Electronic Support Information (ESI)

Figure S1 Cyclic voltammetric responses obtained in the absence (solid line) and presence (dashed line) of 10 mgL⁻¹ phenol using the BDDE obtained in a pH 10 carbonate buffer solution containing 400 mgL⁻¹ 4-dimethylaminoantipyrine. Starting potential: -1.2V, first vertex potential: +1.0V, end potential: -1.2V. Scan rate: 50 mVs⁻¹.



Figure S2 Cyclic voltammetric responses of the BDDE obtained in the absence (solid line) and presence (dashed line) of 10 mgL⁻¹ phenol in a pH 10 carbonate buffer solution containing 400 mgL⁻¹ antipyrine. Starting potential: -1.2V, first vertex potential: +1.0V, end potential: -1.2V. Scan rate: 50 mVs⁻¹.



Figure S3. Cyclic voltammetric response of the BDDE in the absence (solid line) and presence (dashed line) of 10 mgL⁻¹ phenol in pH 10 carbonate buffer solution containing 400 mgL⁻¹ 3-methyl-1-(2-phenylethyl)-2-pyrazolin-5-one. Starting potential: -1.2V, first vertex potential: +1.0V, end potential: -1.2V. Scan rate: 50 mVs⁻¹.



Figure S4. Cyclic voltammetric response of the BDDE in the absence (solid line) and presence (dashed line) of 10 mgL⁻¹ phenol in pH 10 carbonate buffer solution containing 400 mgL⁻¹ 3-amino-1-(1-naphthylmethyl)-2-pyrazolin-5-one. Starting potential: -1.2V, first vertex potential: +1.0V, end potential: -1.2V. Scan rate: 50 mVs⁻¹.



Figure S5. Cyclic voltammetric response of the BDDE in the absence (solid line) and presence (dash line) of 10 mgL⁻¹ phenol in Carbonate Buffer Solution pH 10 containing 400 mgL⁻¹ 4-amino-1,2-dimethyl-3-pentadecyl-3-pyrazolin-5-one hydrochloride. Starting potential: -1.2V, first vertex potential: +1.0V, end potential: -1.2V. Scan rate: 50 mVs⁻¹.



Figure S6. Cyclic voltammetric response of the BDDE in the absence (solid line) and presence (dash line) of 10 mgL⁻¹ phenol in pH 10 carbonate buffer solution containing 400 mgL⁻¹ 3-amino-1-(2-amino-4-methylsulfonylphenyl)-2-pyrazolin-5- one hydrochloride. Starting potential: -1.2V, first vertex potential: 1.0V, end potential: -1.2V. Scan rate: 50 mVs⁻¹.



Figure S7. Cyclic voltammetric response of the BDDE in the absence (solid line) and presence (dashed line) of 10 mgL⁻¹ phenol in pH 10 carbonate buffer solution containing 400 mgL⁻¹ 4-aminoantipyrine. Starting potential: -1.2V, first vertex potential: +1.0V, end potential: -1.2V. Scan rate: 50 mVs⁻¹.

