

**Supplementary information for**

**Control of plugging in bifunctional periodic  
mesoporous organosilica with imidazolium  
framework (BFPMO) via stepwise addition of  
silica precursors**

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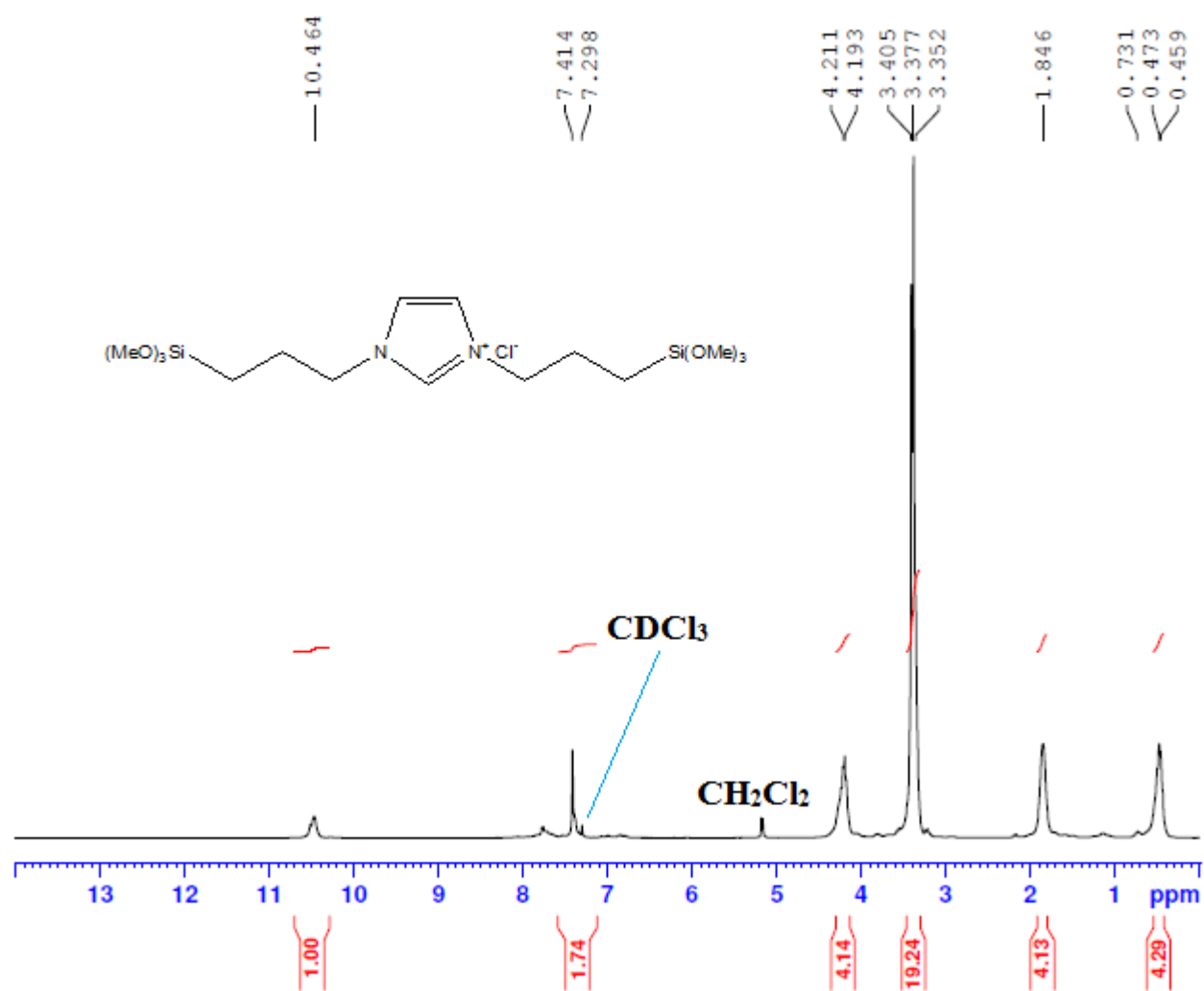
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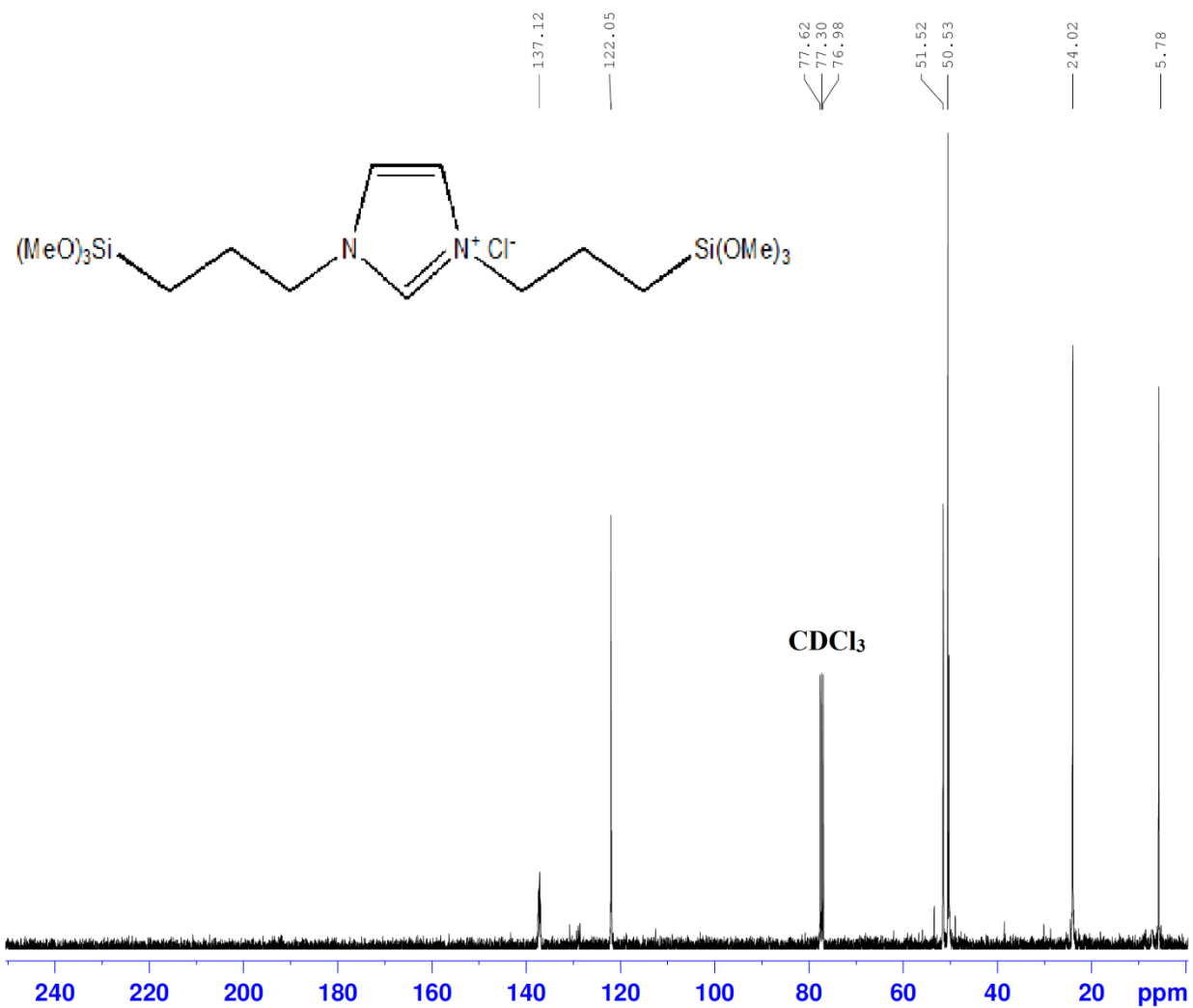
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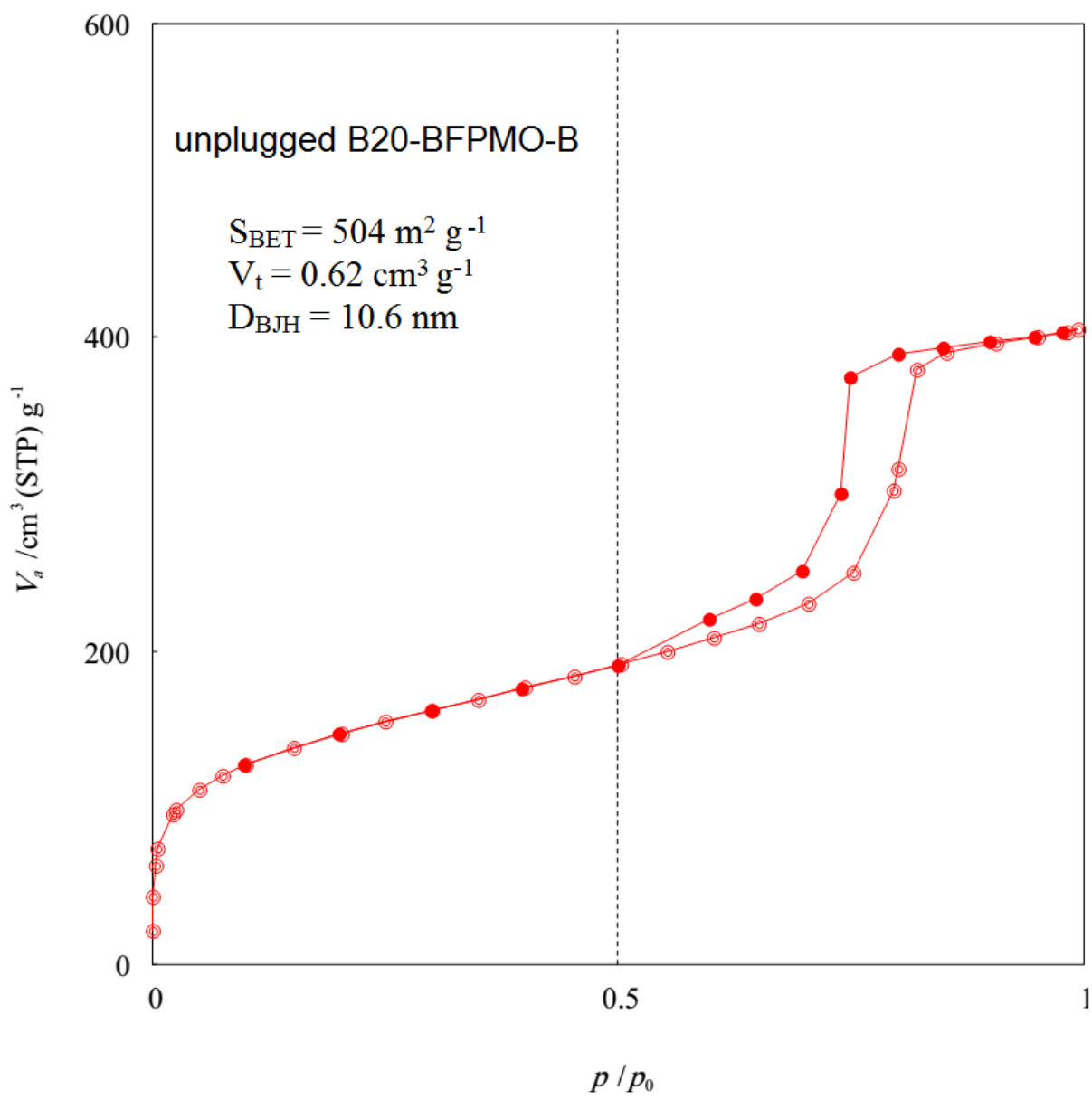
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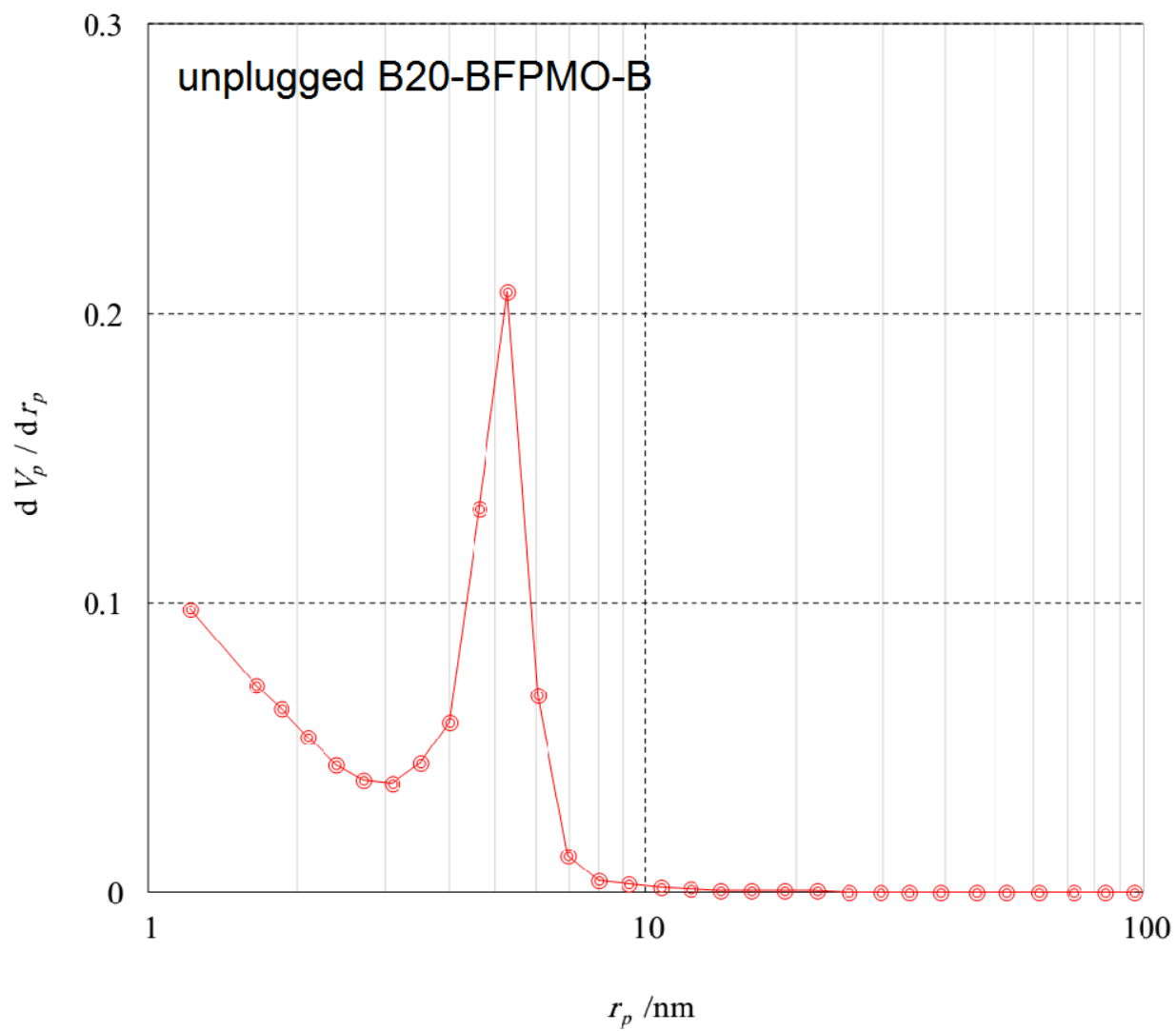
**Figure S1.** <sup>1</sup>H NMR spectra of the 1,3-bis(3-trimethoxysilylpropyl)-imidazolium chloride (BTMSPCl) in the CDCl<sub>3</sub>.



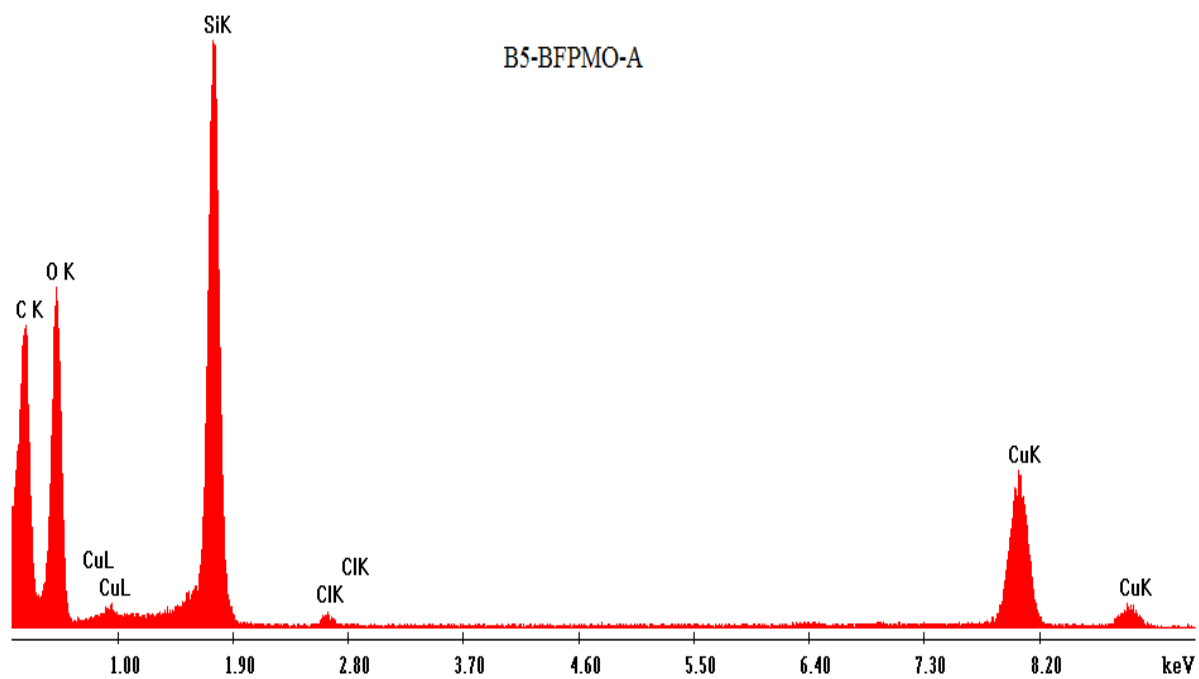
**Figure S2.** <sup>13</sup>C NMR spectra of the 1,3-bis(3-trimethoxysilylpropyl)-imidazolium chloride (BTMSPCl) in the CDCl<sub>3</sub>



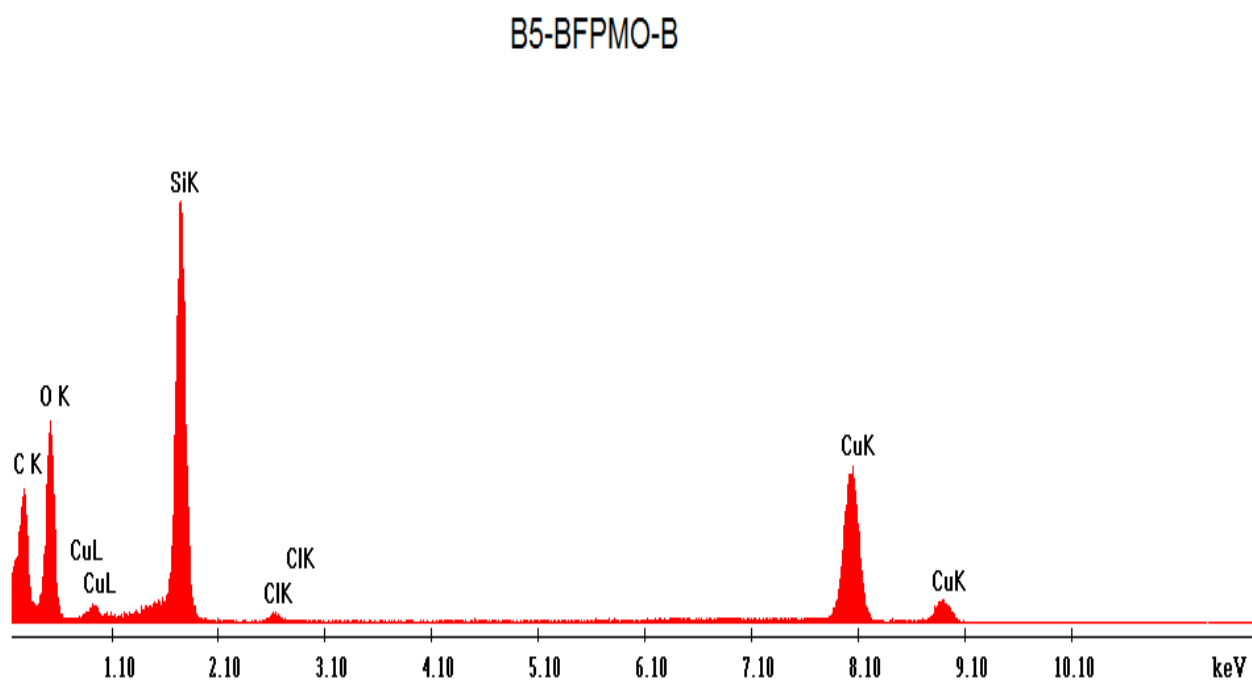
**Figure S3.** Nitrogen adsorption-desorption isotherm for unplugged B20-BFPMO-B



**Figure S4.** Pore size distribution for unplugged B20-BFPMO-B



**Figure S5** EDS pattern for B5-BFPMO-A



**Figure S6** EDS pattern for B5-BFPMO-B



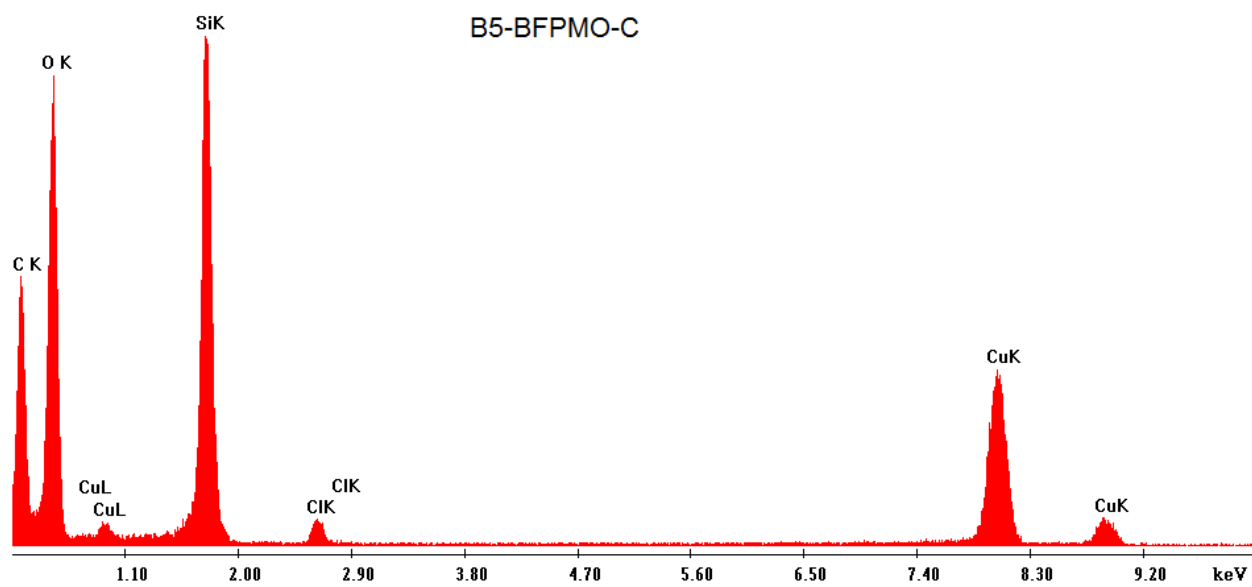


Figure S7 EDS pattern for B5-BFPMO-C.

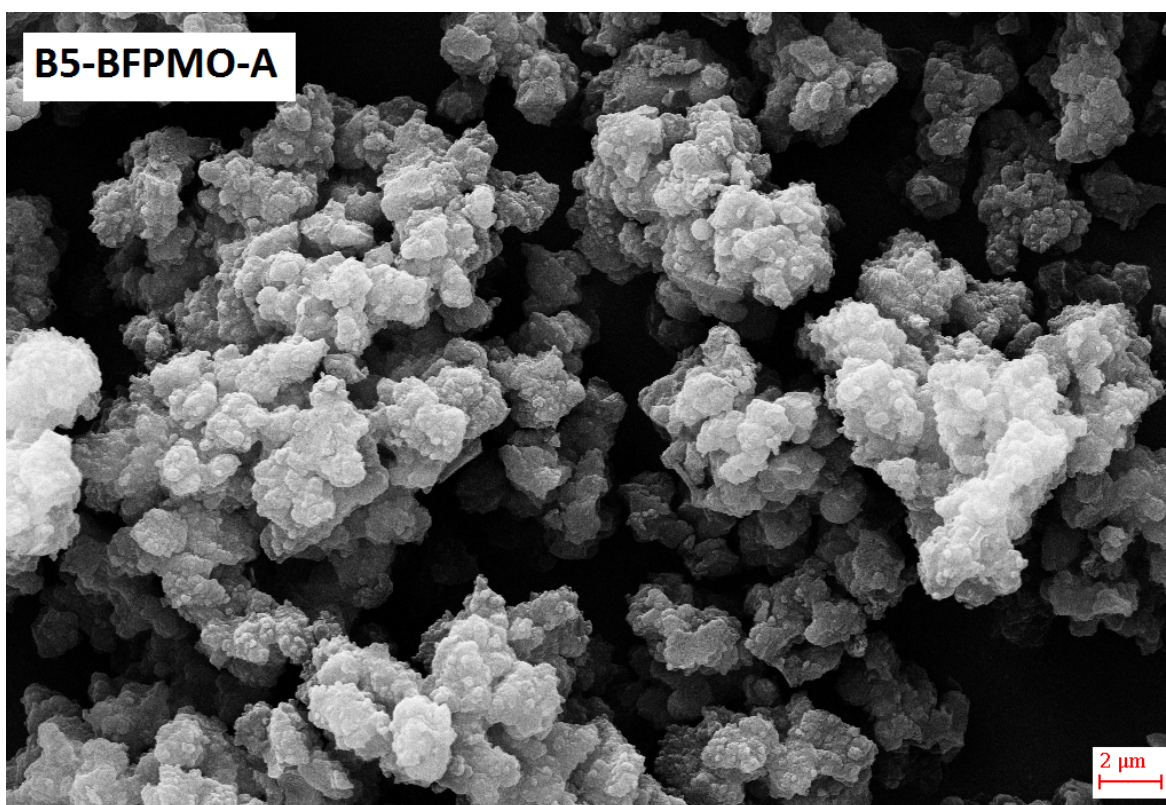
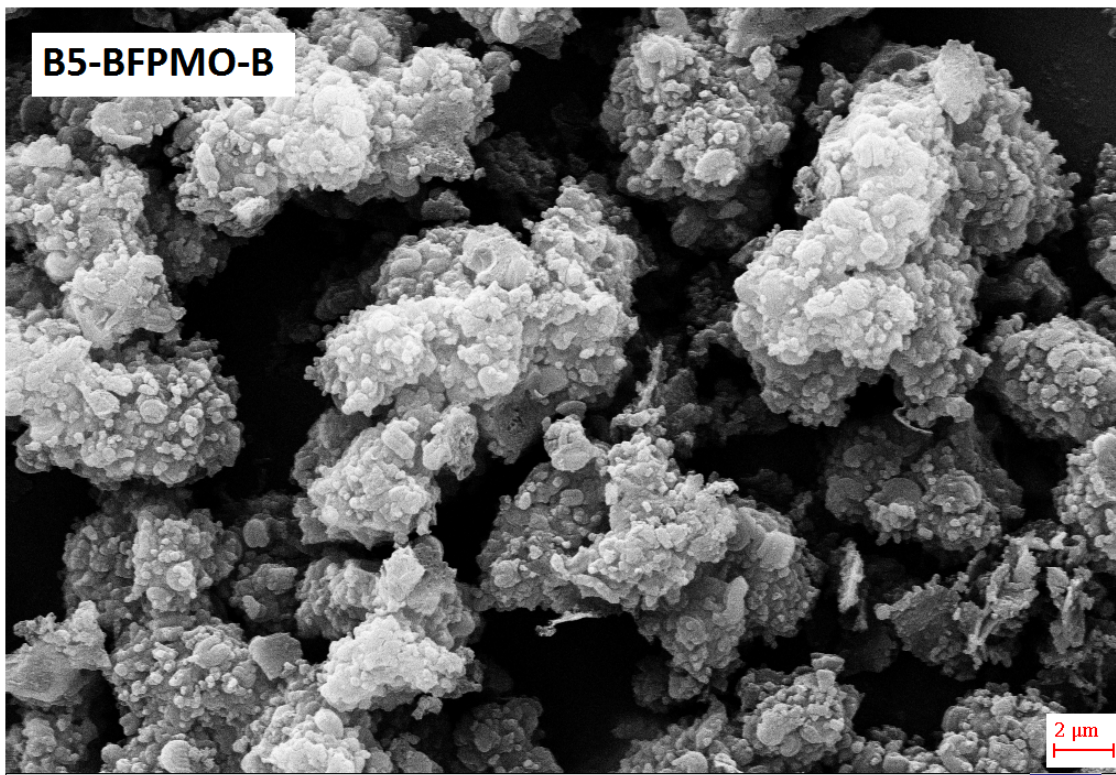
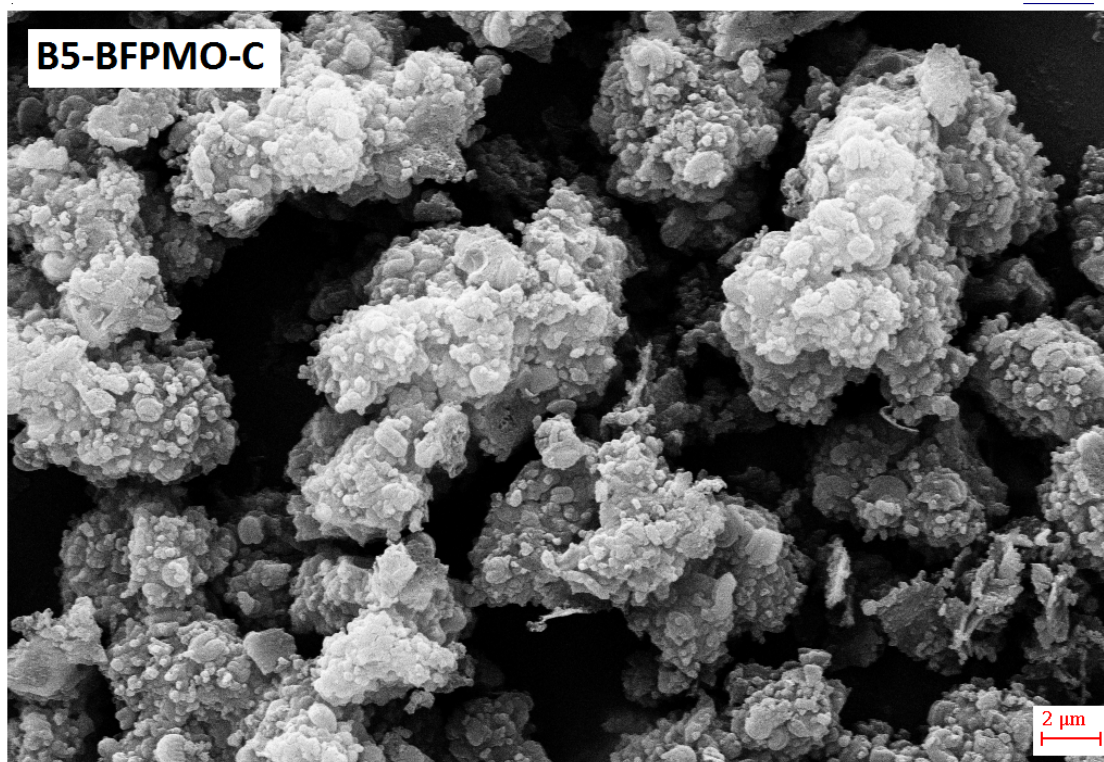


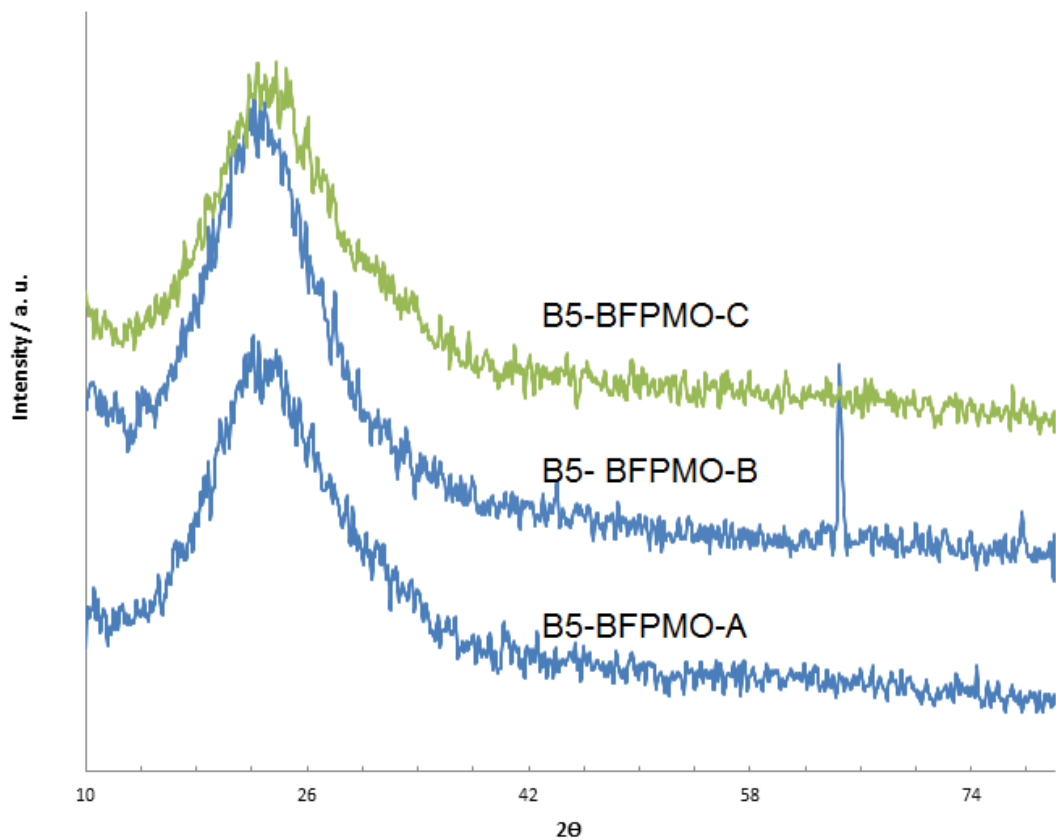
Figure S8. SEM image for the B5-BFPMO-A



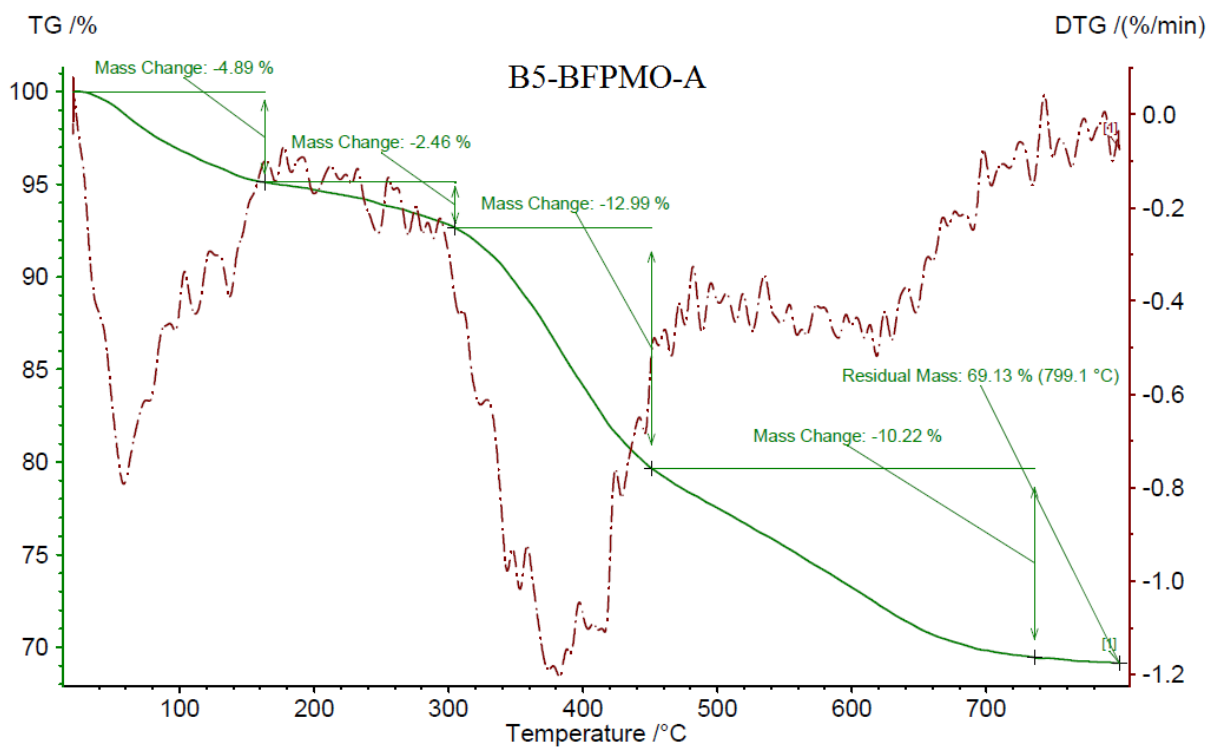
**Figure S9.** SEM image for the B5-BFPMO-B



**Figure S10.** SEM image for the B5-BFPMO-C

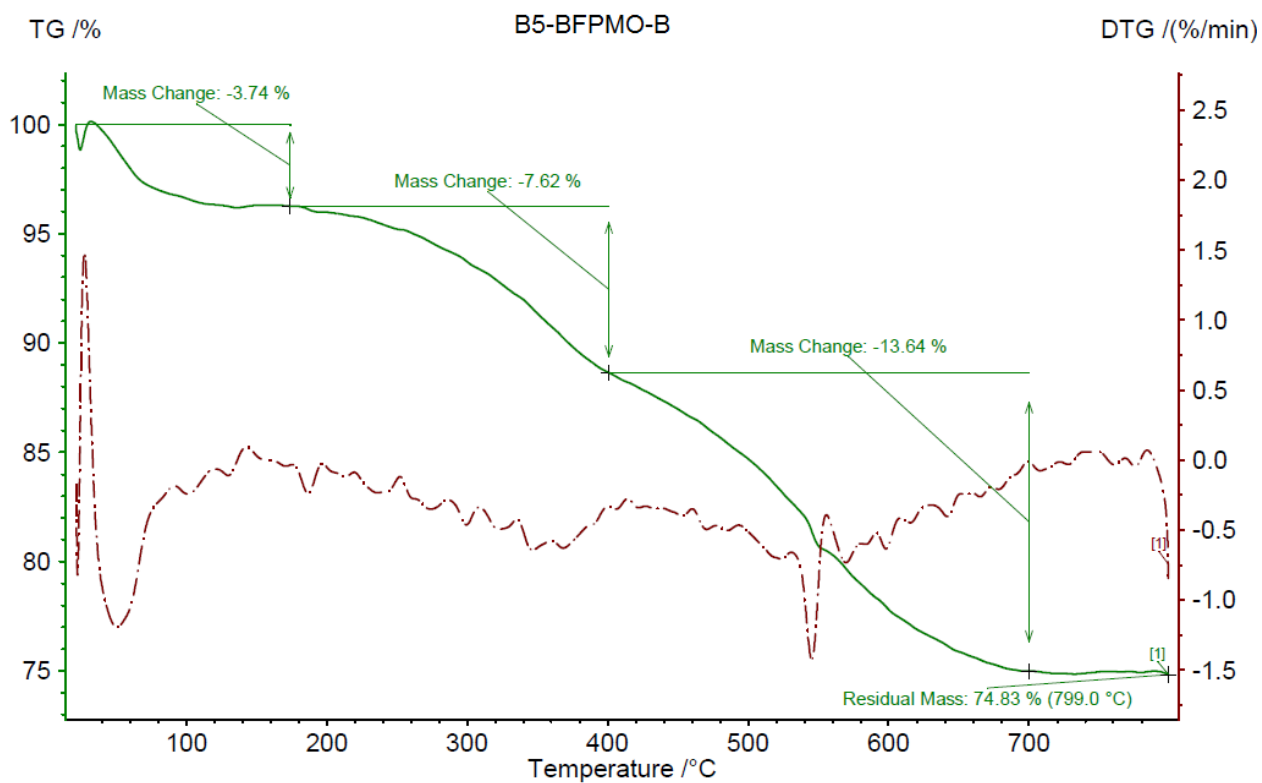


**Figure 11.** XRD pattern for B5-BFPMO-A, -B, and -C

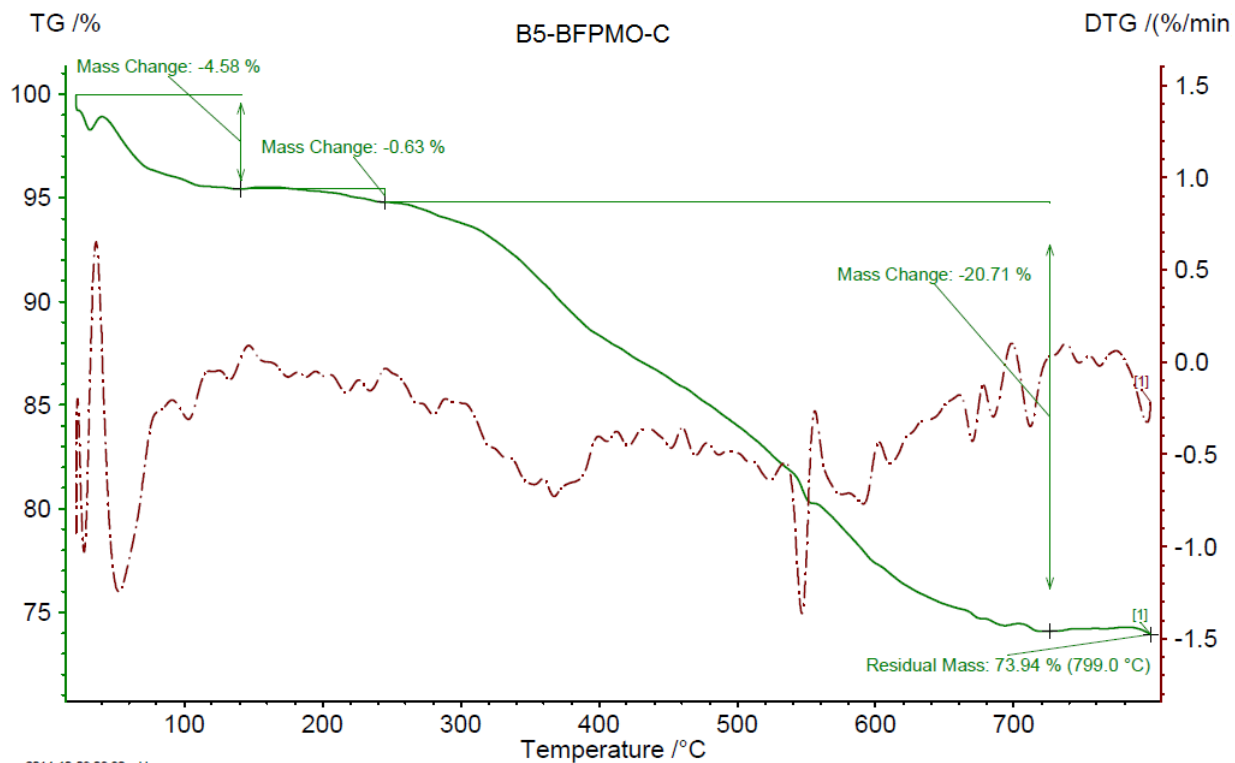


**Figure S12.** TG pattern for B5-BFPMO-A



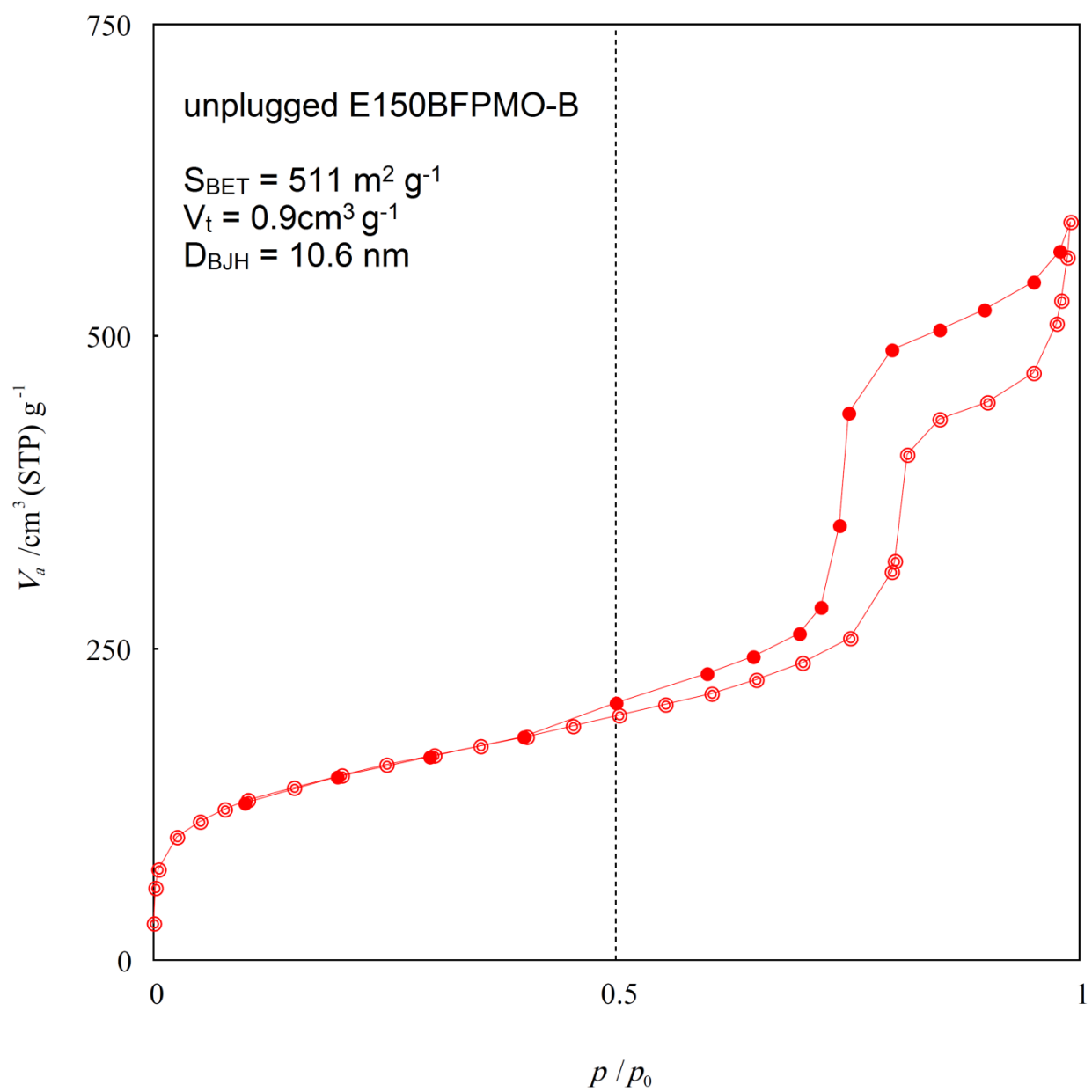


**Figure S13.** TG pattern for B5-BFPMO-B

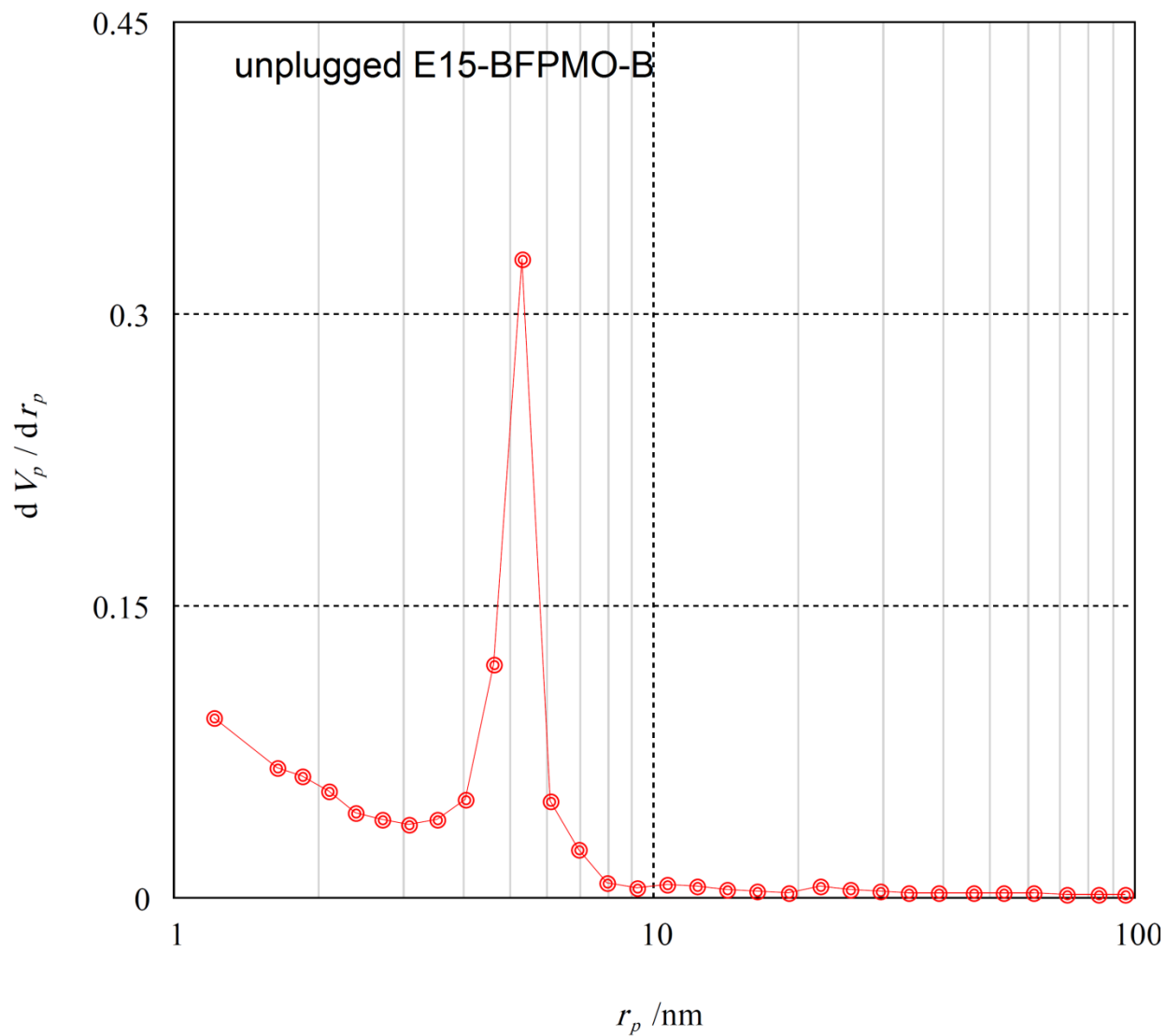


**Figure S14.** TG pattern for B5-BFPMO-C

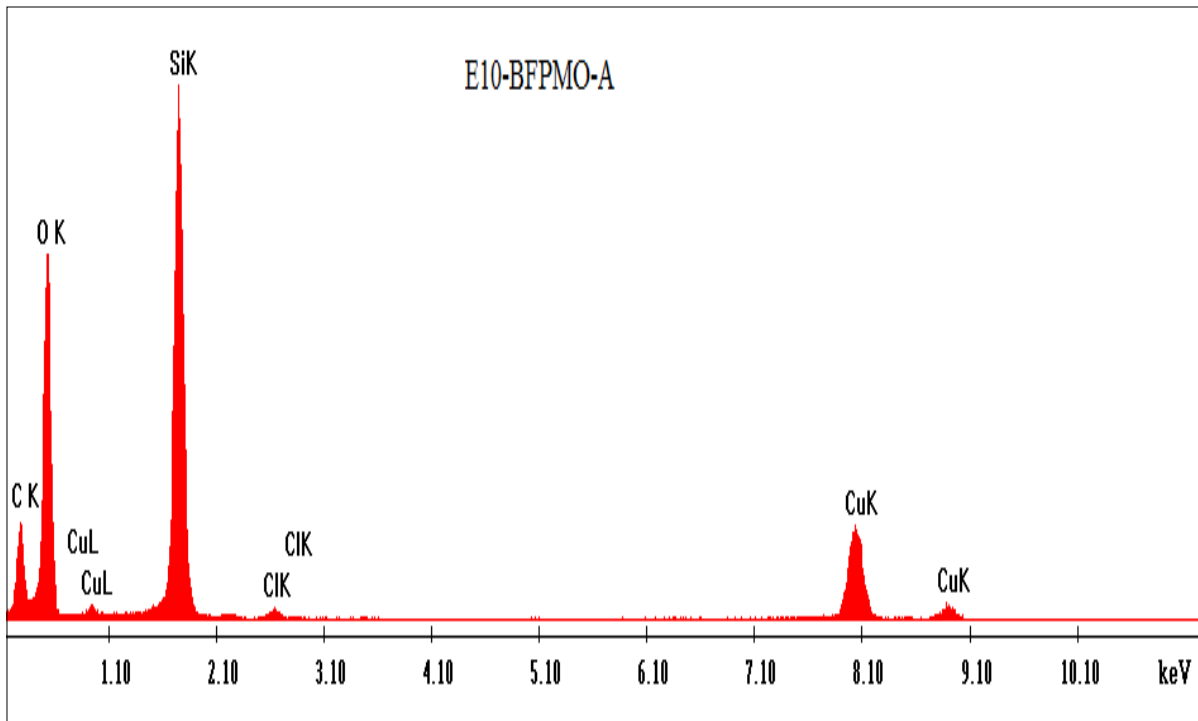
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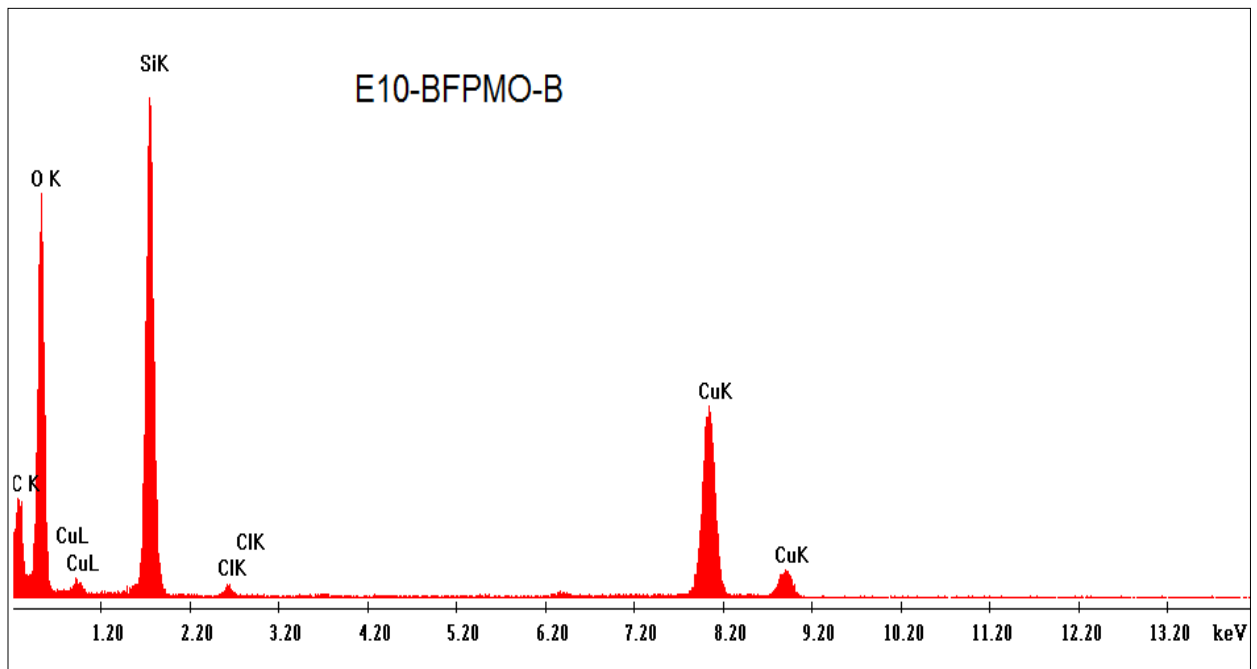
**Figure S15.** Nitrogen adsorption-desorption isotherm for unplugged E150-BFPMO-B



**Figure S16.** Pore size distribution for unplugged E15-BFPMO-B



**Figure S17.** EDS pattern for E10-BFPMO-A



**Figure S18.** EDS pattern for E10-BFPMO-B

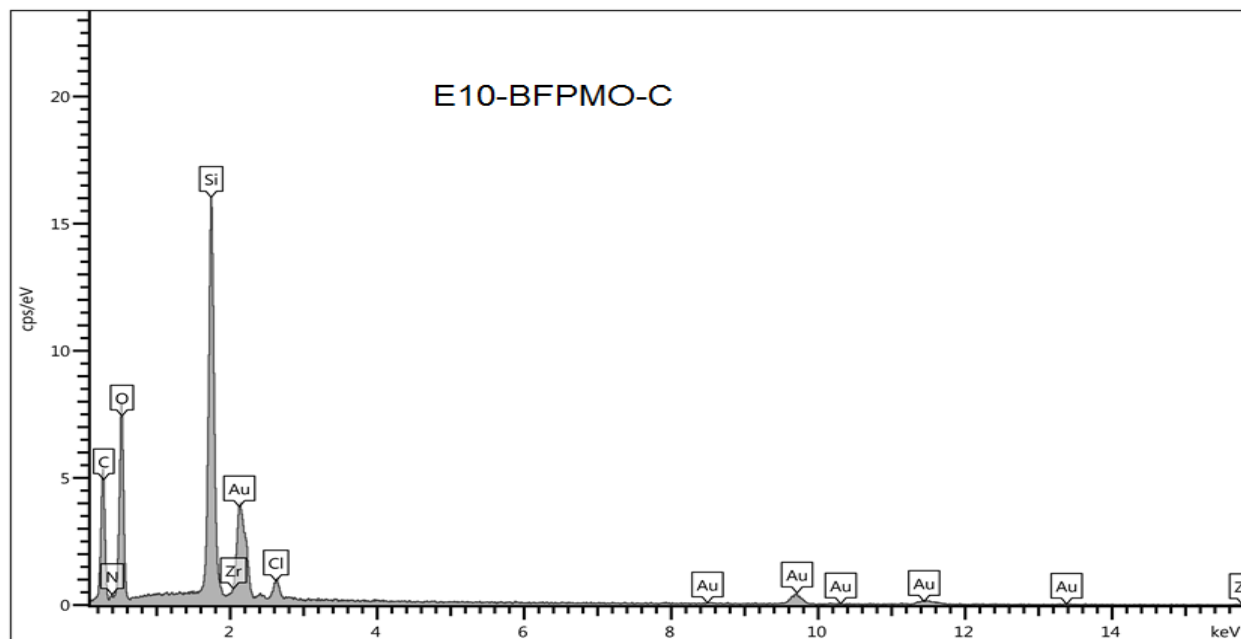


Figure S19. EDS pattern for E10-BFPMO-C

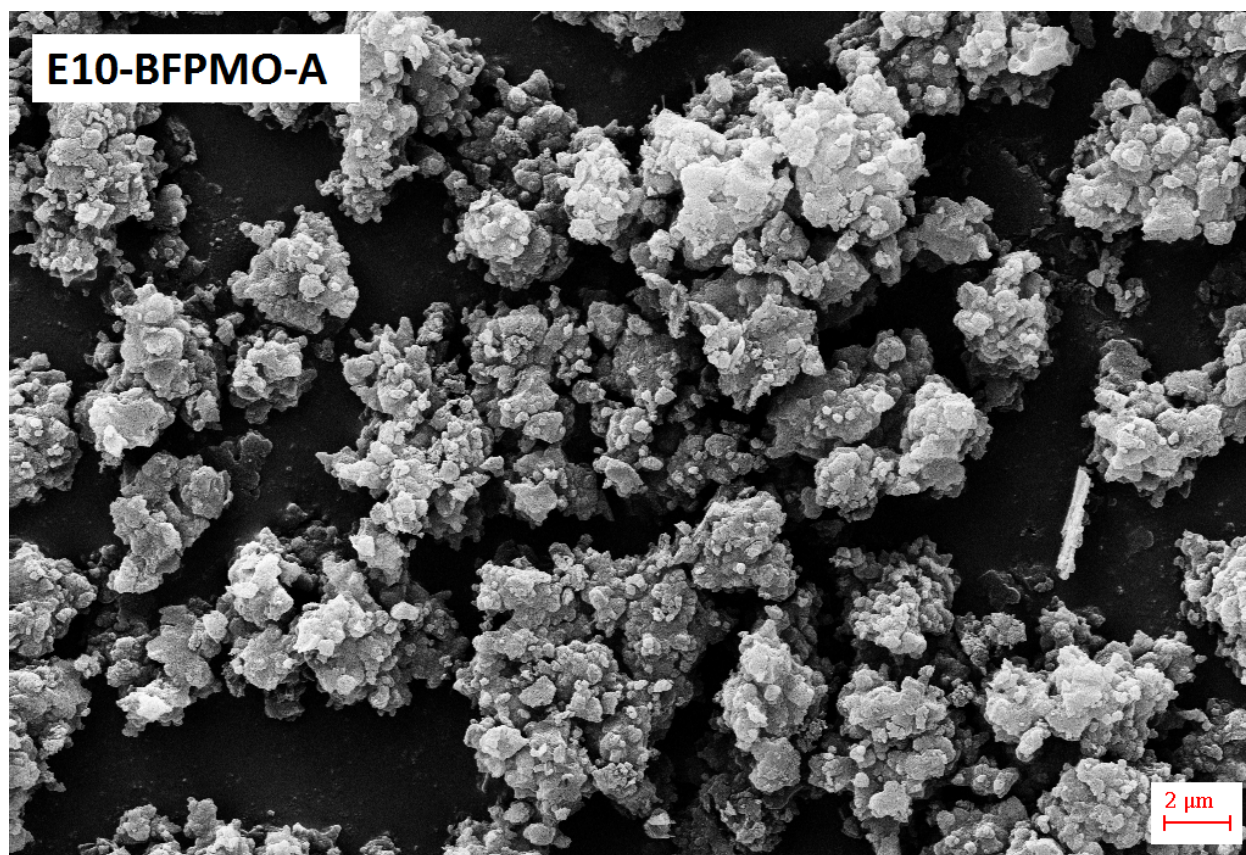
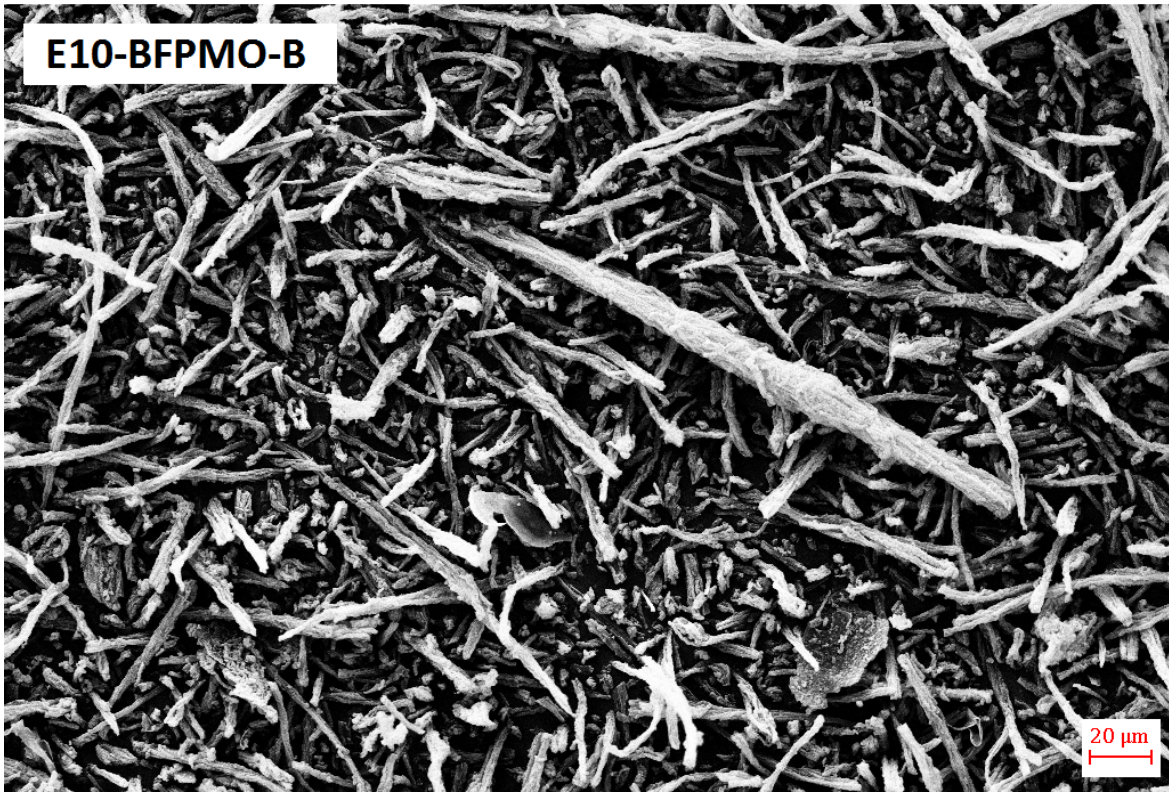
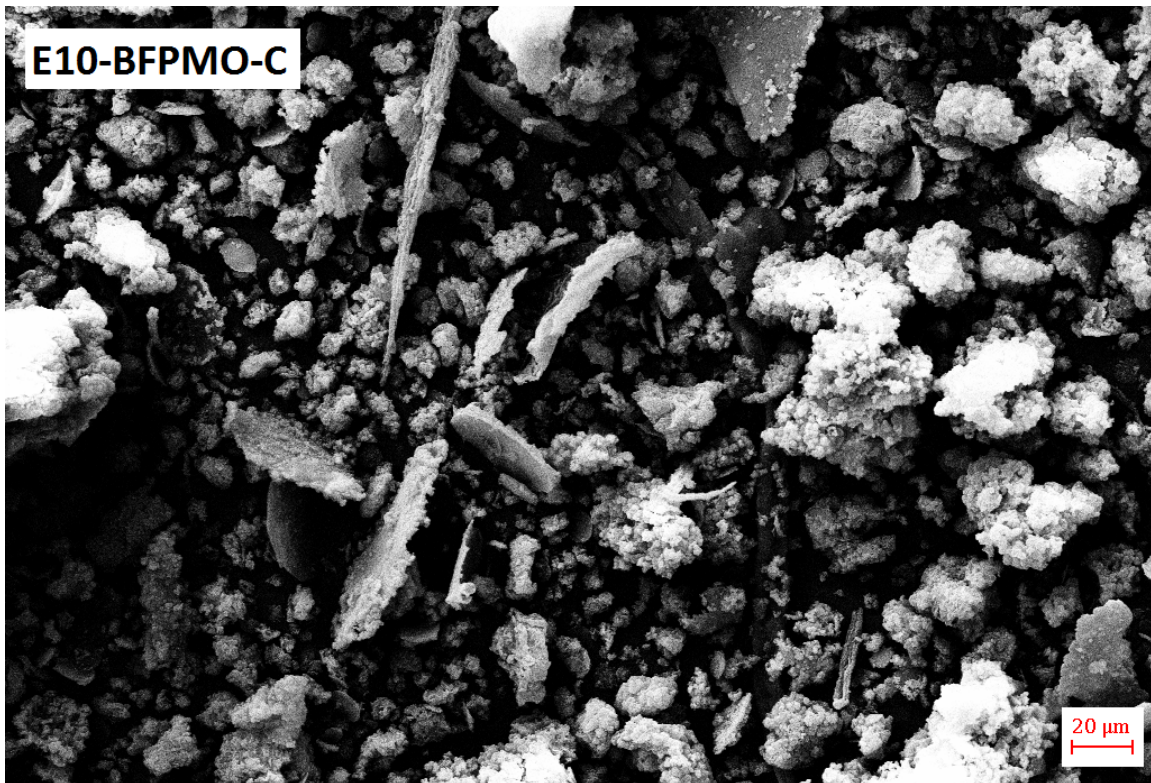


Figure S20. SEM image for E10-BFPMO-A

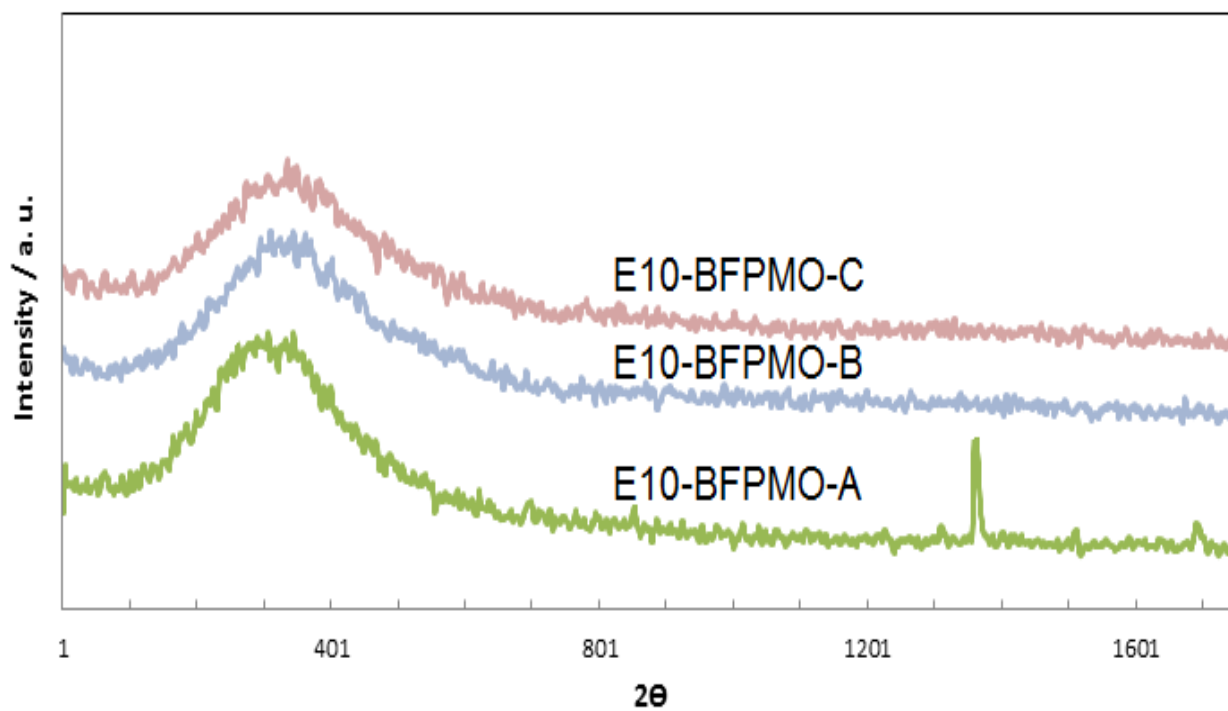




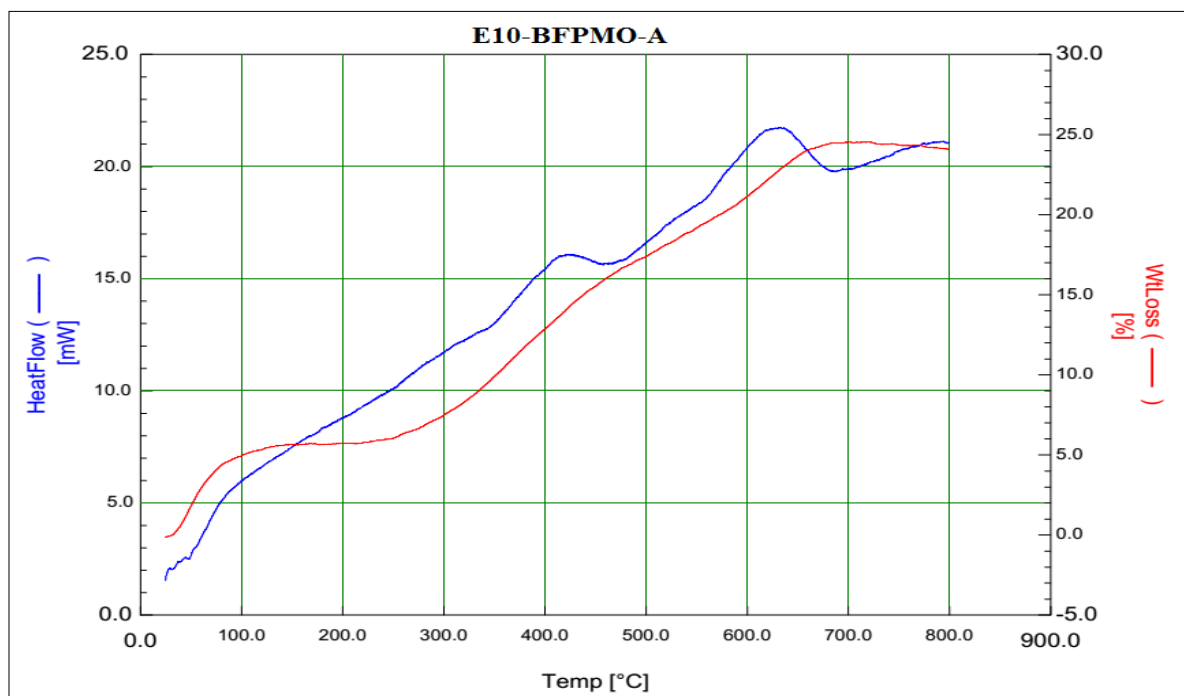
**Figure S21.** SEM image for E10-BFPMO-B



**Figure S22.** SEM image for E10-BFPMO-C



**Figure S23.** XRD pattern for E10-BFPMO-A, -B, and -C



**Figure S24.** TG pattern for E10-BFPMO-A

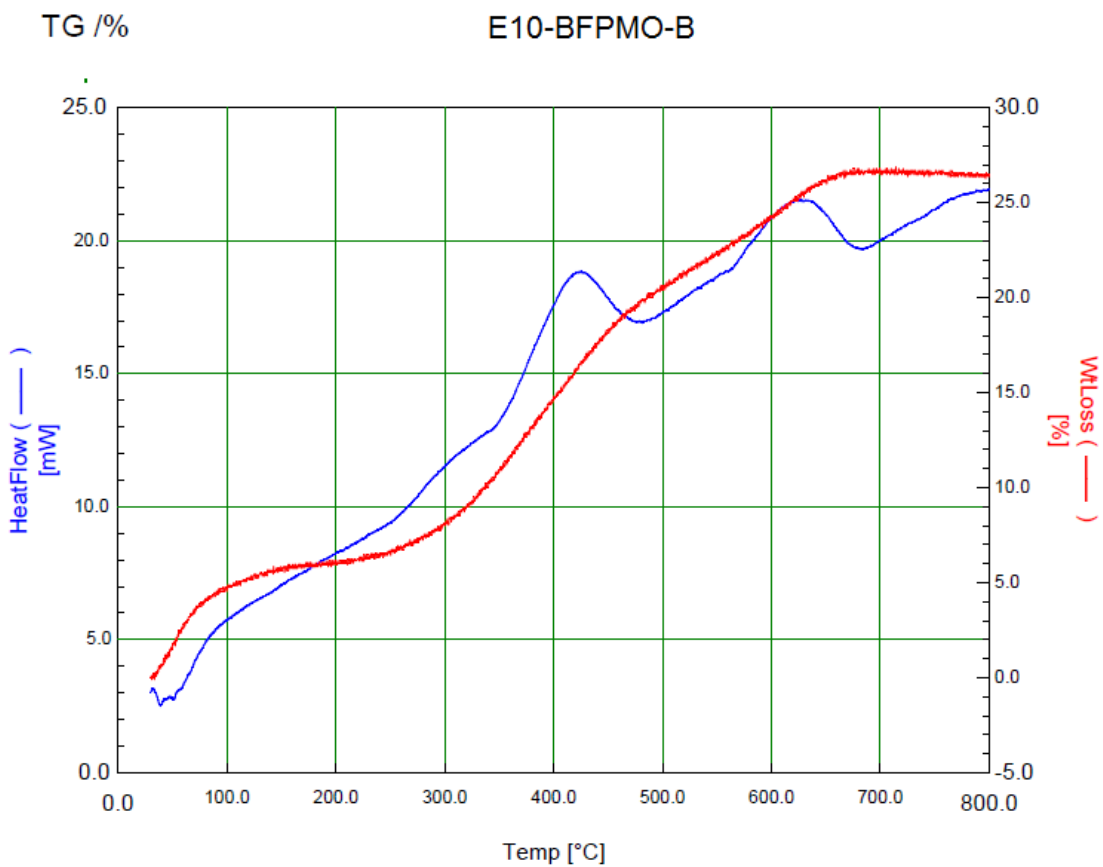


Figure S25. TG pattern for E10-BFPMO-B

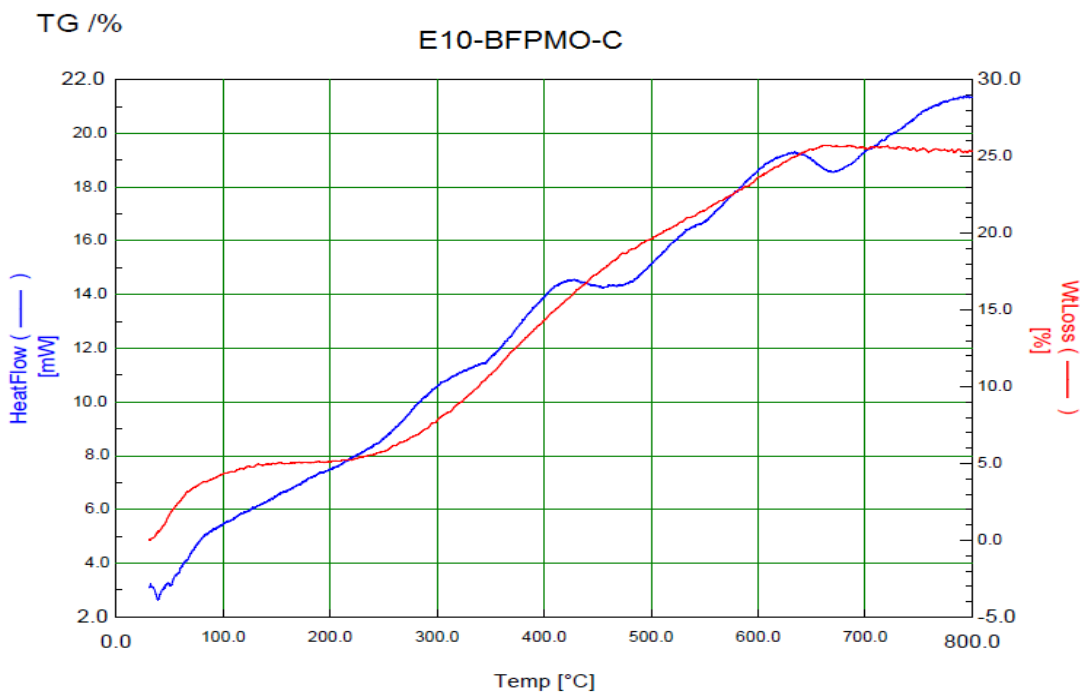


Figure S26. TG pattern for E10-BFPMO-C