

Self sensitized photo-oxidation of N-methyl phenothiazine: acidity control of the competition between electron and energy transfer mechanisms[†]

Thankamoniamma Manju,^a Narayanapillai Manoj,^b André M. Braun^c and Esther Oliveros^{*d}

Supplementary Figures

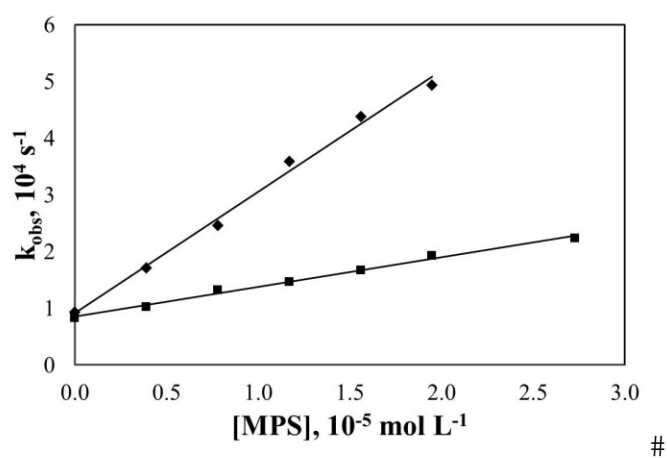


Fig. S1 Stern-Volmer plots of the quenching of the rose bengal (RB) triplet excited state by MPS in CH_3CN (squares) and in CH_3OH (diamonds); Ar-saturated solutions, $[\text{RB}] = 2 \times 10^{-5} \text{ mol L}^{-1}$.

#

#

#

#

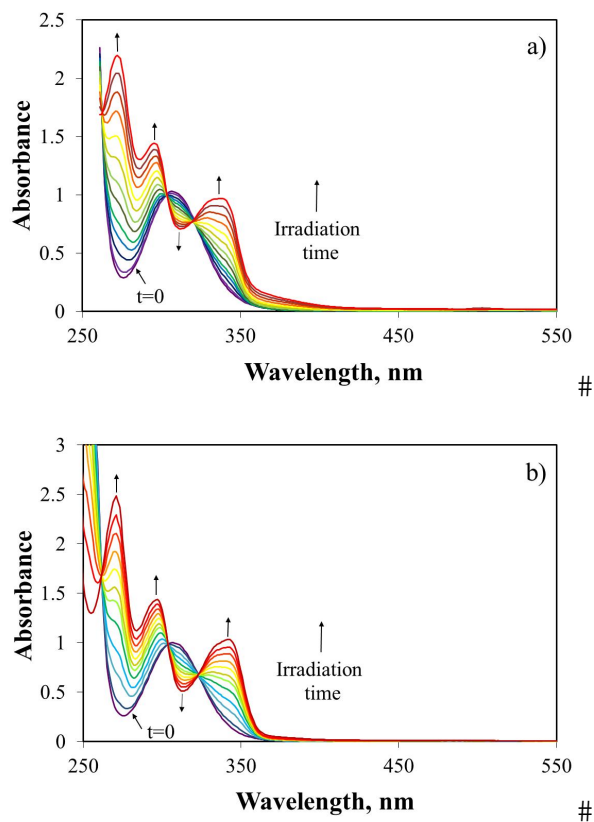
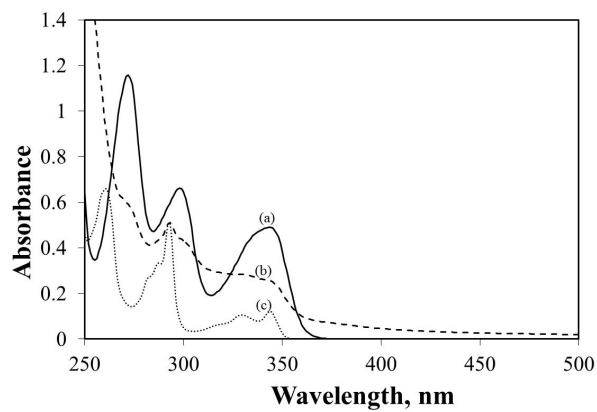


Fig. S2 Self-sensitized photooxidation of MPS: a) in CD₃CN (isosbestic points at 263 nm, 304 nm and 322 nm, maximum time of irradiation: 6 h); b) in CD₃OD ((isosbestic points at 261 nm, 304 nm and 324 nm, maximum time of irradiation: 4 h); [MPS]₀ = 2x10⁻⁴ mol L⁻¹, λ_{exc}: 308 nm; air-equilibrated solutions.

#

#

#



#

Figure S3 Absorption spectra of a solution of MPSO in methanol before irradiation (a) and after irradiation during 26 hours (b); Absorption spectrum of N-methyl carbazole for comparison (c).#

#