Supplementary Materials

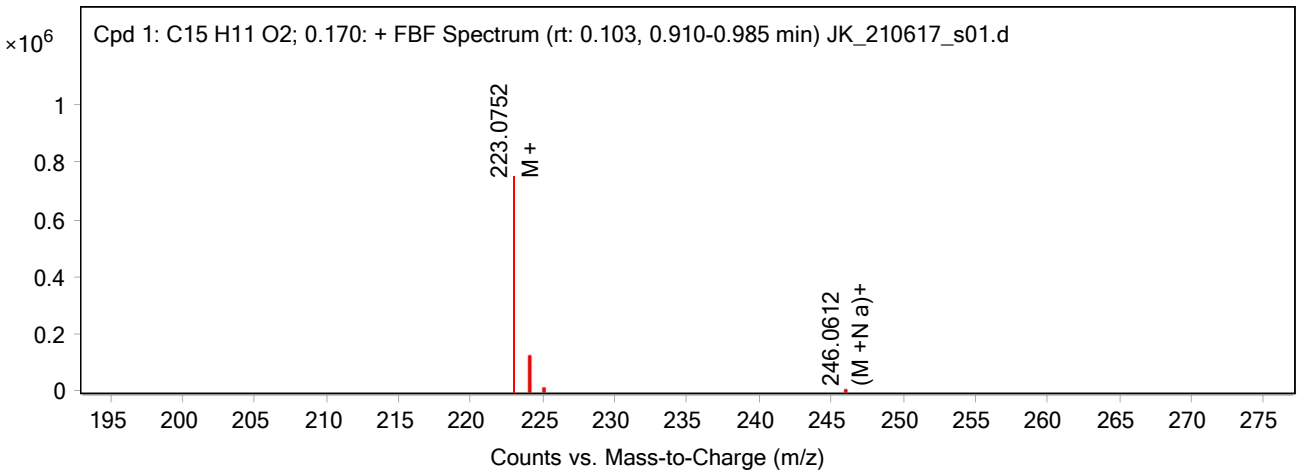

Figure S1. Mass spectrum of **6a**.

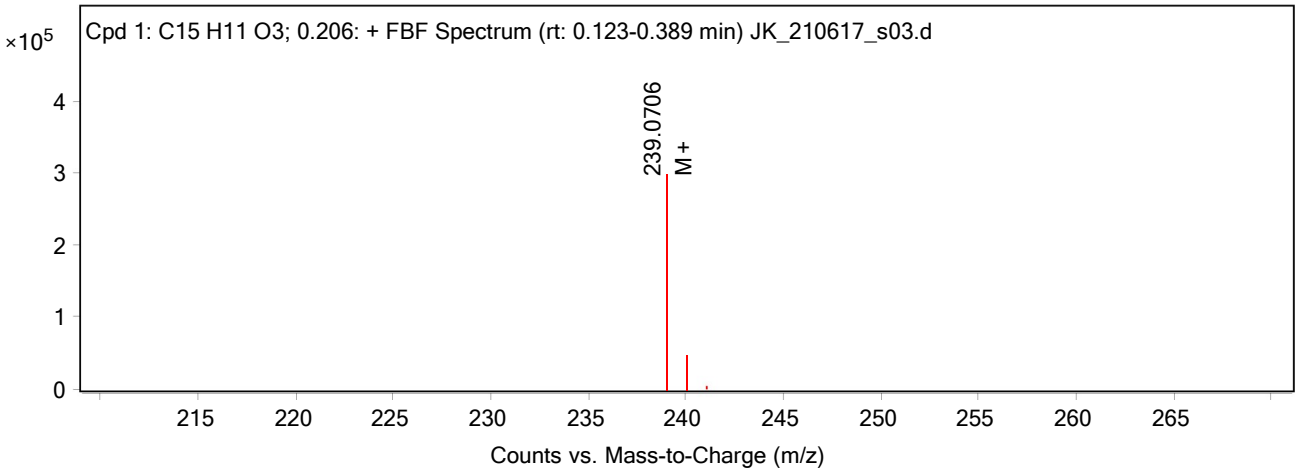

Figure S2. Mass spectrum of **6b**.

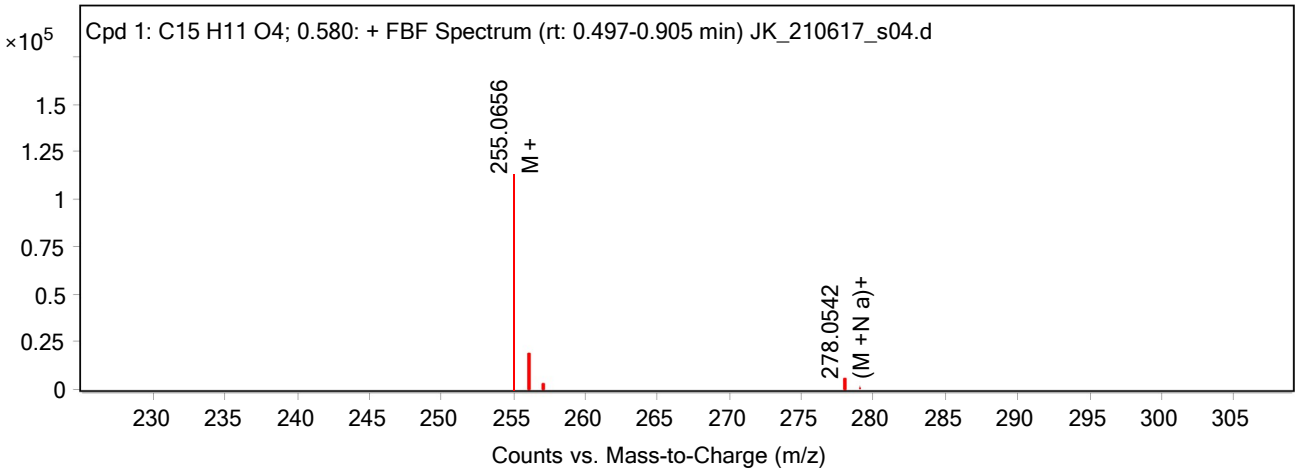

Figure S3. Mass spectrum of **6c**.

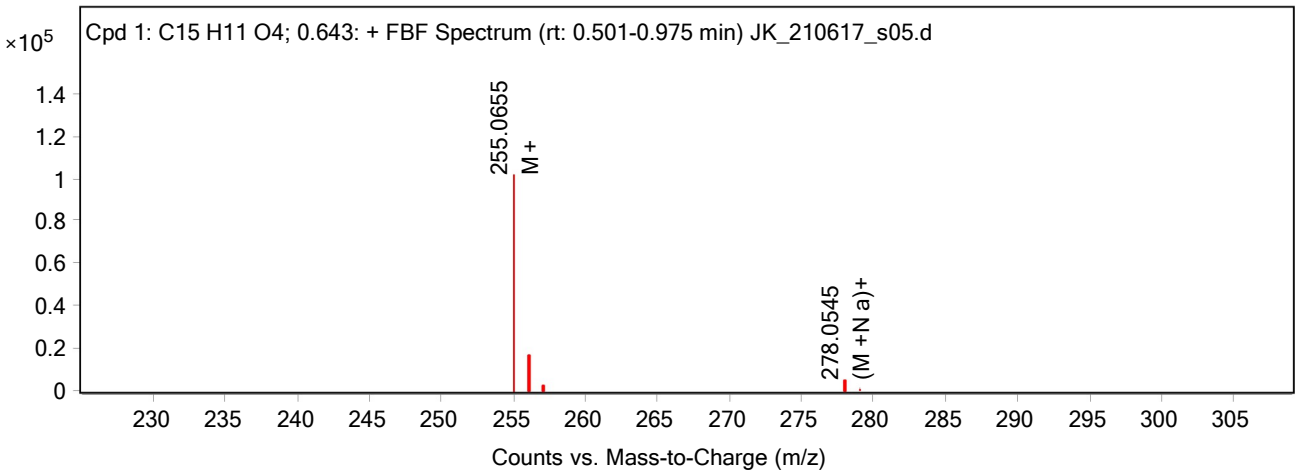

Figure S4. Mass spectrum of **6d**.

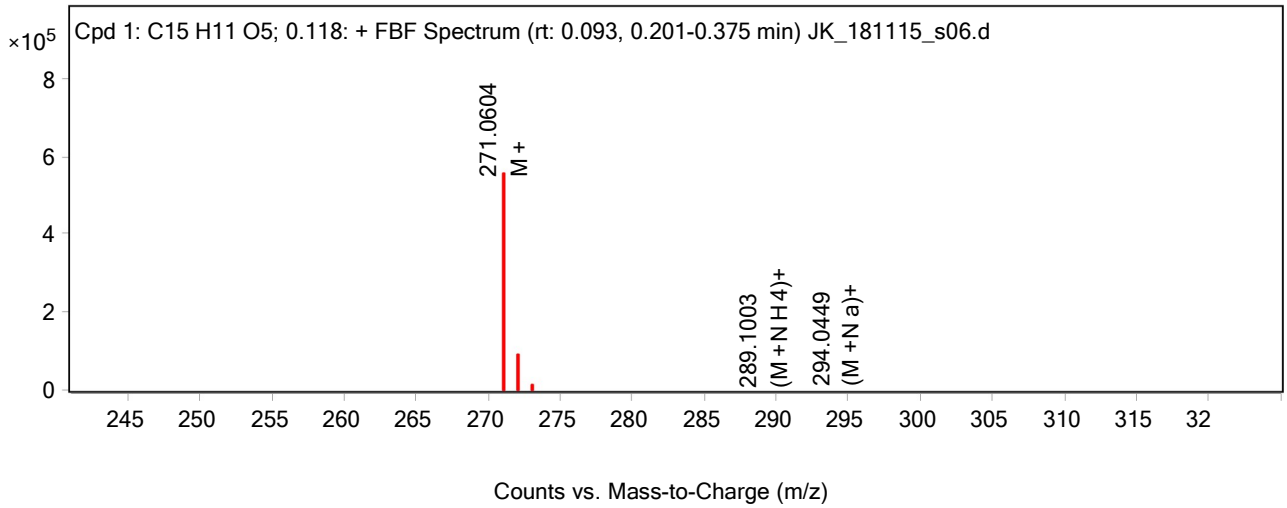

Figure S5. Mass spectrum of **6e**.

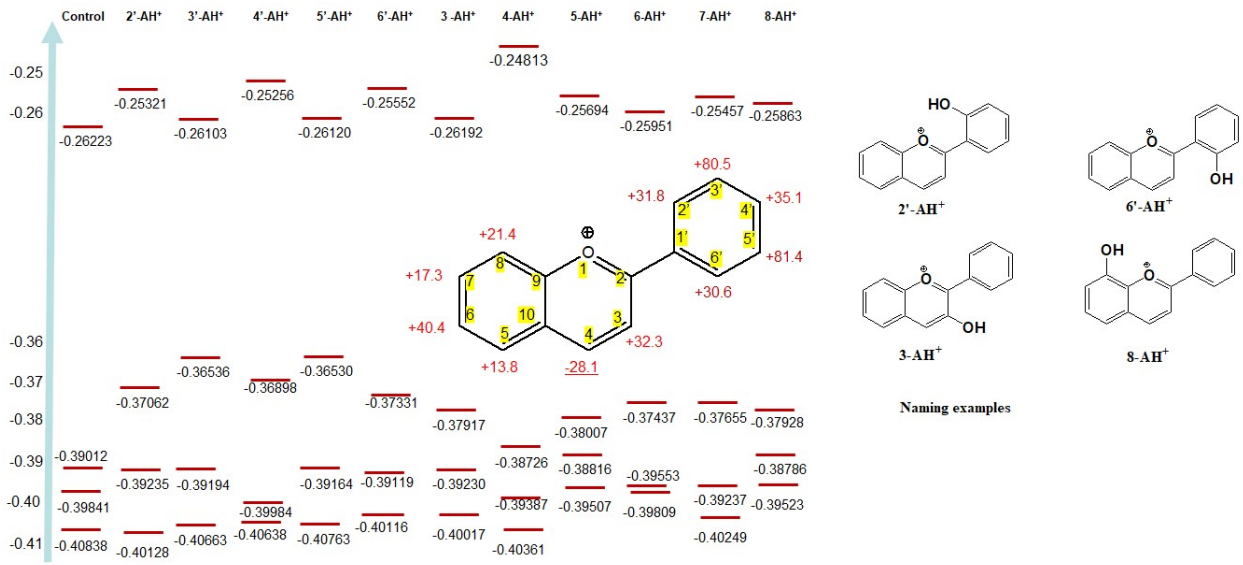

Figure S6. Energy levels (on the left, in Hartree) and energy gaps (in-set on the left, in nanometers for transitions from HOMO to LUMO) for the flavylium ions with one OH group. Numbers on the graph for energy levels are in Hartree, while numbers on the flavylium ions are converted to nanometers. Example structures and name symbols (on the right).

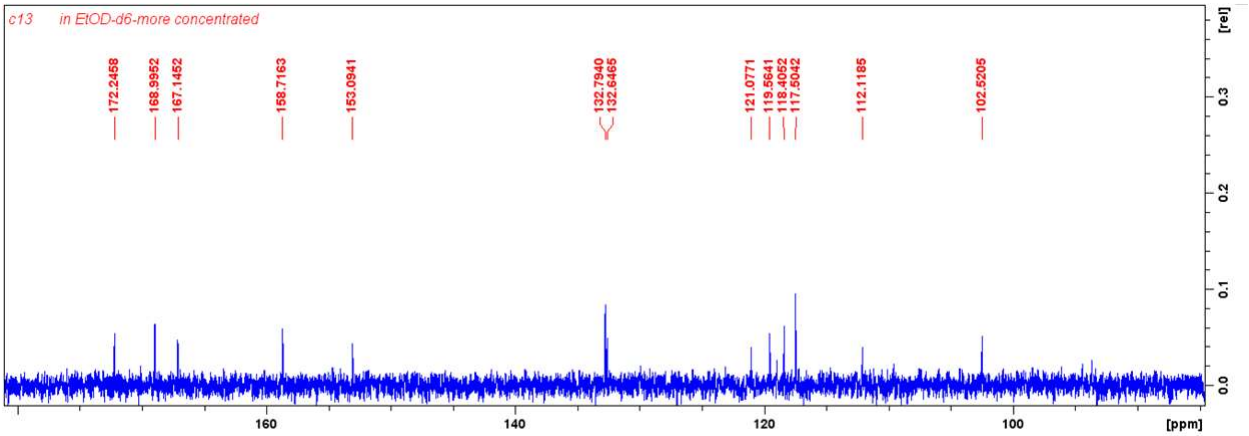

Figure S7. ^{13}C-NMR spectrum of **6b** in ethanol-d6.

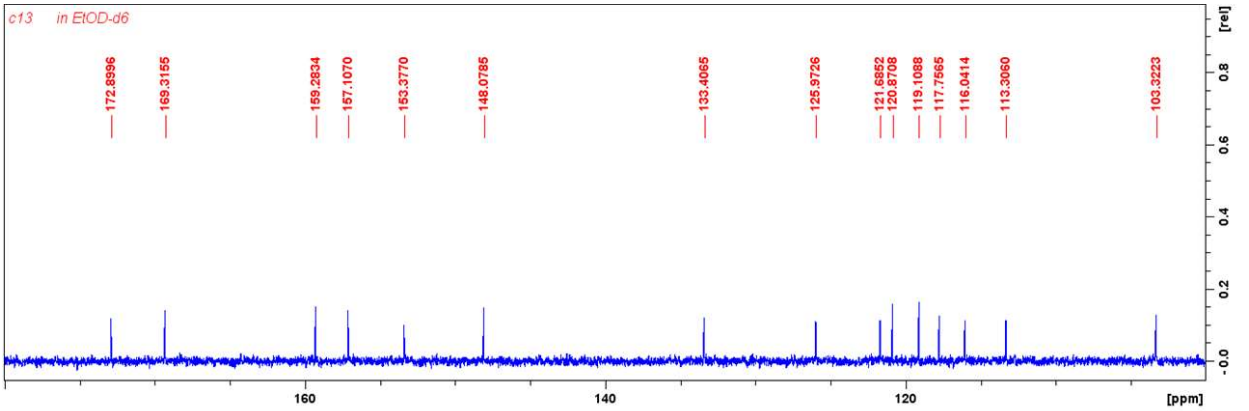

Figure S8. ^{13}C-NMR spectrum of **6c** in ethanol-d6.

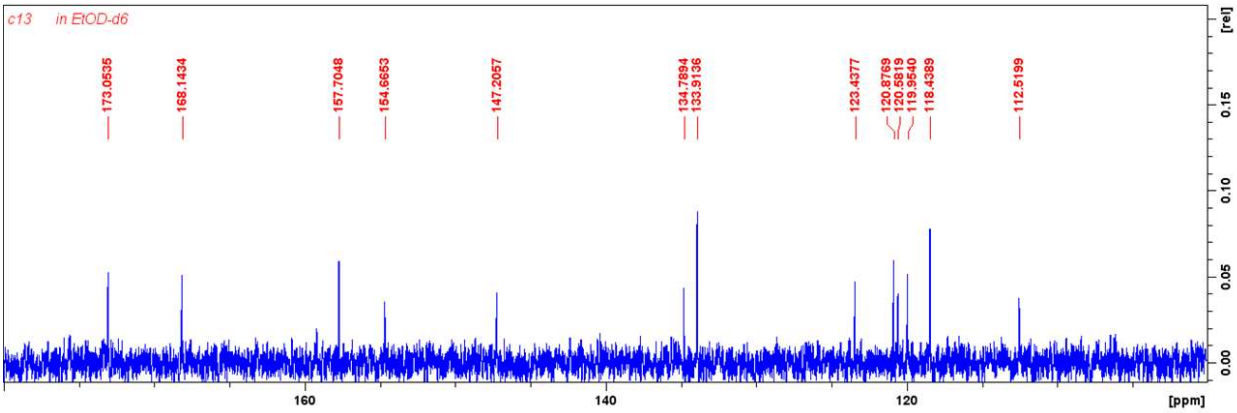

Figure S9. ^{13}C-NMR spectrum of **6d** in ethanol-d6.

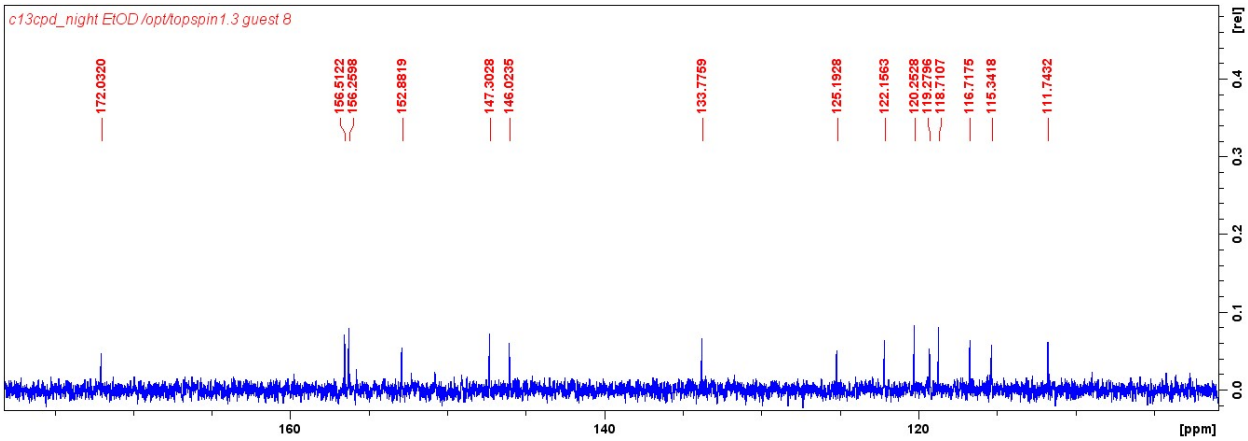

Figure S10. ^{13}C-NMR spectrum of **6e** in ethanol-d6.

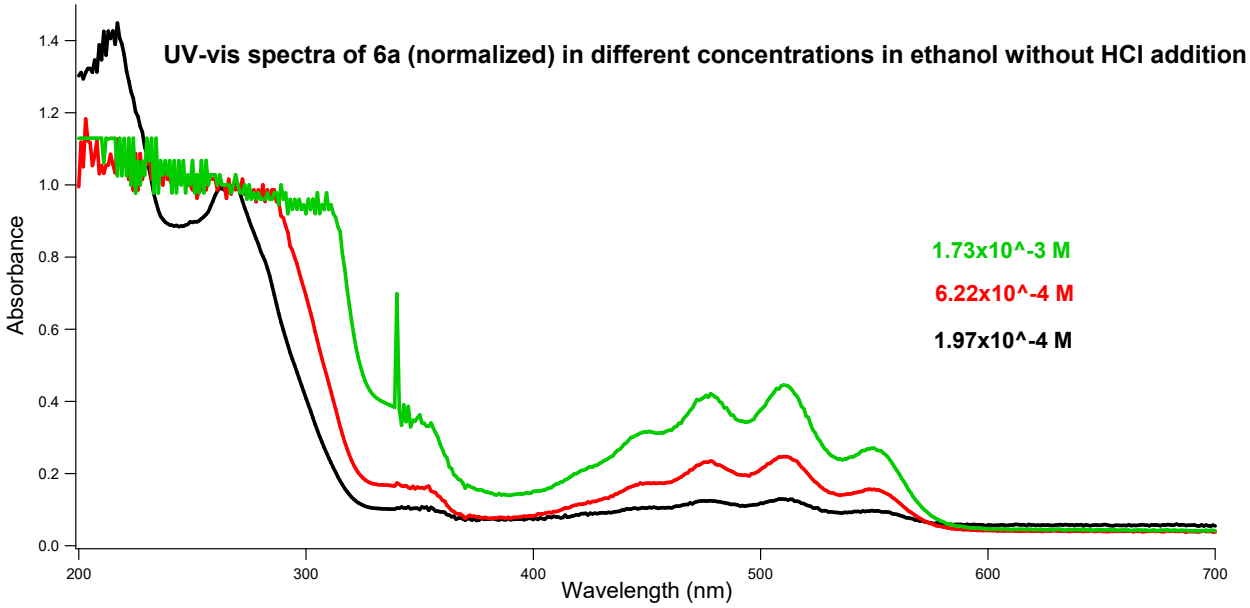

Figure S11. UV-vis spectra of 6a (normalized) in different concentrations in ethanol without HCl addition.