

Supplementary Information

Hybrid density functional theory / molecular mechanics calculations of two-photon absorption of dimethylamino nitro stilbene in solution

N. Arul Murugan[†], Jacob Kongsted[‡], Zilvinas Rinkevicius[†], Kęstutis Aidas[†],
Kurt V. Mikkelsen[§] and Hans Ågren[†]

[†]Department of Theoretical Chemistry and Biology

School of Biotechnology

Royal Institute of Technology

SE-10691 Stockholm, Sweden

[‡]Department of Physics and Chemistry

University of Southern Denmark

Campusvej 55

DK-5230 Odense M, Denmark

[§]Department of Chemistry

H. C. Ørsted Institute, University of Copenhagen

Universitetsparken 5

DK-2100 Copenhagen Ø, Denmark

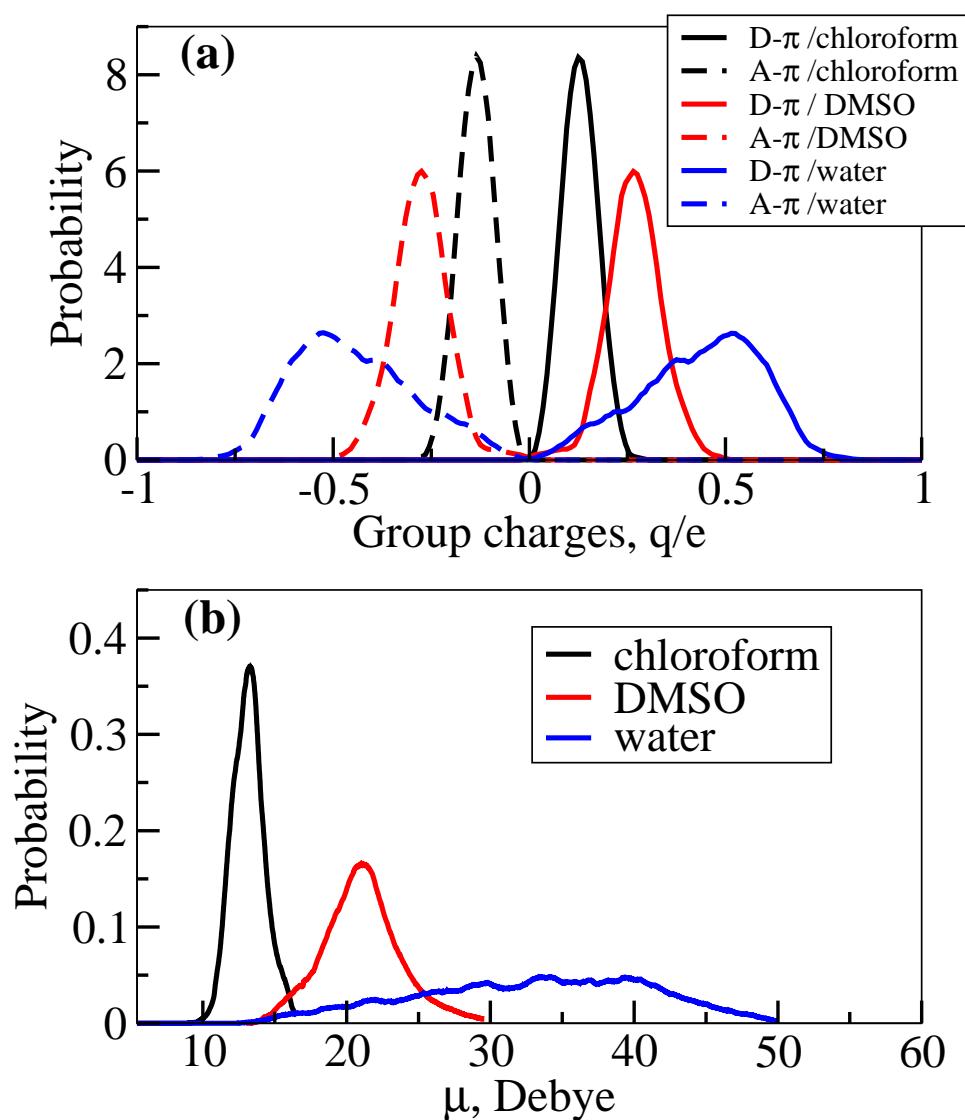


Figure 1s (a) Group charge distribution for DANS in chloroform, DMSO and in water (b)

Molecular dipole moment for DANS in chloroform, DMSO and in water solvents.

Table 1s. Standard deviation in the excitation energy corresponding to different models.

Method	DANS in CHCl ₃	DANS in DMSO	DANS in water
QM/MM-0	0.08	0.10	0.13
QM/PCM	0.11	0.14	0.16
QM/MM-1	0.13	0.24	0.21
QM/MM-2	0.14	0.24	0.26
QM/MM-3	—	—	0.21