

Electrochemical Sensing of Sodium ions in Bovine Serum using 4-tert Butylcalix[4]arene as Receptor

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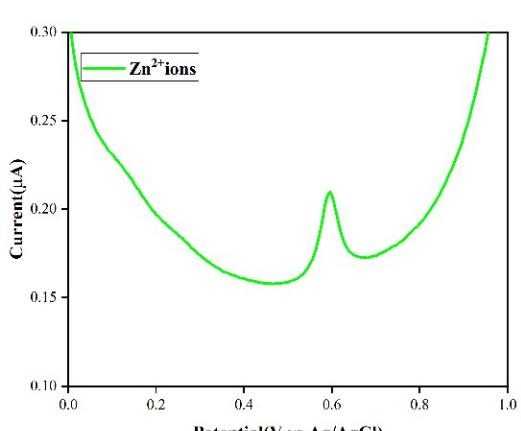
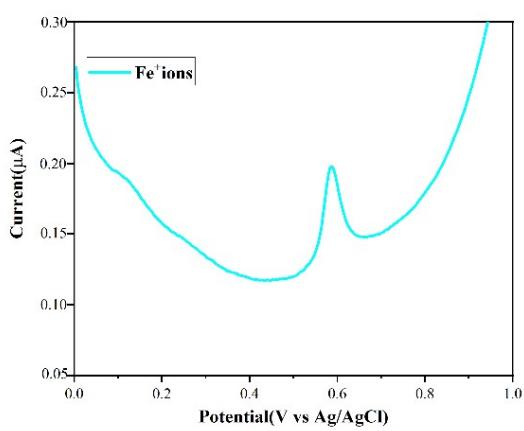
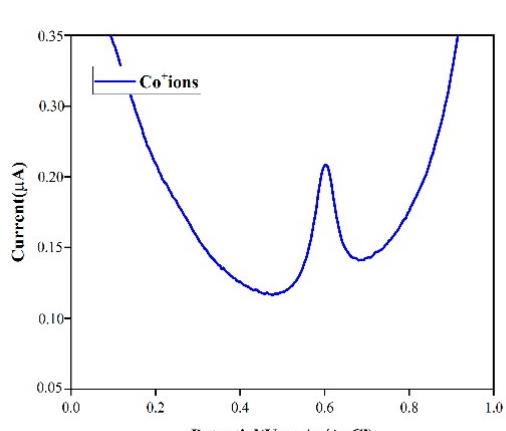
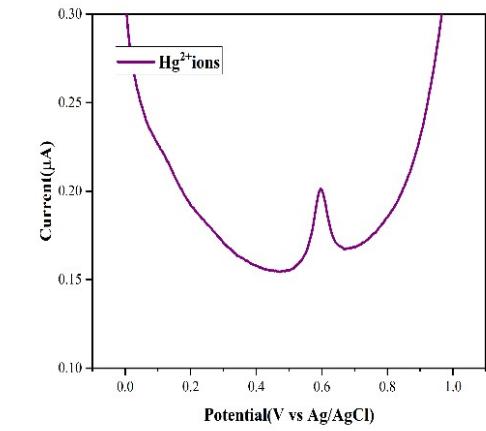
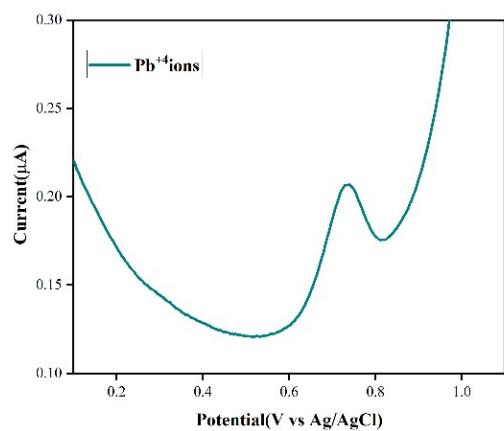
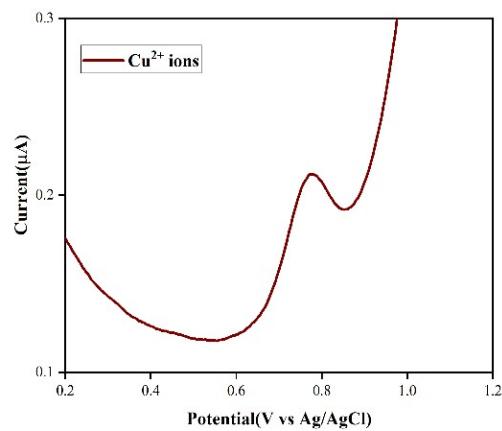
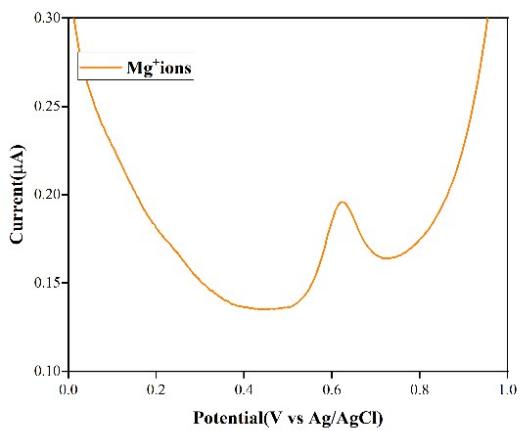
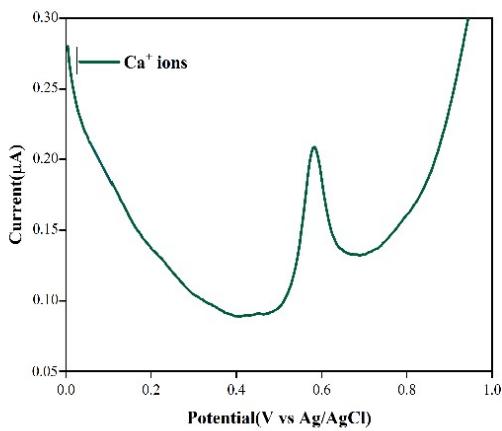
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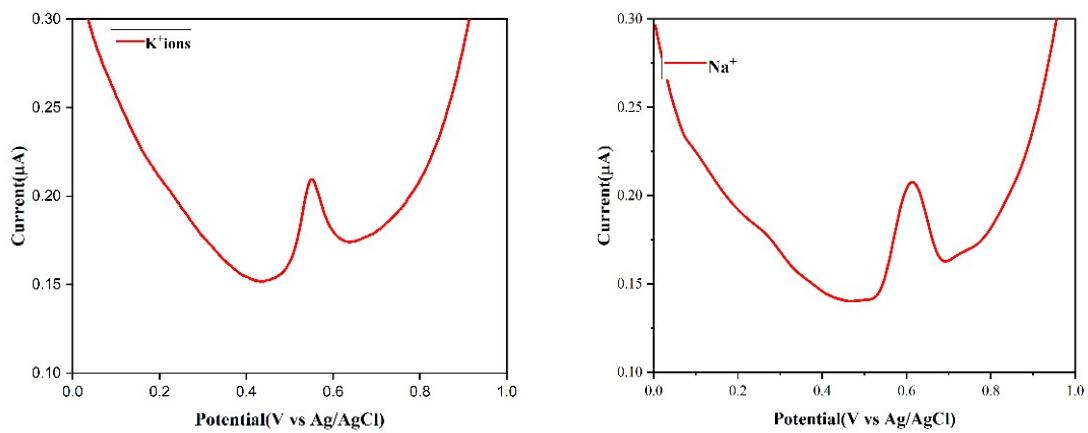


Figure S-1: Interference study performance of Na^+ ion with 4-TBC/GCE in the presence of ten-fold concentrations of various metal cations (Ca^{2+} , Mg^{2+} , Cu^{2+} , Pb^{2+} , Hg^{2+} , Co^{2+} , Fe^{2+} , Zn^{2+} , K^+ , and Na^+).

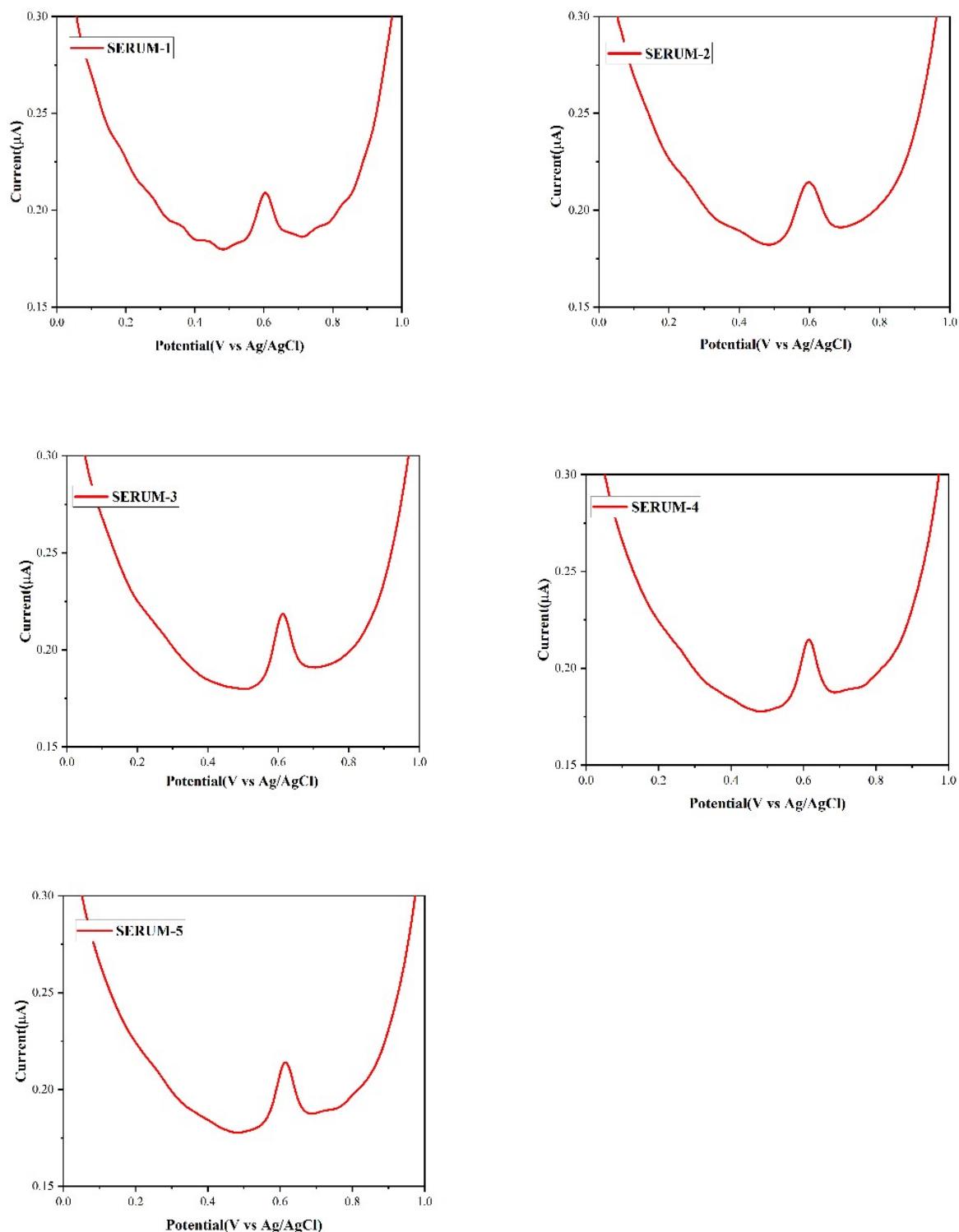


Figure S-2: DPV comprising various bovine serum samples in 0.1 M PBS (pH 7.0) to assess Na^+ ions oxidation at a scan rate of 50 mV/s^{-1} for a modified 4-tert Butylcalix[4]arene/GCE.

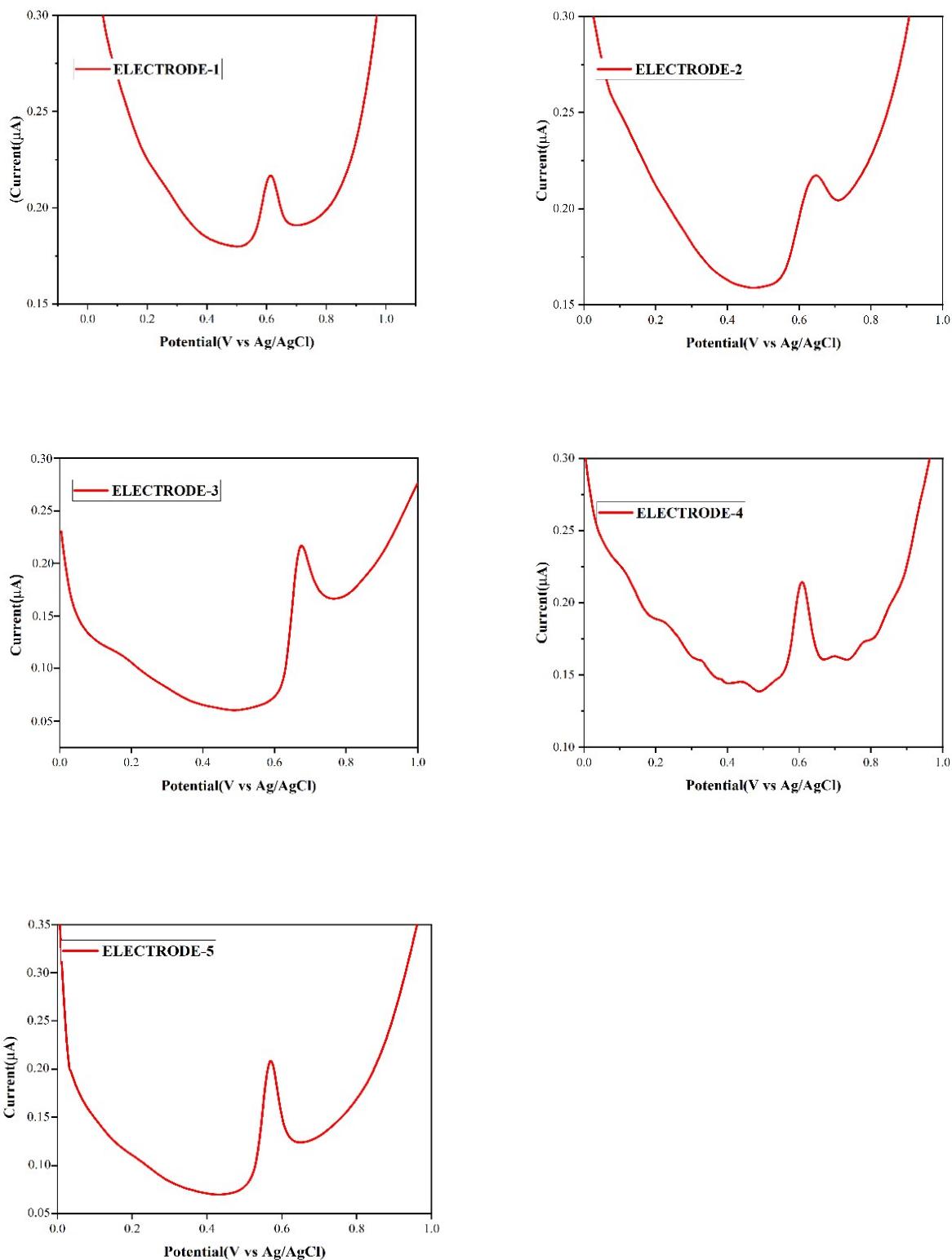


Figure S-3: DPV comprising a particular bovine serum sample in 0.1 M PBS (pH 7.0) to assess Na^+ ions oxidation at a scan rate of 50 mV/s^{-1} for various modified 4-tert Butylcalix[4]arene/GCE.

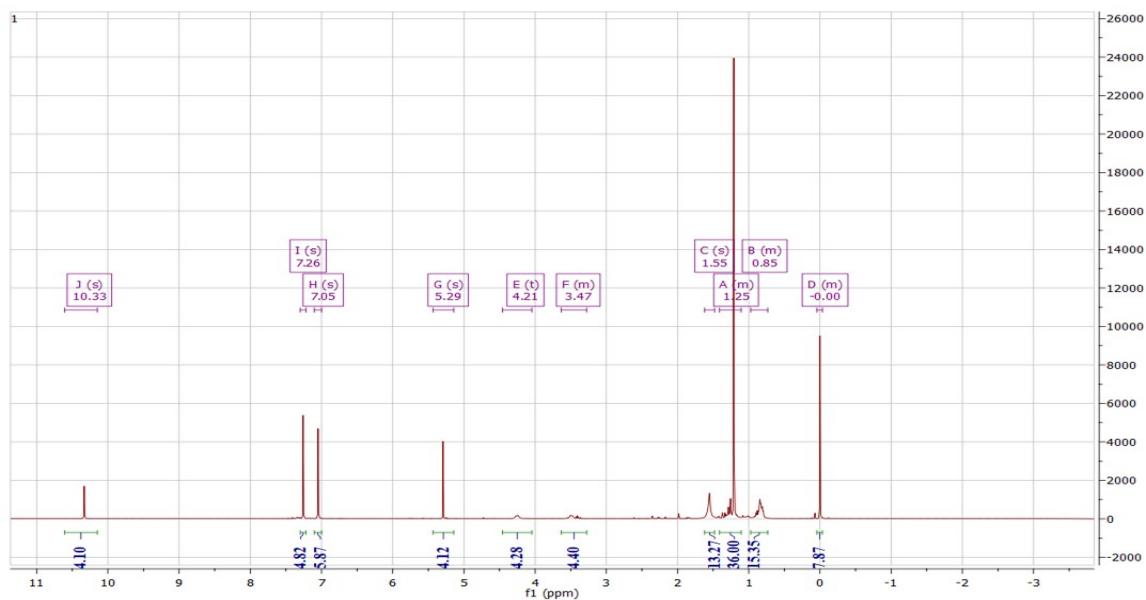


Figure S-4: ^1H NMR of 4-tert Butylcalix[4]arene in CDCl_3

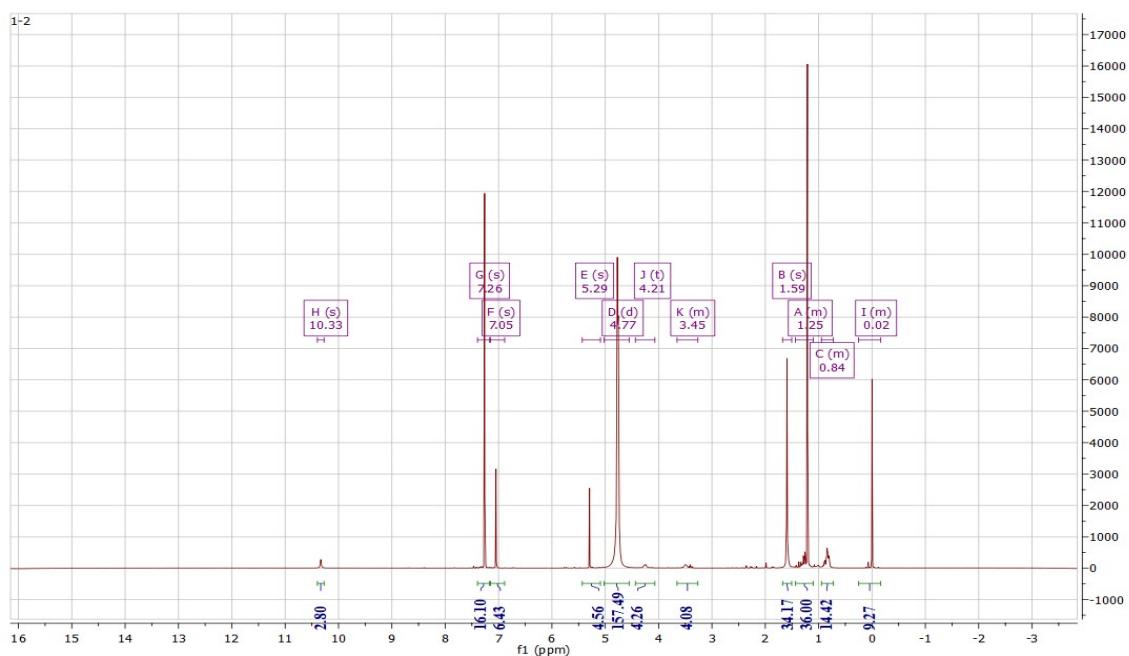


Figure S-5: ^1H NMR of 4-tert Butylcalix[4]arene + 100 μL of NaOH (100 mM) in CDCl_3

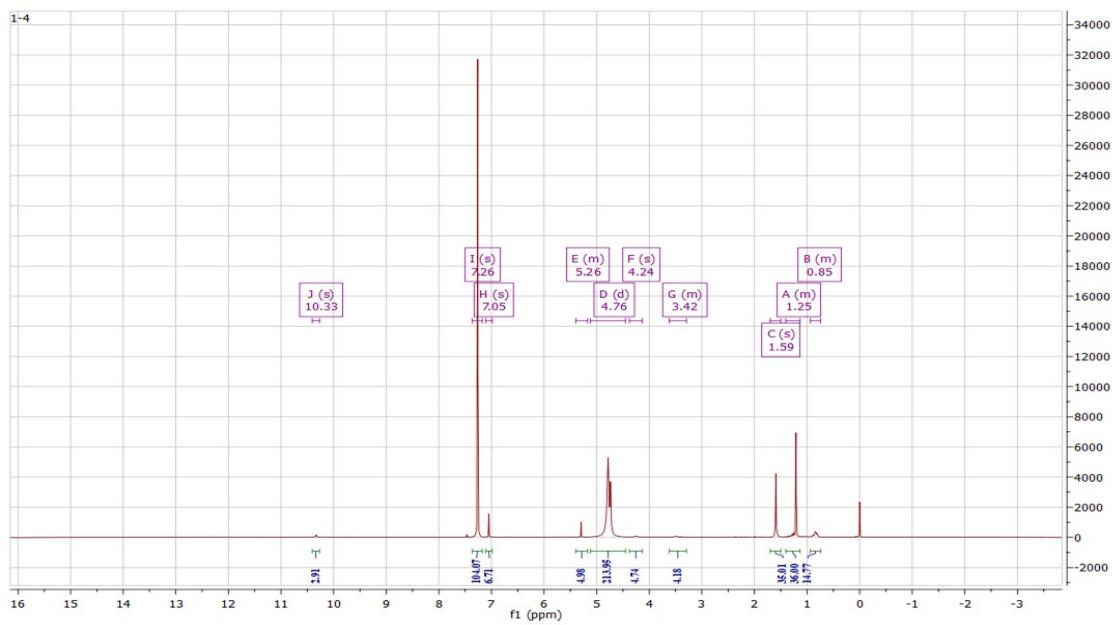


Figure S-6: H^1 NMR of 4-tert Butylcalix[4]arene + 200 μL of NaOH(100mM) in CDCl_3

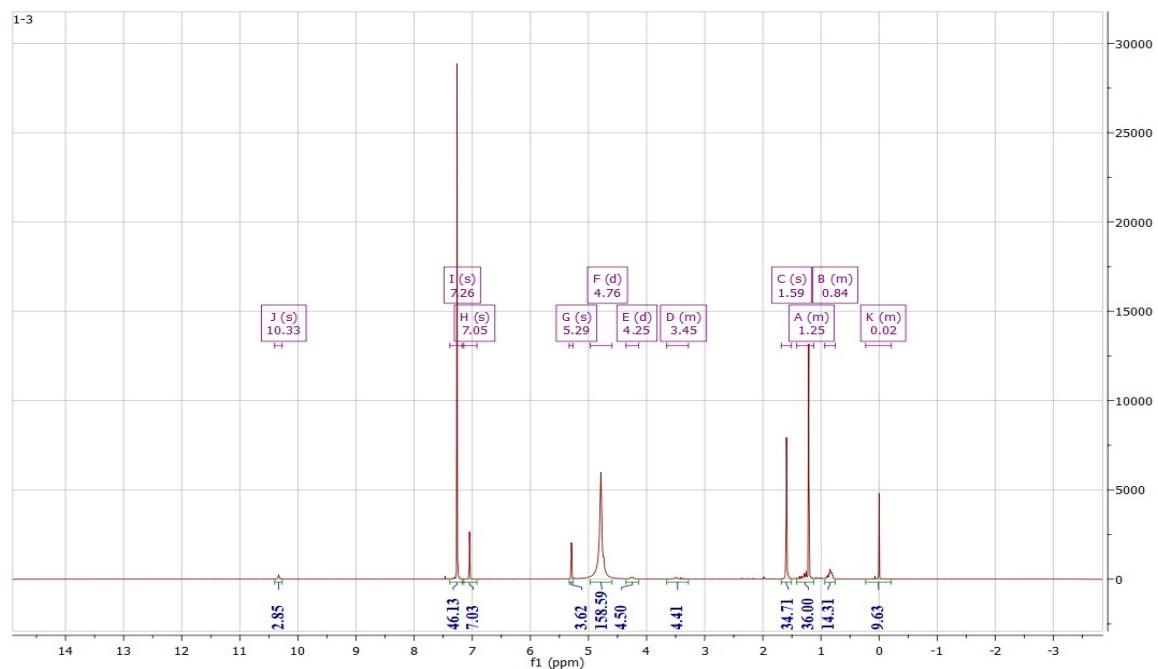


Figure S-7: H^1 NMR of 4-tert Butylcalix[4]arene + 300 μL of NaOH(100mM) in CDCl_3

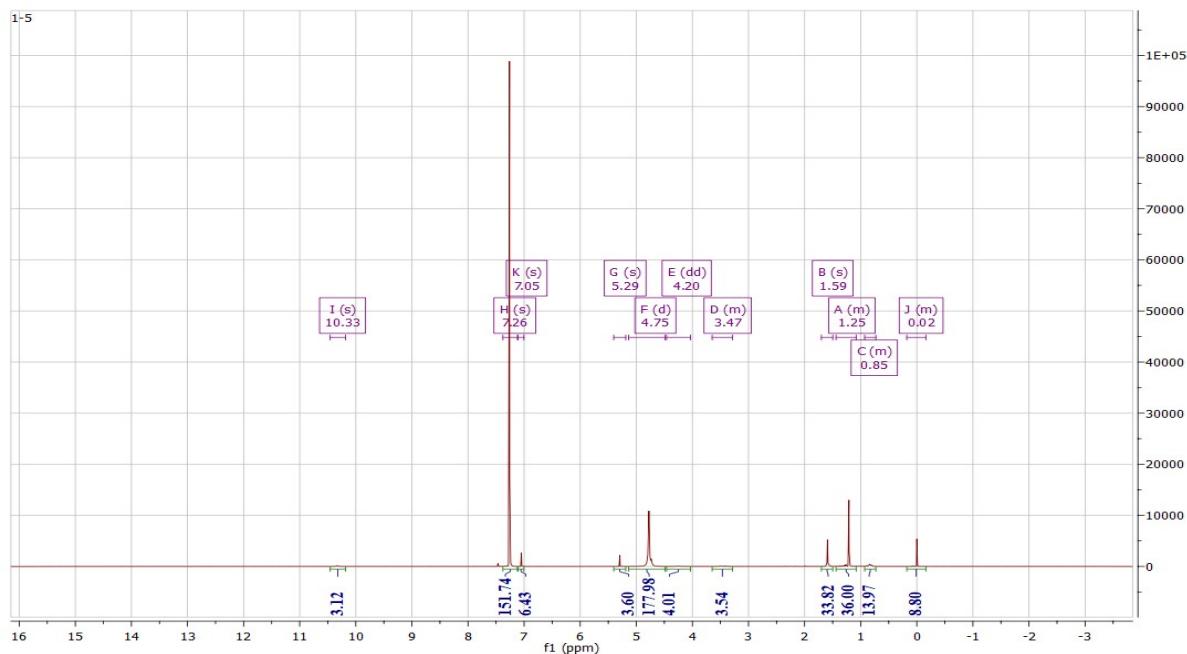


Figure S-8: H^1 NMR of 4-tert Butylcalix[4]arene + 400 μL of NaOH(100mM) in CDCl_3

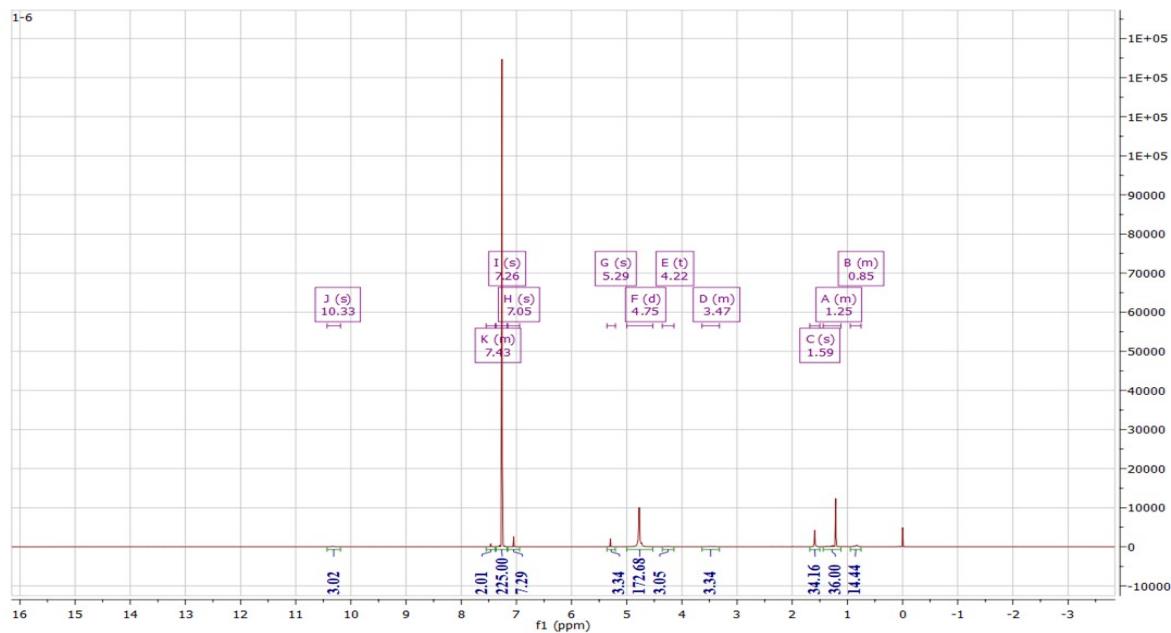


Figure S-9: H^1 NMR of 4-tert Butylcalix[4]arene + 500 μL of NaOH(100mM) in CDCl_3