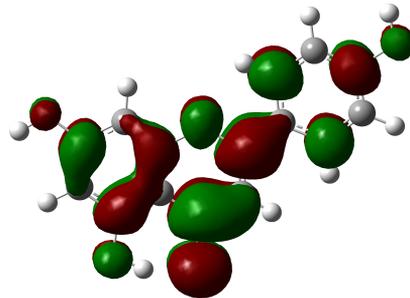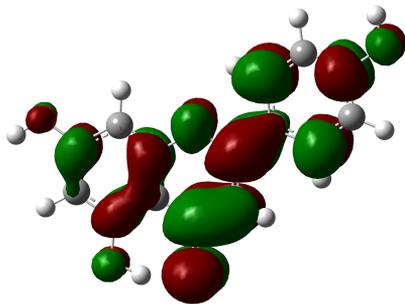$S_1(\pi\pi^*)$

$S_2(n\pi^*)$