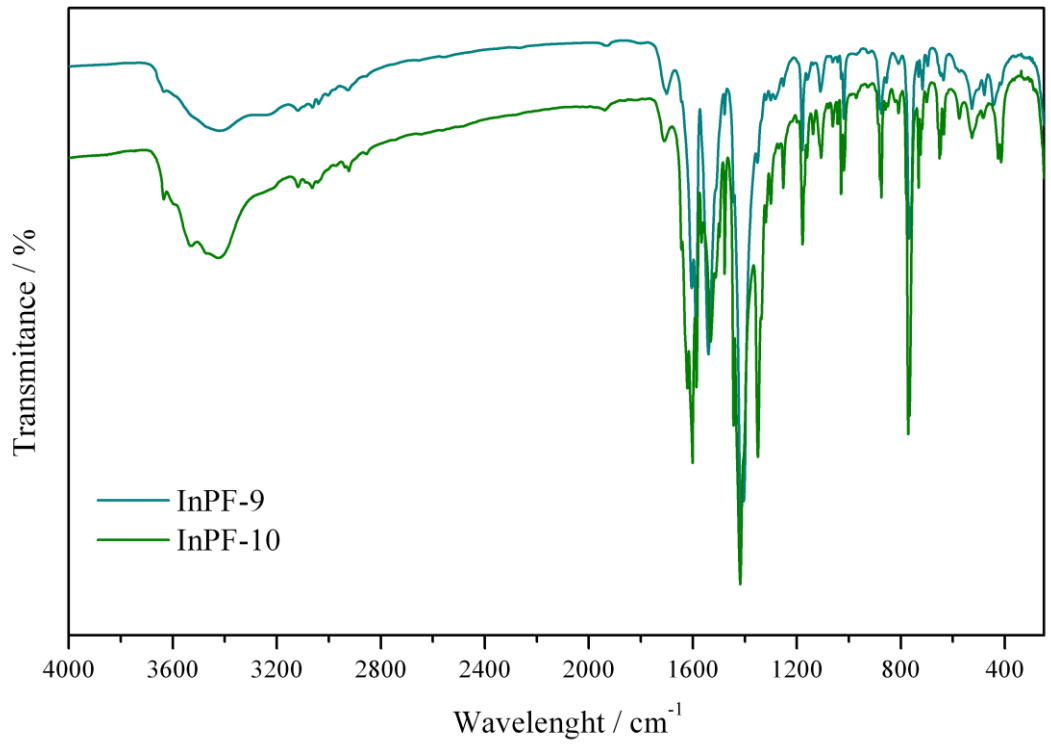

Figure S16. FTIR spectra of compounds In**PF-9** and **InPF-10** in the 4000-300 cm^{-1} range.