

Supplementary information

Synthesis and fluorescent properties of 2'-benzyloxy flavone-a dual probe for selective detection of picric acid and pH sensing

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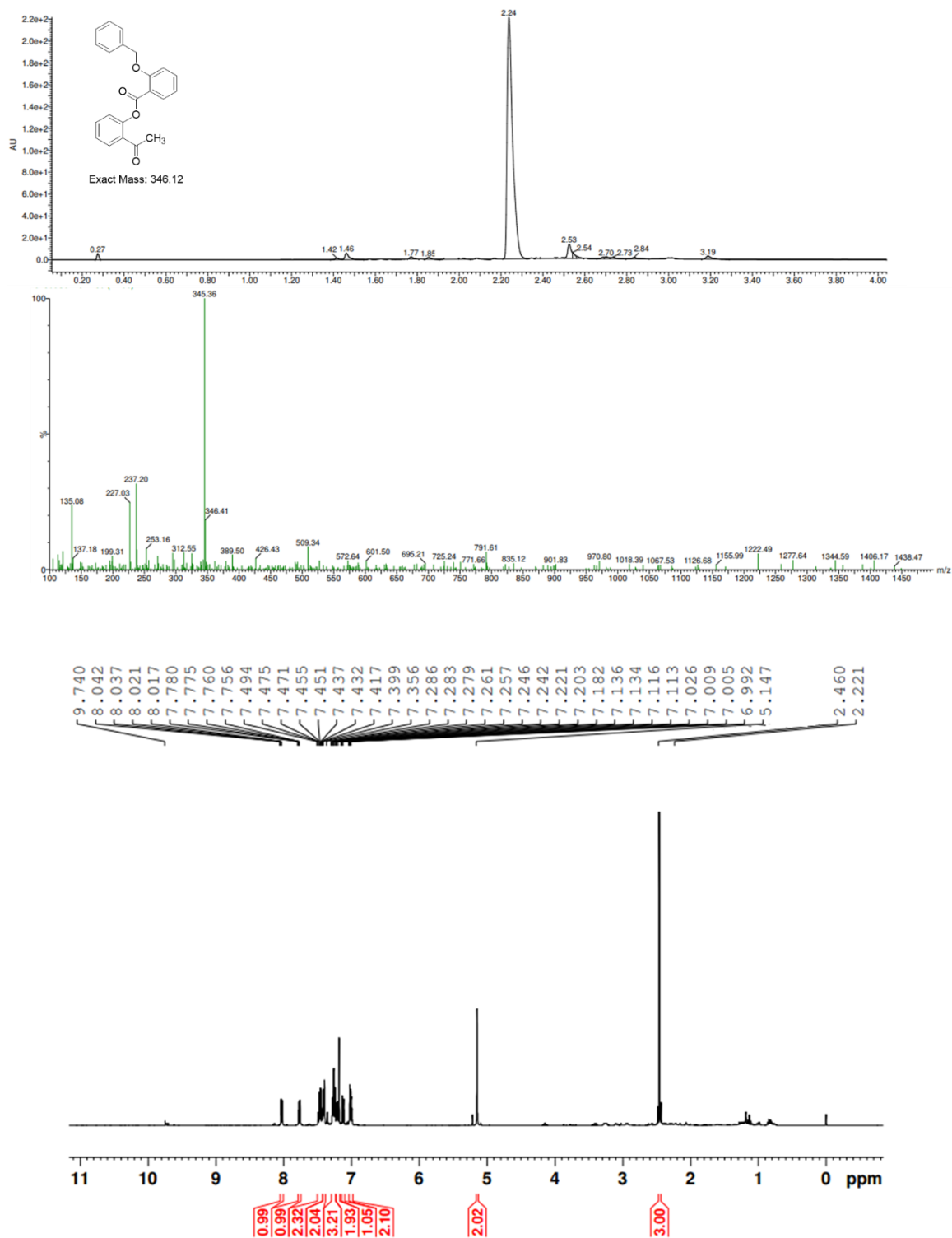
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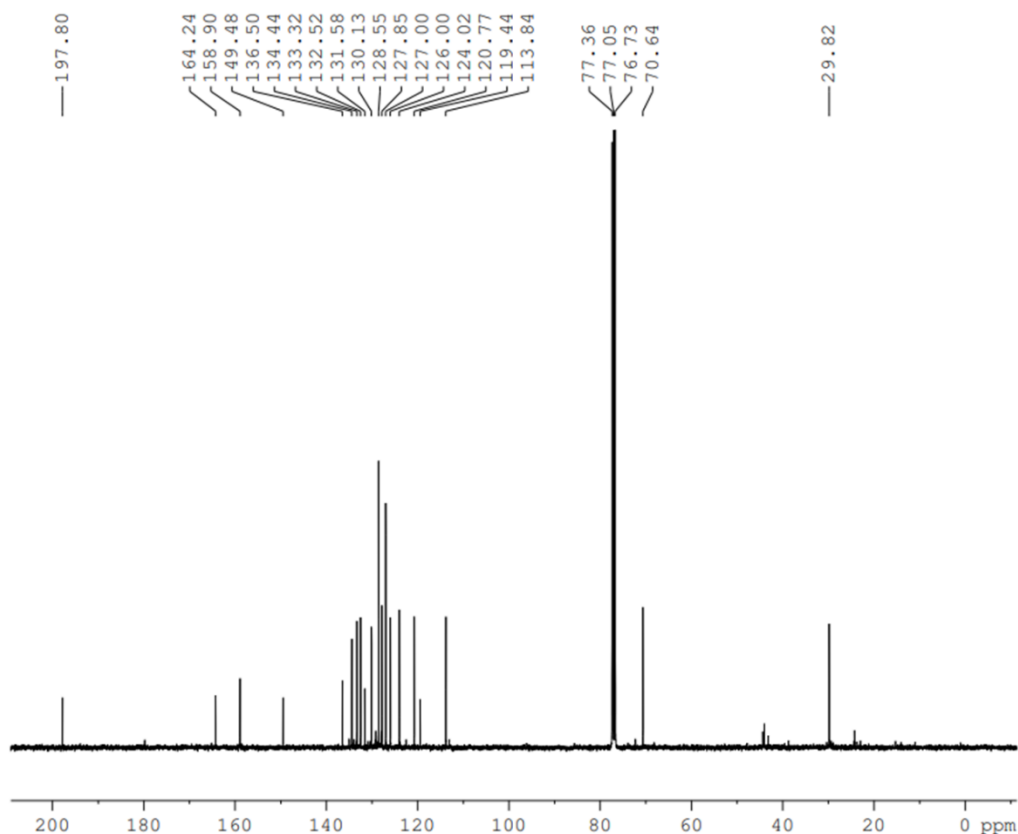
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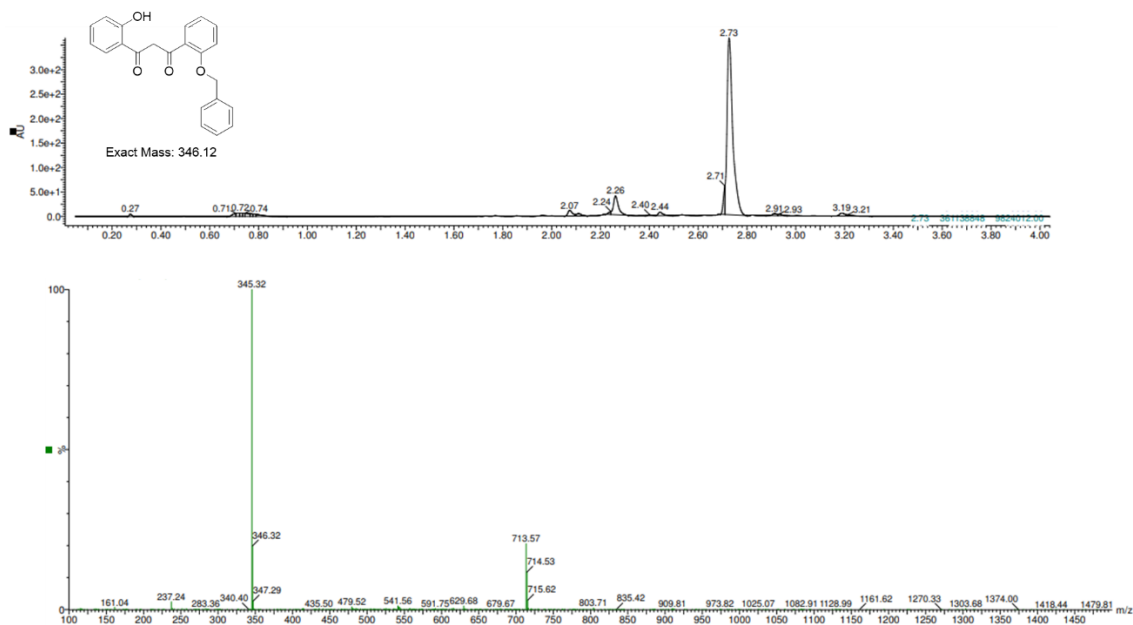
Spectral data of synthesised compounds

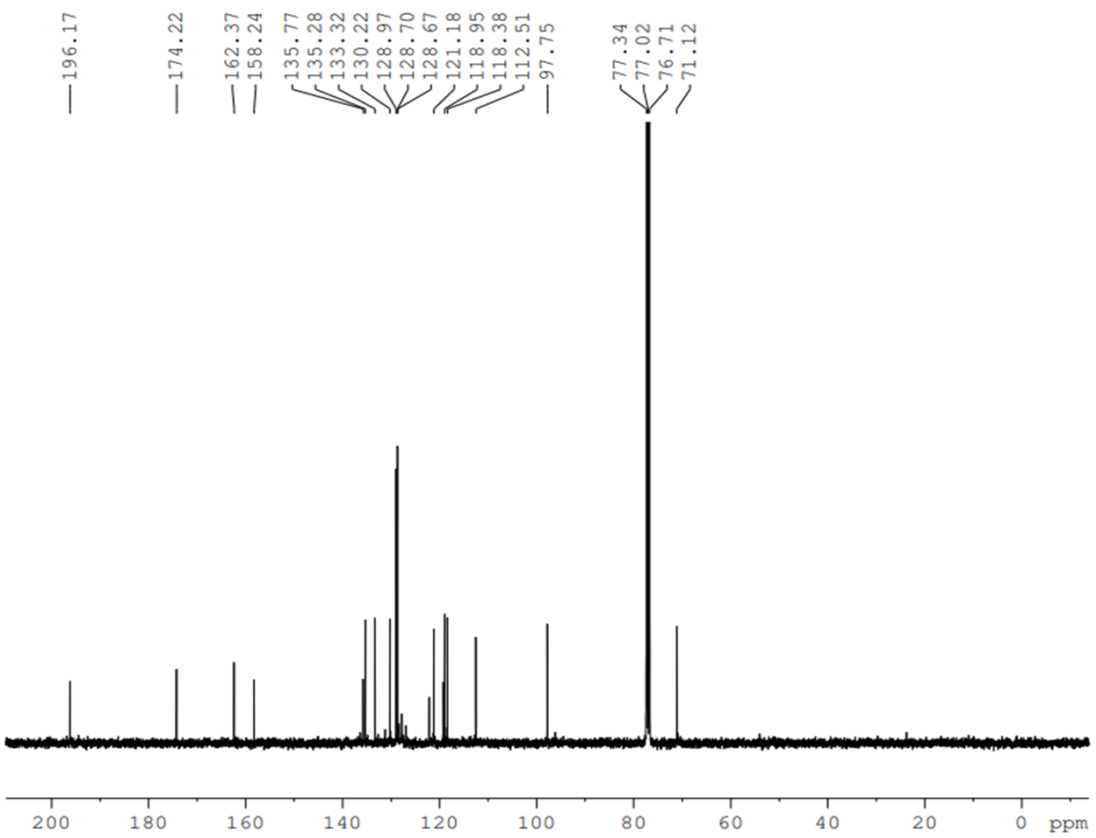
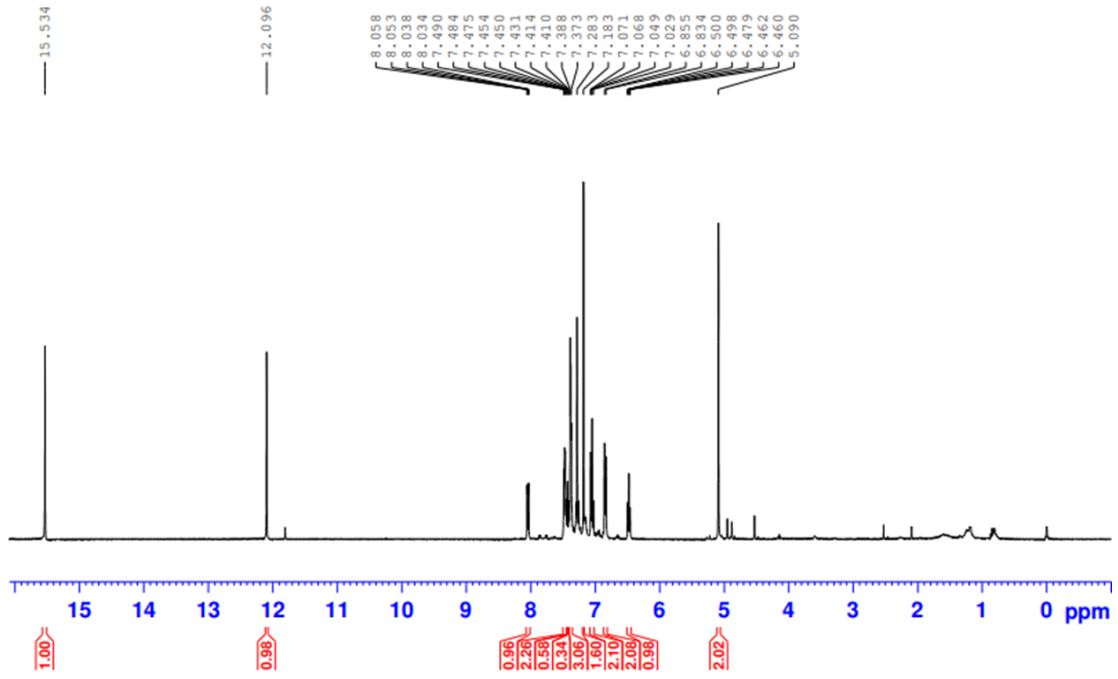
2-acetylphenyl-2-(benzyloxy) benzoate (3): yield-85%: ^1H NMR (CDCl_3) δ : 2.46, s, 3H; 5.14, s, 2H; 6.99, m, 2H; 7.11, dd, 1H; 7.20, m, 2H; 7.28, m, 3H; 7.41, m, 2H; 7.7, dd, 1H; 8.04, dd, 1H. ^{13}C NMR (CDCl_3) δ : 197, 164, 158, 149, 136, 134, 133, 132, 131, 130, 128, 127.8, 127, 126, 124, 120, 119, 113, 70, 29. Mass data $[\text{M}-\text{H}]^-$; 345.12 (Exact mass-346.12).





1-(2-(benzyloxy) phenyl)-3-(2-hydroxyphenyl) propane-1,3-dione (4): yield-78%: ^1H NMR (CDCl_3) δ : 5.09, *s*, 2H; 6.46, *t*, 1H; 6.83, *d*, 2H ($J = 8.4\text{Hz}$); 7.02, *dd*, 2H; 7.38, *m*, 2H; 7.41, *m*, 3H; 8.05, *dd*, 1H; 12.09, *s*, 1H; 15.5, *s*, 1H. ^{13}C NMR (CDCl_3) δ : 196, 174, 162, 158, 135.7, 135.2, 133, 130, 128.9, 128.7, 128.6, 121.1, 118.9, 118.3, 112, 97, 71. Mass data[M-H]⁻; 345.32 (Exact mass-346.12).





2'-Benzoyloxy flavone (5): yield-72%: ^1H NMR (CDCl_3) δ : 5.18, *s*, 2H; 6.99, *m*, 2H; 7.16, *d*, 2H ($J = 6.4$ Hz); 7.24, *d*, 1H ($J = 6.8$ Hz); 7.3, *t*, 1H; 7.33, *m*, 4H; 7.43, *d*, 1H ($J = 8.4$ Hz); 7.61, *t*, 1H; 7.77, *dd*, 1H; 8.16, *dd*, 1H. ^{13}C NMR (CDCl_3) δ : 178, 162, 157, 156, 136, 133, 132, 129, 128.7, 128.1, 127, 125.7, 125.1, 123, 121.4, 121.1, 118, 113, 112, 70. Mass data $[\text{M}+\text{H}]^+$; 329.35 (Exact mass-328.11).

