

Table 2. Computed VEE in aqueous solution for 9-methyl adenine PCM/TD-PBE0//PCM/PBE0/6-31G(d) calculations in aqueous solution

6-31G(d)			
	Energy(Osc. Str.)	Orbitals	Description
S1	5.19(0.25)	H→L	π/π^*
S2	5.31(0.02)	H-1→L	n/π^*
S3	5.42(0.05)	H→L+1	π/π^*
S6	6.28(0.21)	H-2→L	π/π^*
6-31+G(d,p)			
S1	5.05(0.31)	H→L	π/π^*
S2	5.31(0.01)	H-1→L	n/π^*
S3	5.33(0.04)	H→L+1	π/π^*
S6	6.11(0.28)	H-2→L	π/π^*
6-311+G(2d,2p)			
S1	5.00(0.30)	H→L	π/π^*
S2	5.27(0.03)	H→L+1	π/π^*
S3	5.29(0.0)	H-1→L	n/π^*
S6	6.05(0.28)	H-2→L	π/π^*
9MA·4 H ₂ O			
S1	5.09(0.24)	H→L	π/π^*
S2	5.37(0.12)	H→L+1	π/π^*
S3	5.61(0.00)	H-1→L	n/π^*
S6	6.30(0.18)	H-2→L	π/π^*

Experimental absorption maximum: 4.76 (1) Another strong feature at ≈ 6 eV (2)

1. Cohen, B., Hare, P.M. & Kohler. *B. J. Am. Chem. Soc.* **125**, 13594.
2. Clark, L.B., Peschel, G. G. & Tinoco, Jr. I. (1965) *J. Phys. Chem.* **69** 3615-3618.