Electronic Supplementary Information

Bifunctional Cr3+ modified ion exchange resins as efficient reusable catalysts for the production and isolation of 5-hydroxymethylfurfural from glucose

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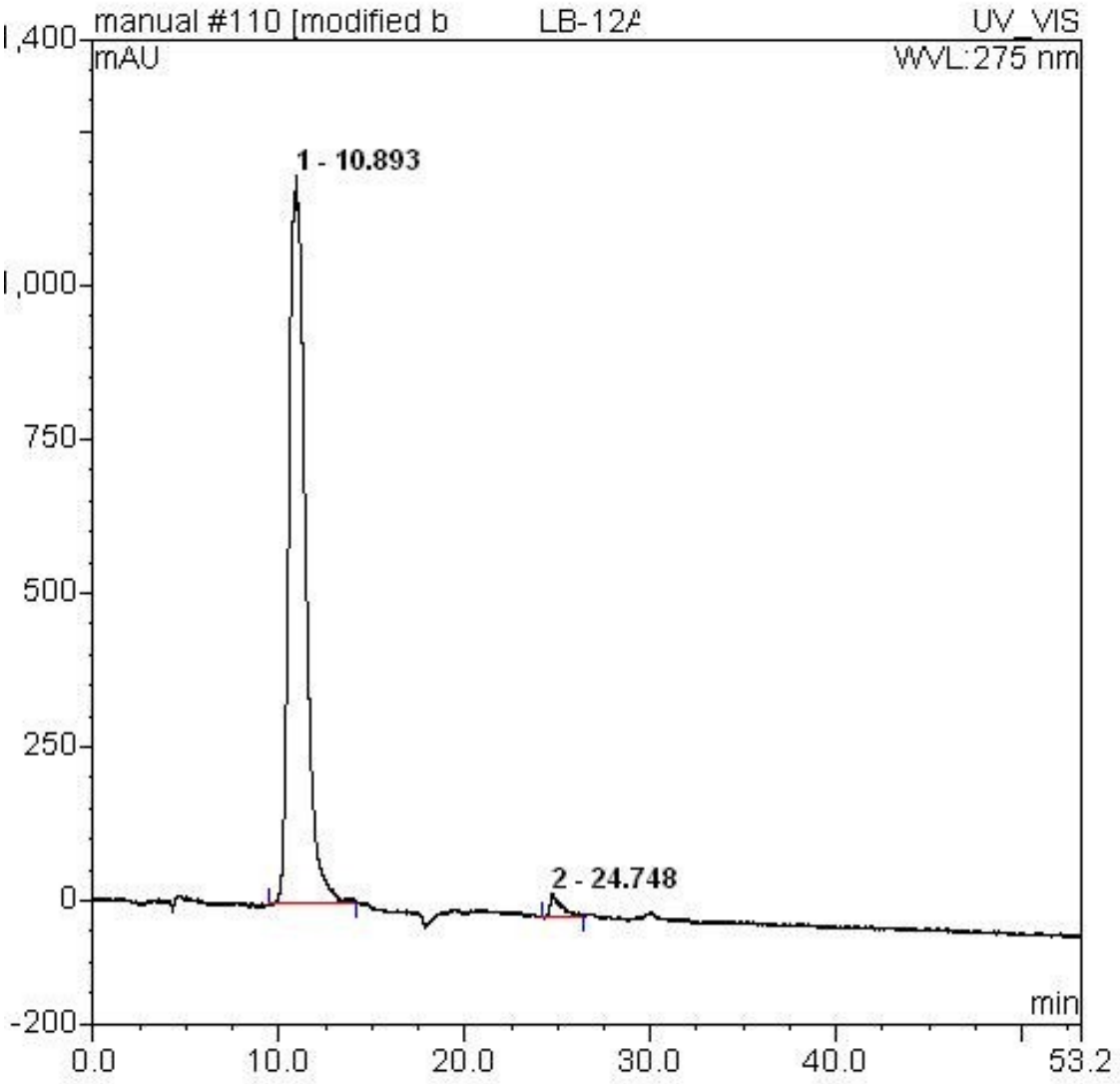

Figure S1. Representative HPLC chromatogram of isolated HMF. Reaction conditions: Amberlyst 15/Cr^{3+} (0.7 g), glucose (0.7 ,), water (0.7 mL), TEAB (7 g), 120°C, 60 min. Column HICHROM C18, 250x4.6mm

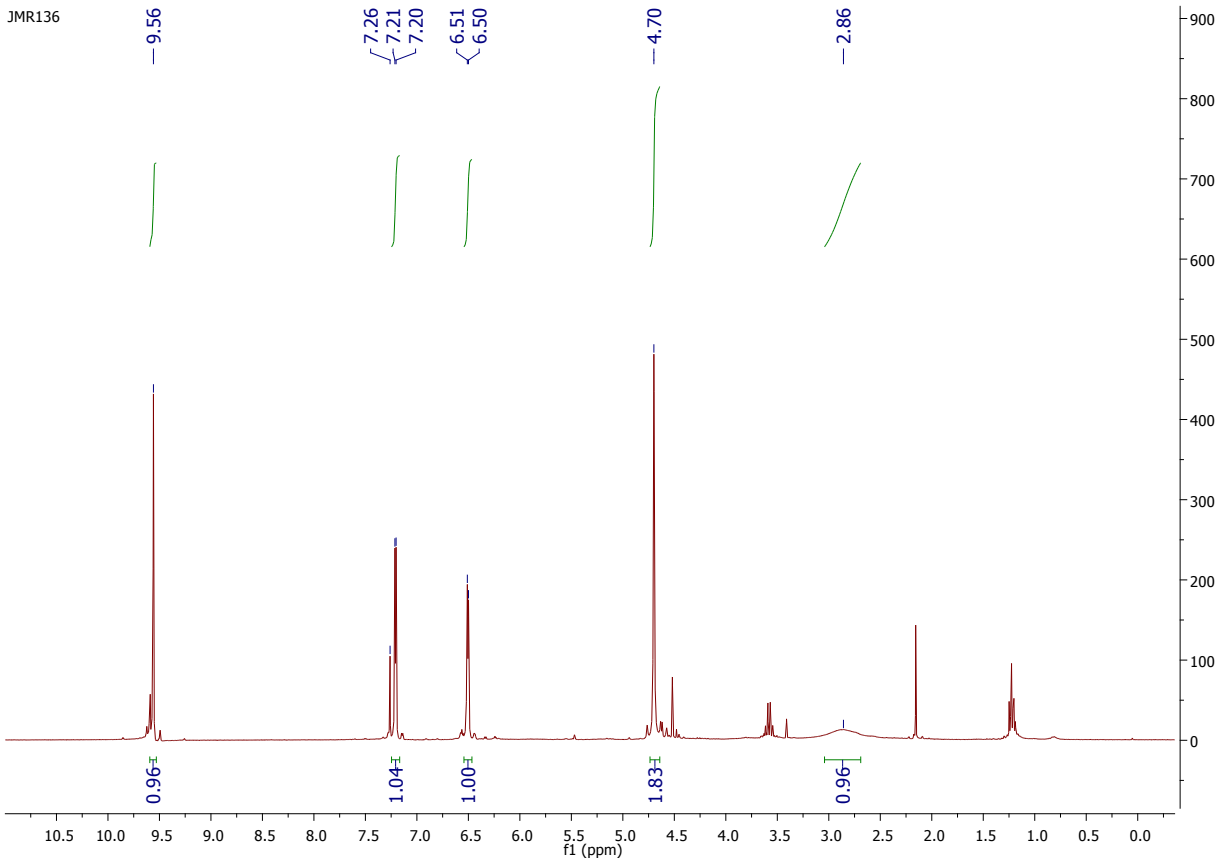

Figure S2. ^{1}H NMR, $CDCl_3$ of isolated HMF. Reaction conditions: Amberlyst 15/Cr^{3+} (0.7 g), glucose (0.7 g,), water (0.7 mL), TEAB (7 g), 120°C, 60 min.

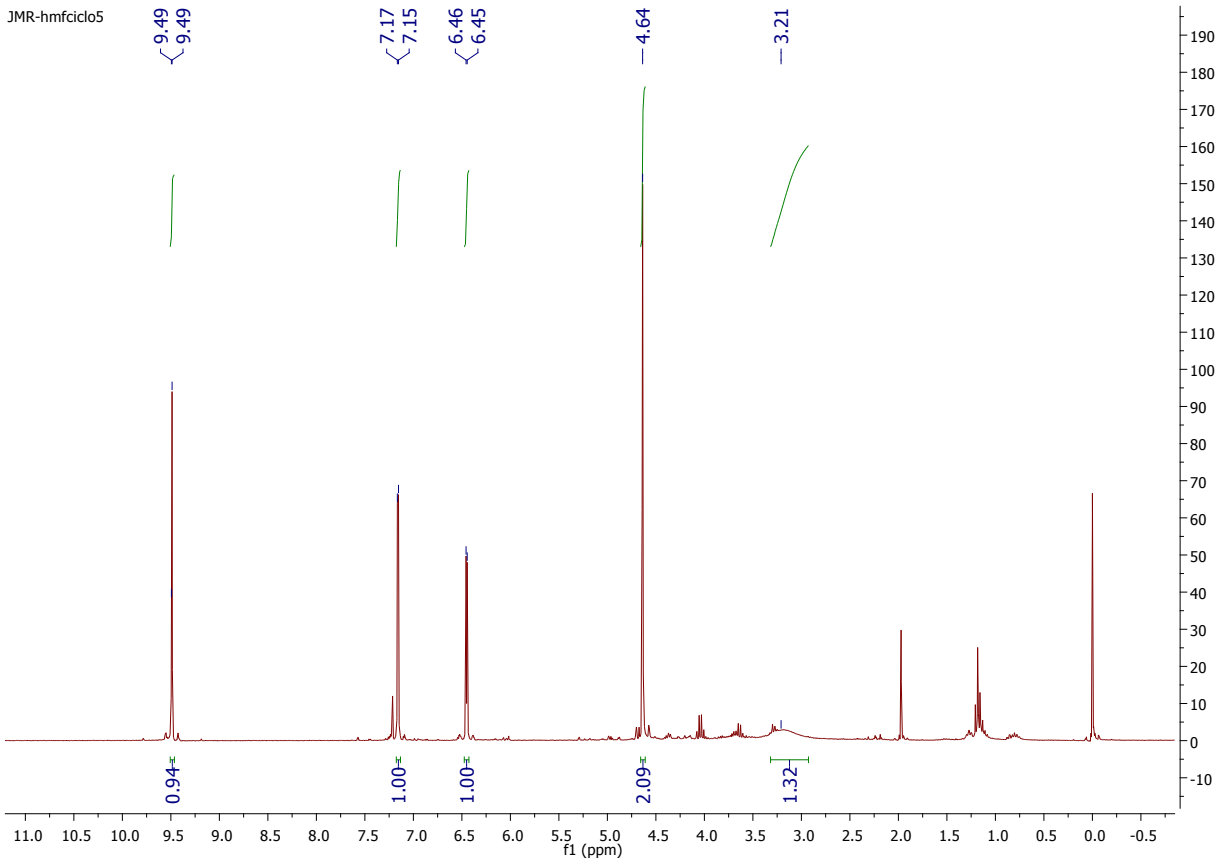

Figure S3. ^{1}H NMR, $CDCl_3$ of isolated HMF after the 5th recycle of Amberlyst 15/Cr^{3+}catalyst

Figure S4. 15 mL, Aldrich Z181064 glass preasure reactor charged with the reaction mixture and experiment set up.