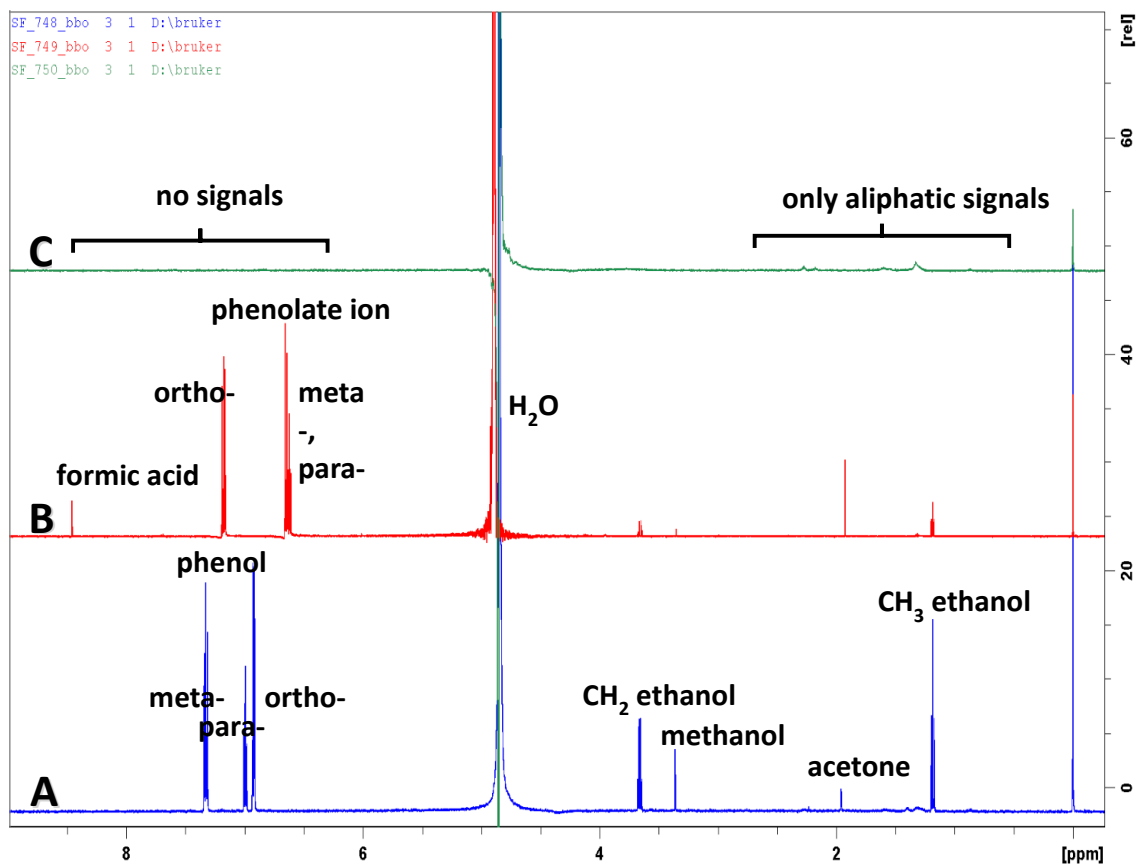
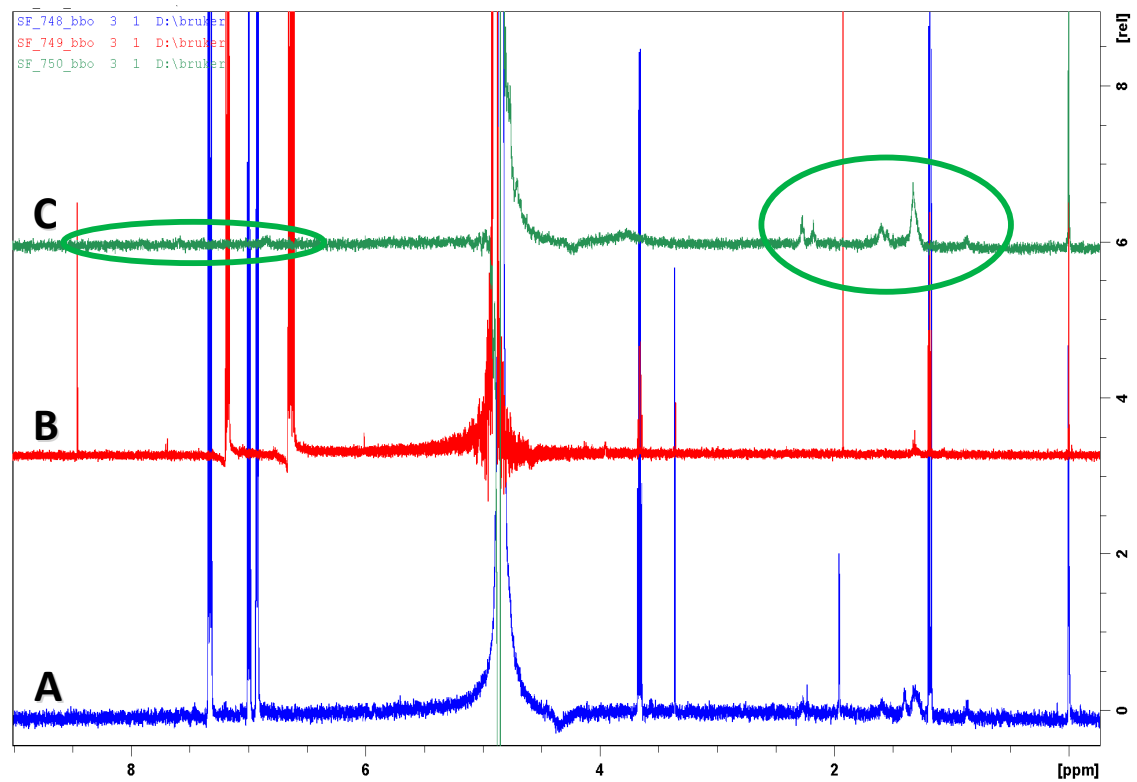


Figure S1.- Enzyme activities at different anode potentials. Initial phenol concentration 0.06 g dm<sup>-3</sup>. (A) – Phenol hydroxylase; (B) - Catechol 1,2-dioxygenase; (C) - Catechol 2,3-dioxygenase.



(S2a)



(S2b)

Figure S2.  $^1\text{H}$ -NMR spectra in water (with pre-saturation of the water signal). (S2a) - initial phenol solution (A); an alkaline extract from activated carbon particles after adsorption in abiotic process (B); sample from the broth after 140 hours of fermentation in electric field, anode potential 1 V/S.H.E. (C). (S2b) - Enlarged spectra of samples (A,B,C).