Pyrrolylamidourea based anion receptors

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Supplementary information

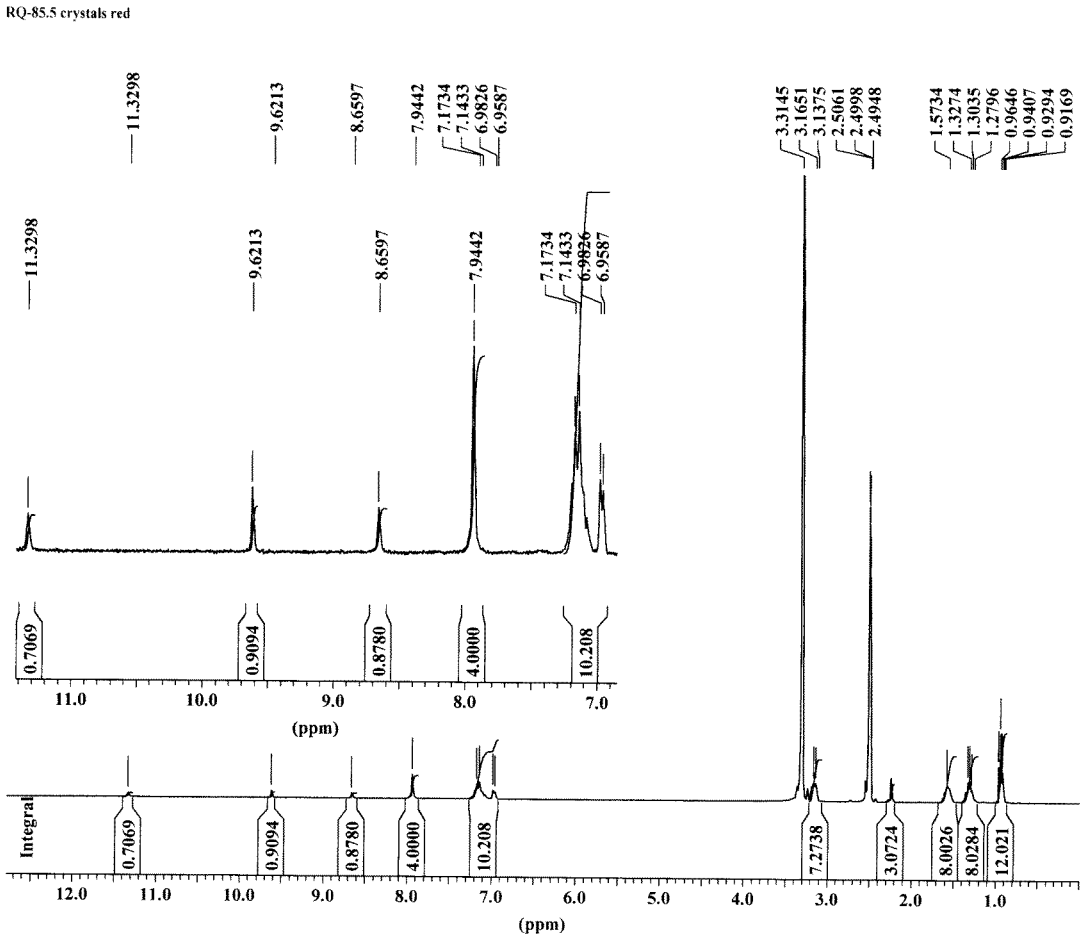

Figure S1 ^{1}H NMR spectra of the TBA salt of deprotonated compound **4** in DMSO-d_6 .

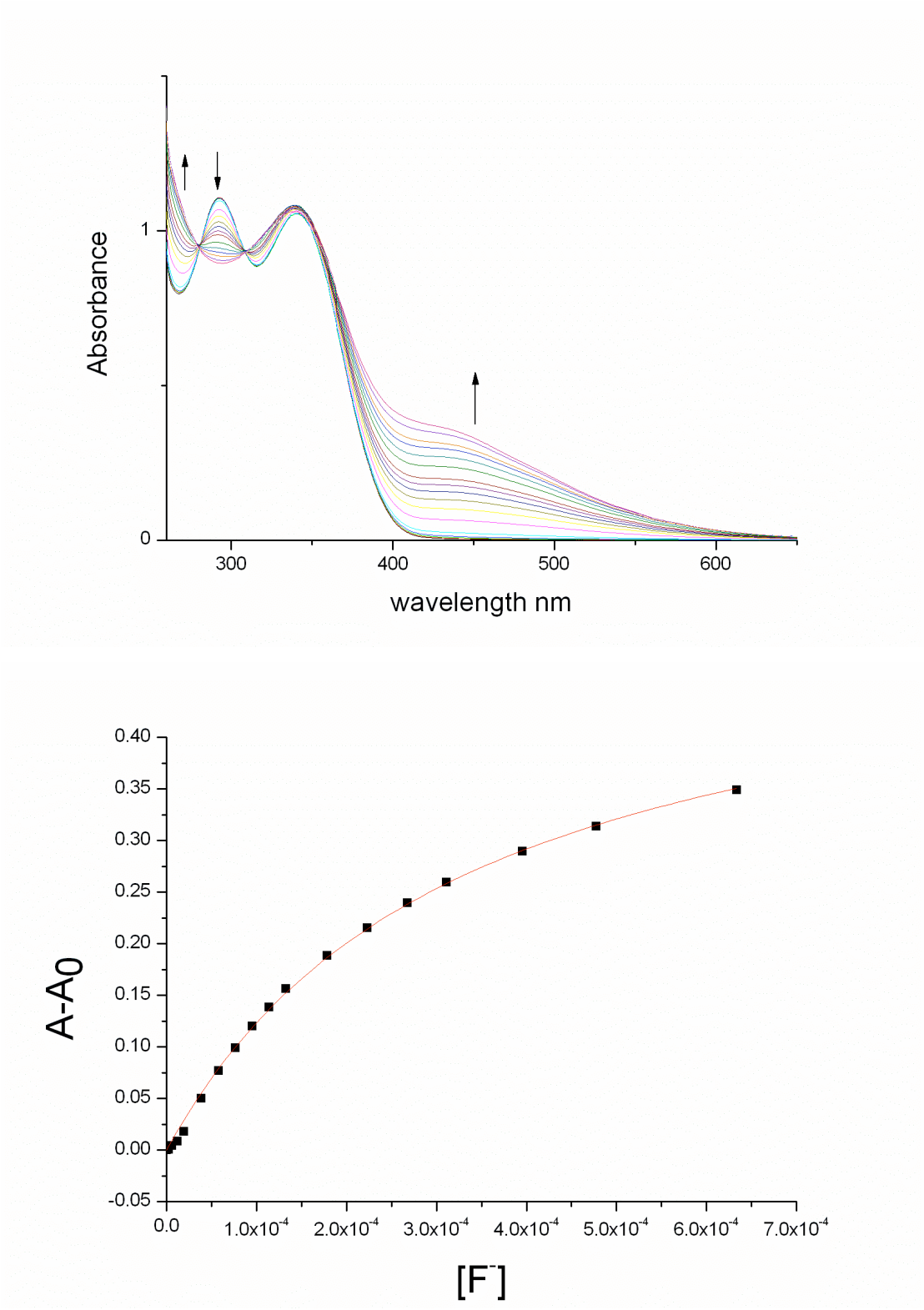

Figure S2 a) UV–vis absorption spectrophotometric titration of compound **2** with TBA fluoride in DMSO at 25 ºC. b) Variation of absorbance at 390 nm versus concentration of anion. The trend line is the result of the non linear least-square fit of the experimental data according to $A\text{-}A_0=B\times[G^-]/(1+(K\times[G^-])$.

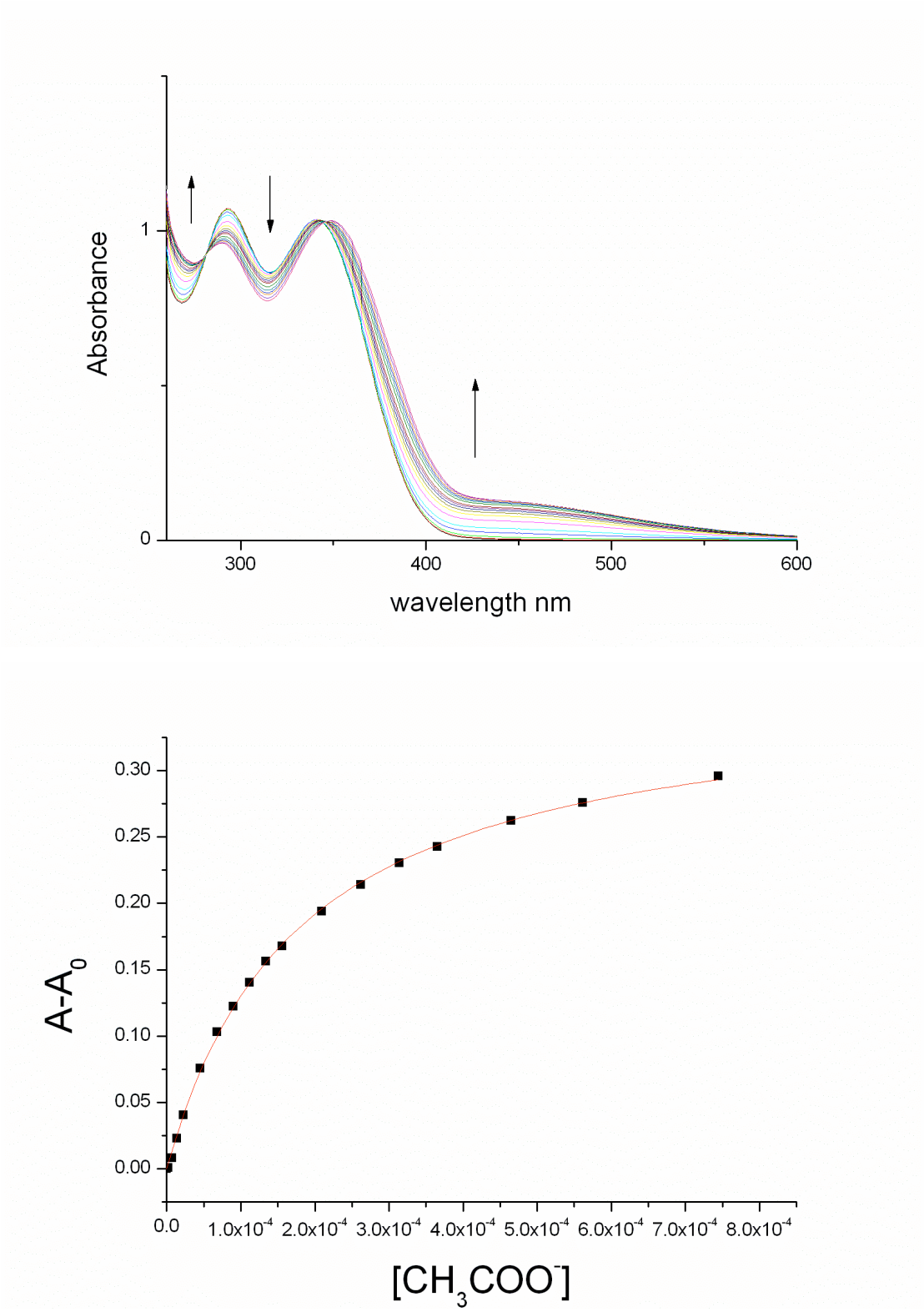

Figure S3 a) UV–vis absorption spectrophotometric titration of compound **2** with TBA acetate in DMSO at 25 ºC. b) Variation of absorbance at 390 nm versus concentration of anion. The trend line is the result of the non linear least-square fit of the experimental data according to $A\text{-}A_0=B\times[G^-]/(1+(K\times[G^-])$

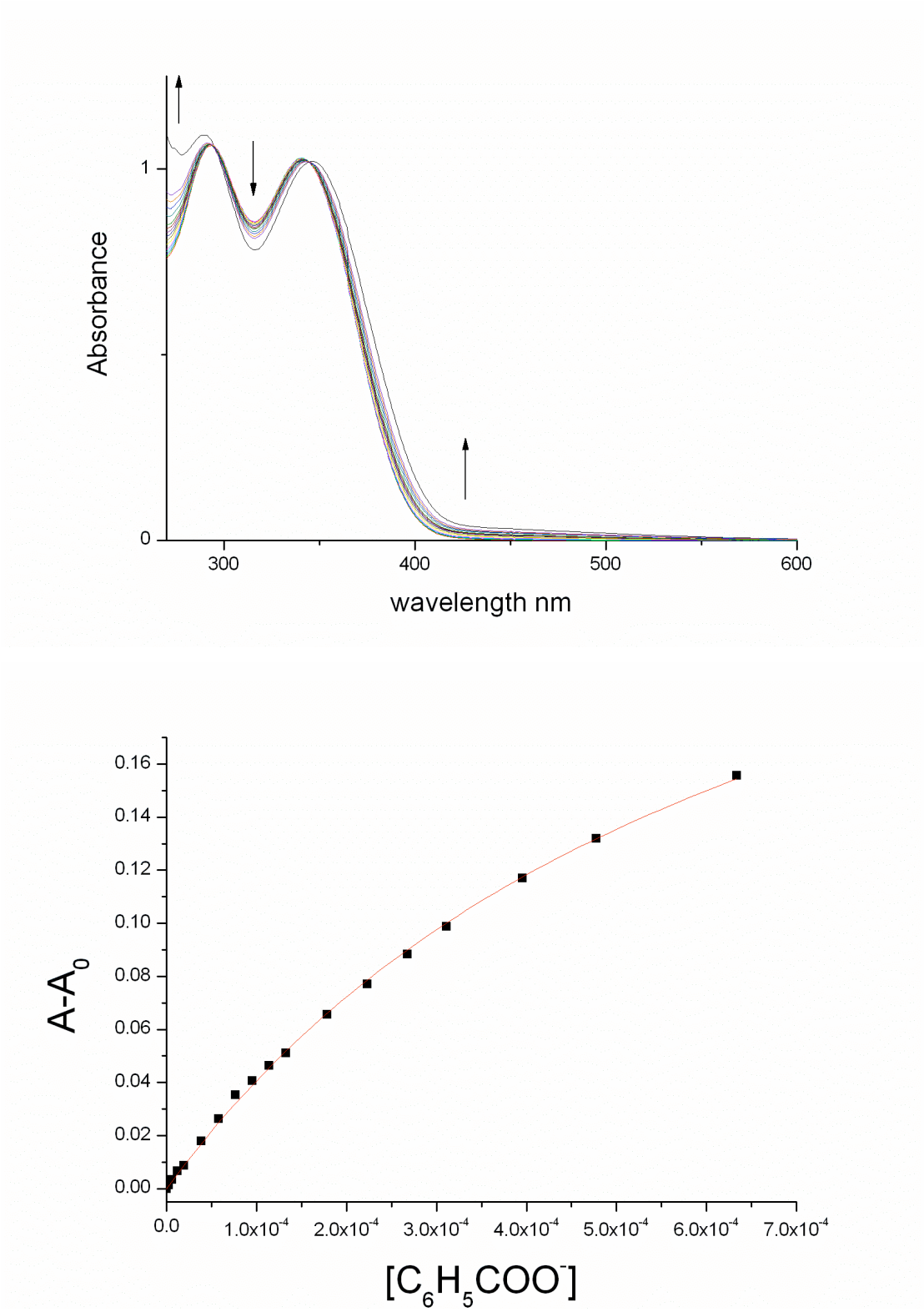

Figure S4 a) UV–vis absorption spectrophotometric titration of compound **2** with TBA benzoate in DMSO at 25 ºC. b) Variation of absorbance at 390 nm versus concentration of anion. The trend line is the result of the non linear least-square fit of the experimental data according to $A-A_0=B\times[G^-]/(1+(K\times[G^-])$

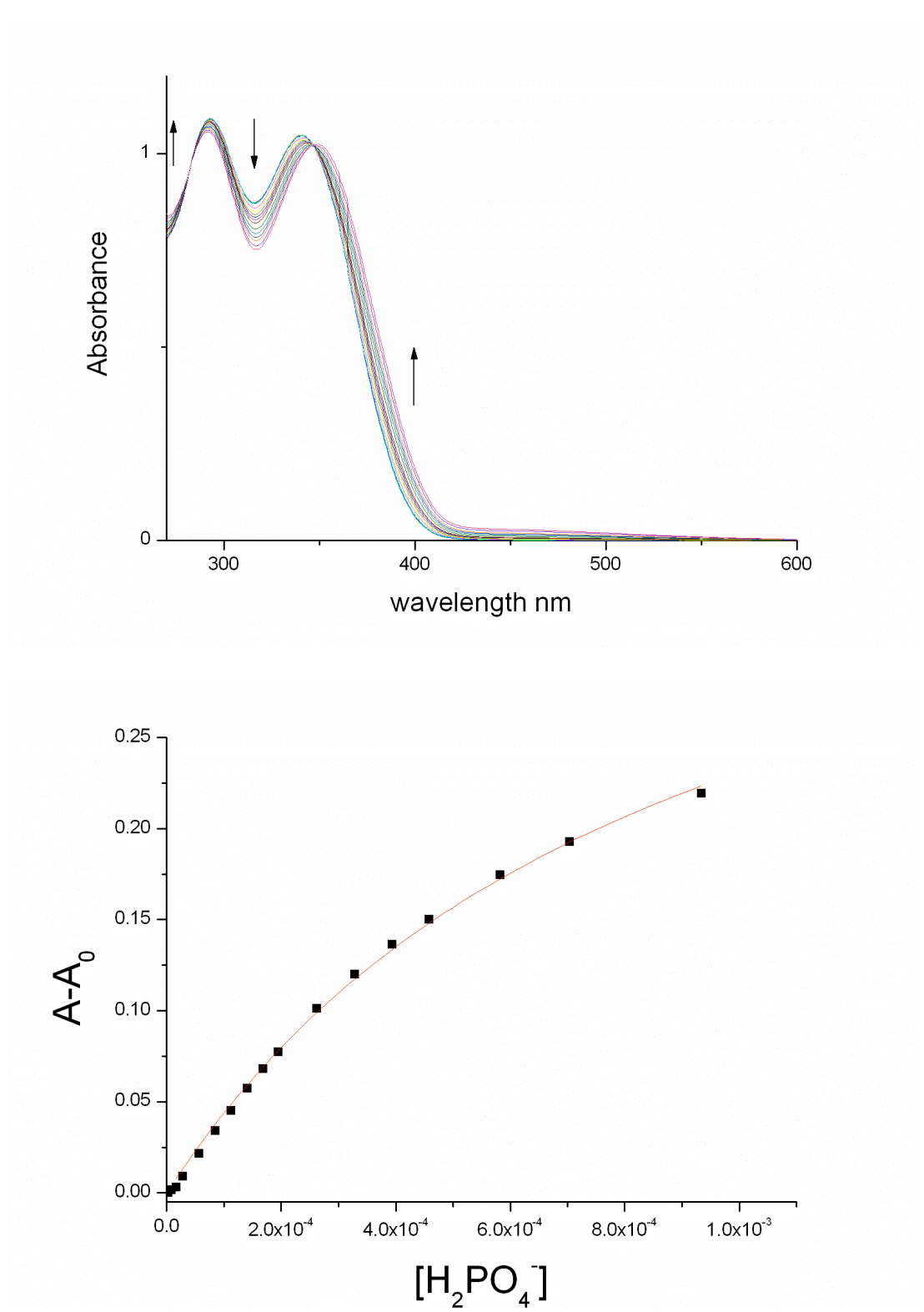

Figure S5 a) UV–vis absorption spectrophotometric titration of compound **2** with TBA dihydrogenphosphate in DMSO at 25 ºC. b) Variation of absorbance at 390 nm versus concentration of anion. The trend line is the result of the non linear least-square fit of the experimental data according to $A\text{-}A_0=B\times[G^-]/(1+(K\times[G^-])$

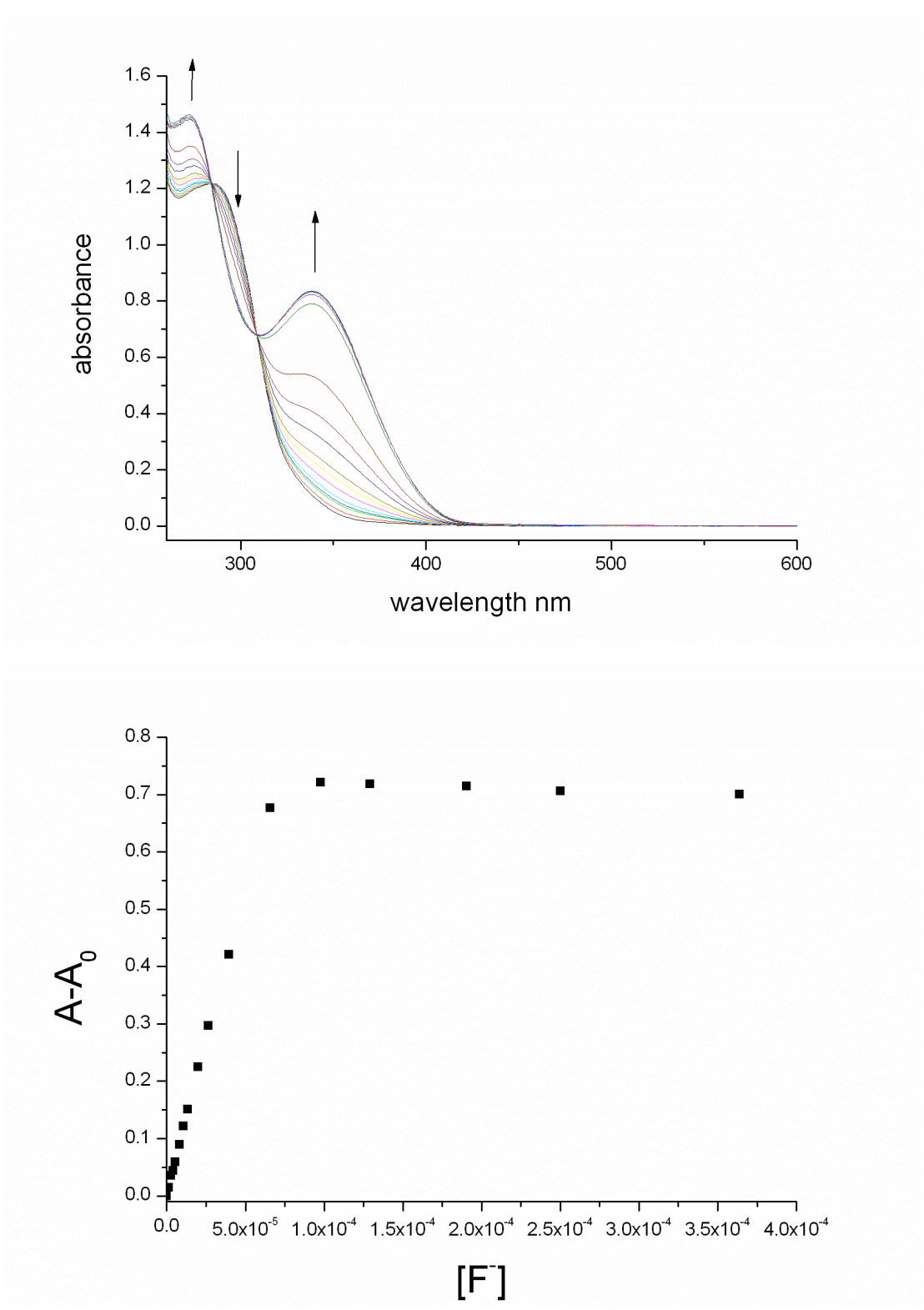

Figure S6 a) UV–vis absorption spectrophotometric titration of compound **3** with TBA fluoride in DMSO at 25 ºC. b) Variation of absorbance at 360 nm versus concentration of anion.

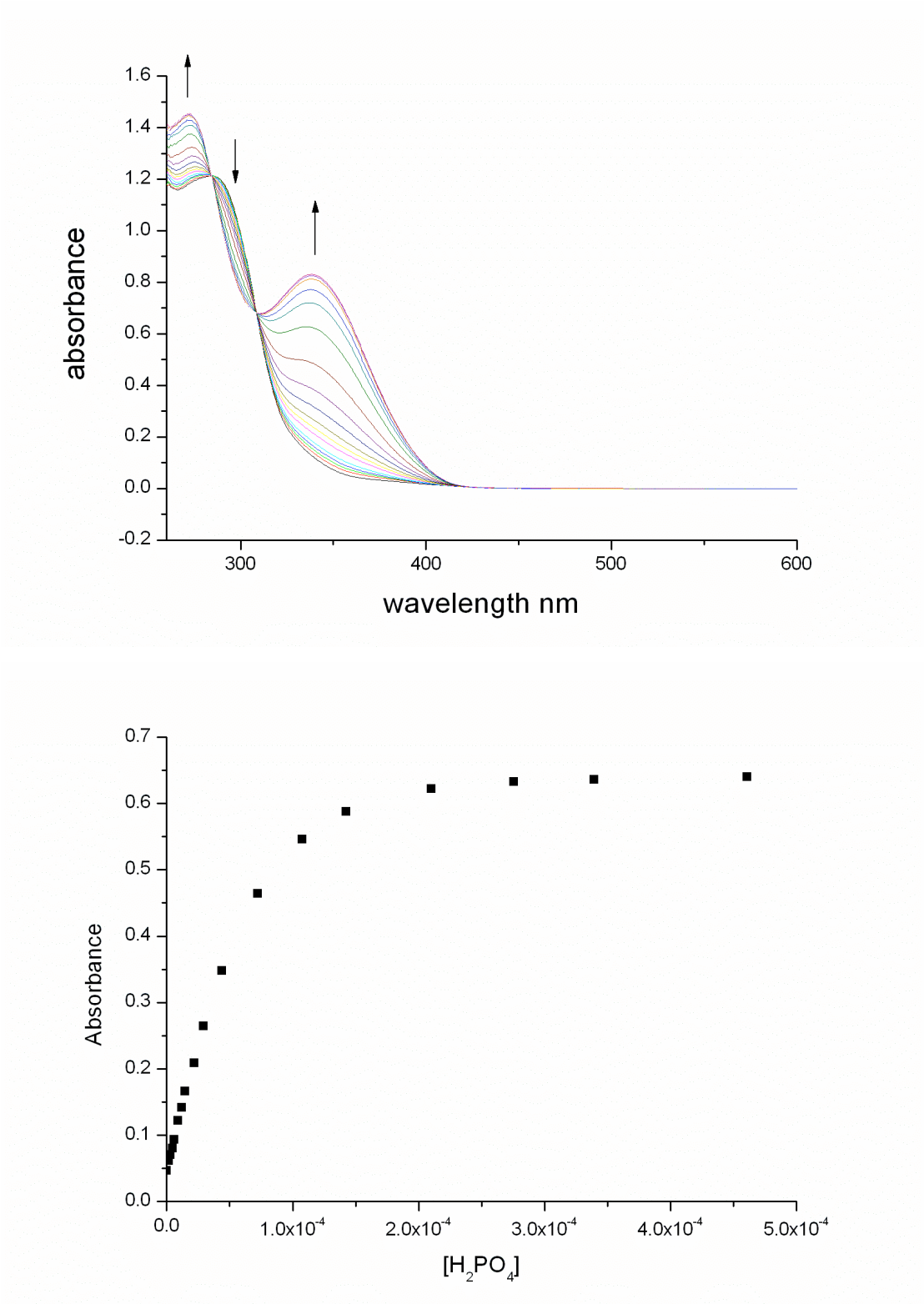

Figure S7 a) UV–vis absorption spectrophotometric titration of compound **3** with TBA dihydrogenphosphate in DMSO at 25 ºC. b) Variation of absorbance at 360 nm versus concentration of anion.

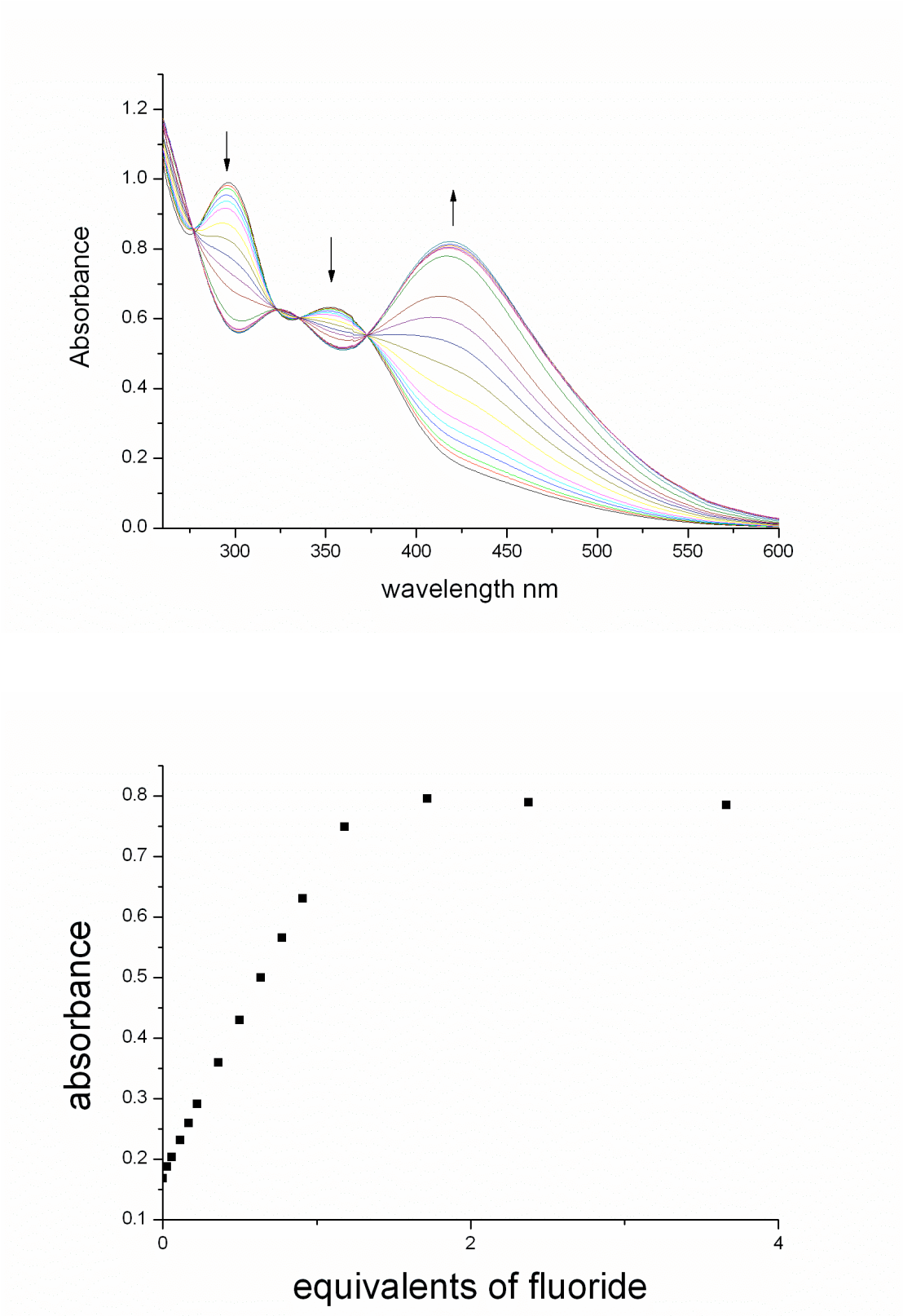

Figure S8 a) UV–vis absorption spectrophotometric titration of compound **4** with TBA fluoride in DMSO at 25 ºC. b) Variation of absorbance at 360 nm versus equivalents of fluoride.

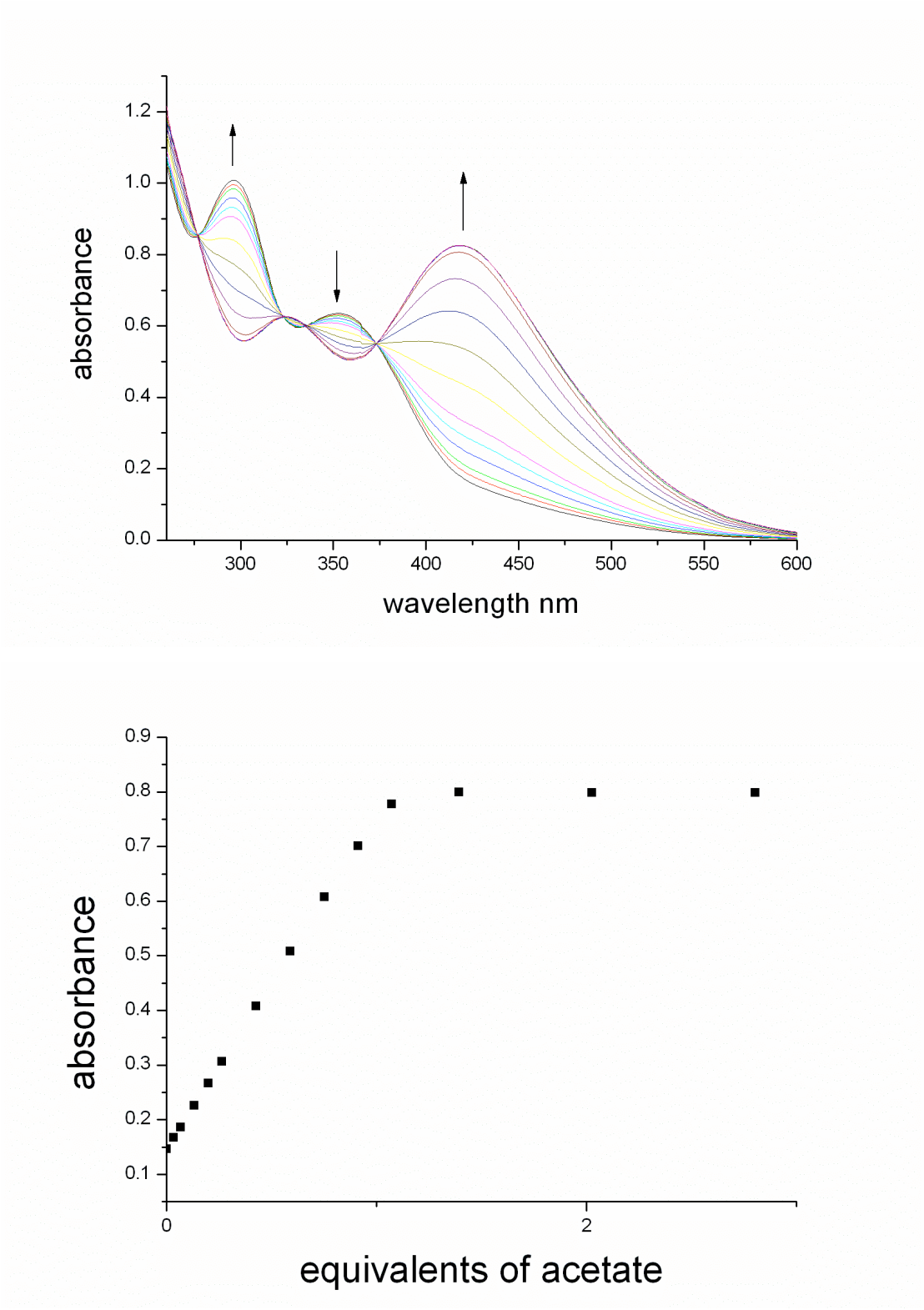

Figure S9 a) UV–vis absorption spectrophotometric titration of compound **4** with TBA acetate in DMSO at 25 ºC. b) Variation of absorbance at 450 nm versus equivalents of acetate.

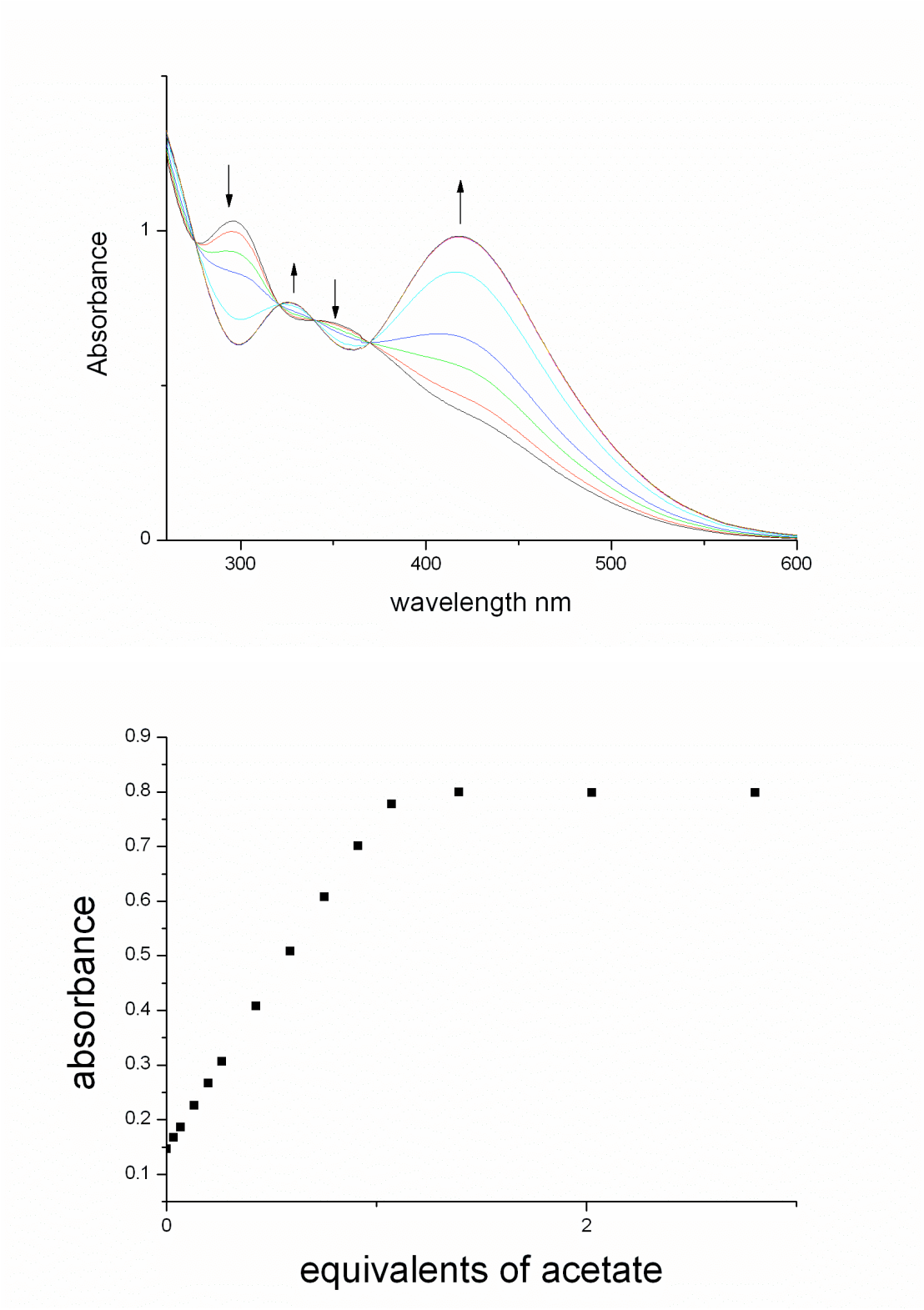

Figure S10 a) UV–vis absorption spectrophotometric titration of compound **4** with TBA acetate in DMSO/ water 9:1 at 25 ºC. b) Variation of absorbance at 450 nm versus equivalents of acetate.

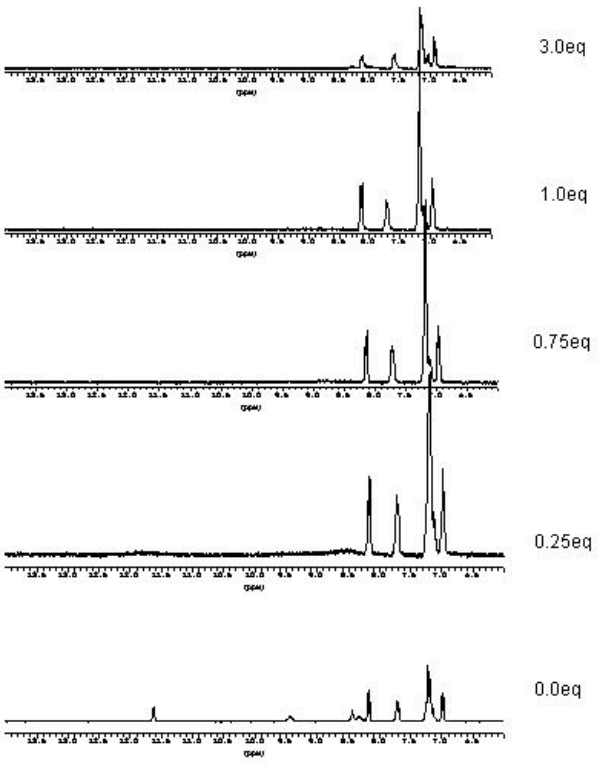

Figure S11 Stack plot of ^{1}H NMR spectra of compound **2** in the presence of increasing amounts of TBAF recorded in DMSO-d_6 .

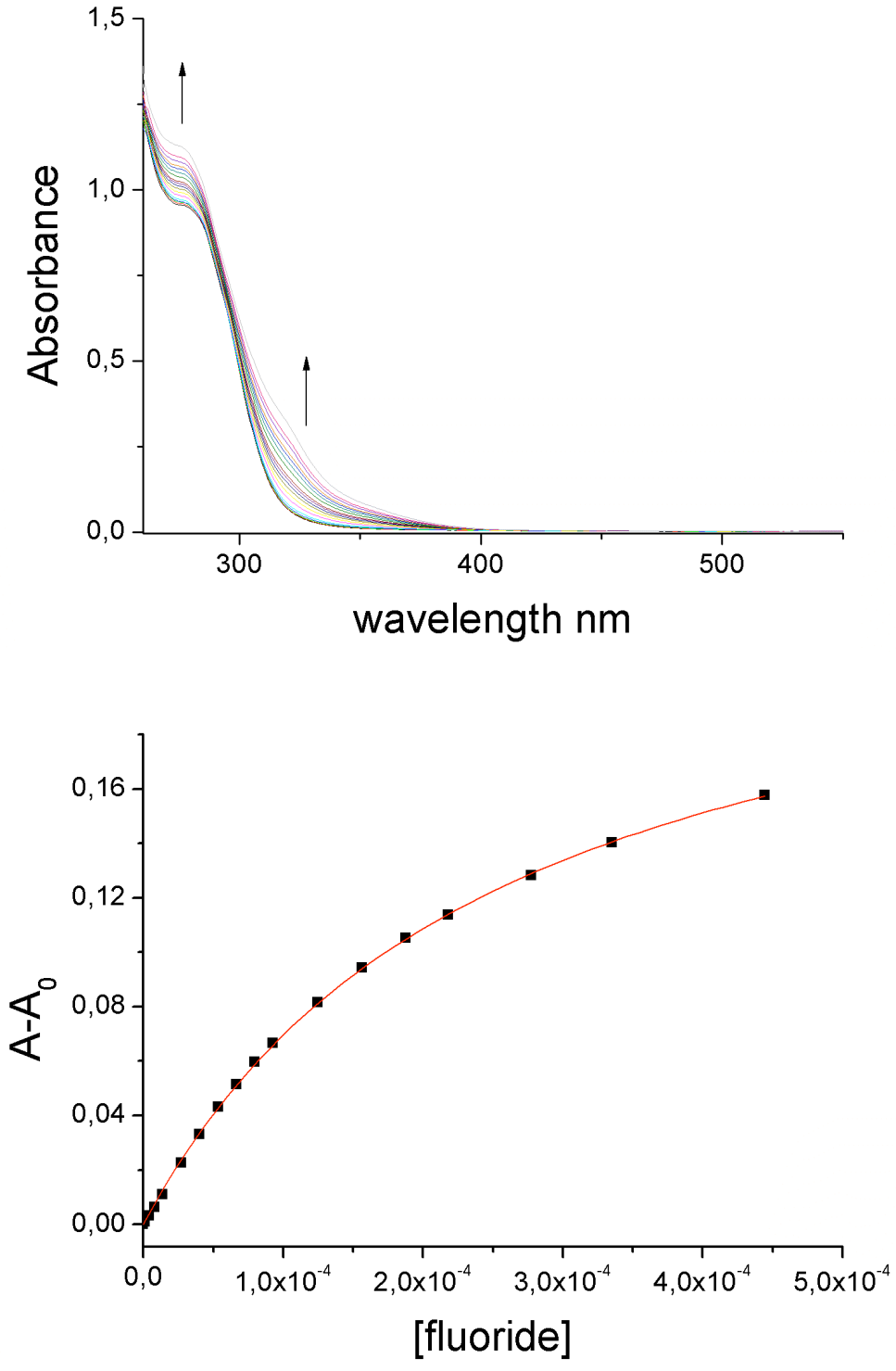

Figure S12 a) UV–vis absorption spectrophotometric titration of compound **5** with TBA fluoride in DMSO at 25 ºC. b) Variation of absorbance at 330 nm versus concentration of fluoride. The trend line is the result of the non linear least-square fit of the experimental data according to $A-A_0=B\times[G^-]/(1+(K\times[G^-])$.

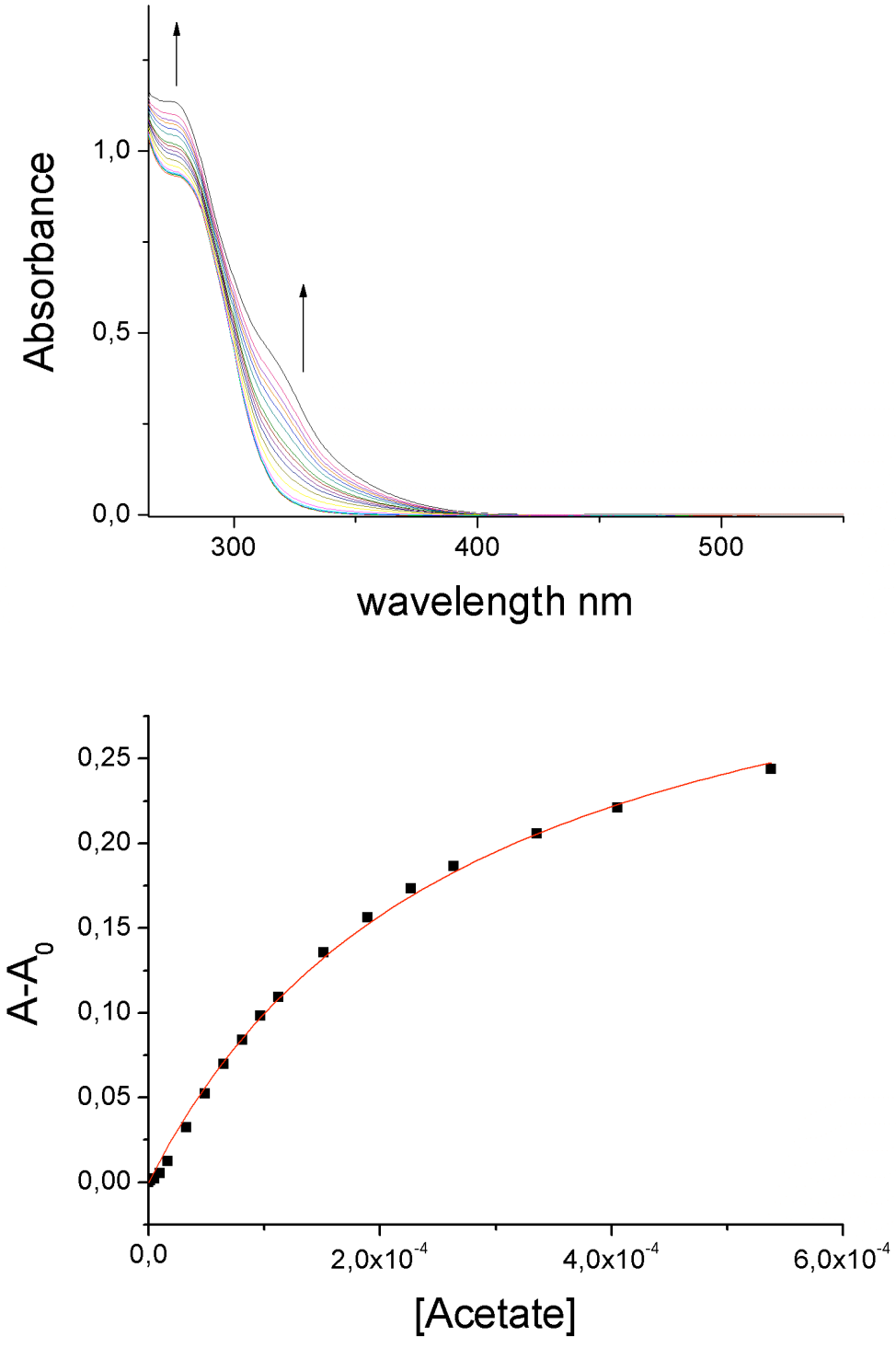

Figure S13 a) UV–vis absorption spectrophotometric titration of compound **5** with TBA acetate in DMSO at 25 ºC. b) Variation of absorbance at 330 nm versus concentration of acetate. The trend line is the result of the non linear least-square fit of the experimental data according to $A\text{-}A_0=B\times[G^-]/(1+(K\times[G^-])$.

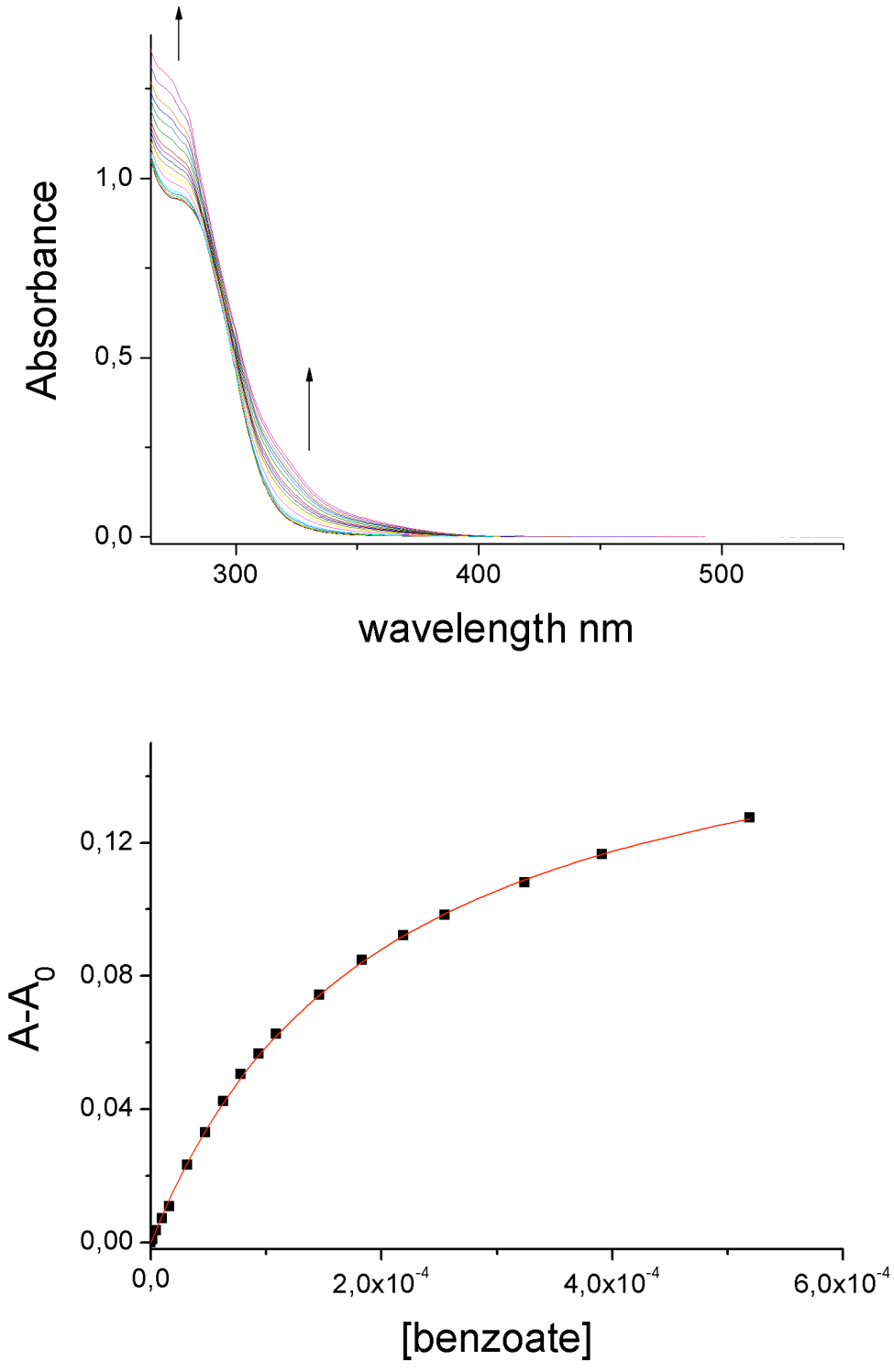

Figure S14 a) UV–vis absorption spectrophotometric titration of compound **5** with TBA benzoate in DMSO at 25 ºC. b) Variation of absorbance at 330 nm versus concentration of benzoate. The trend line is the result of the non linear least-square fit of the experimental data according to $A-A_0=B\times[G^-]/(1+(K\times[G^-])$.

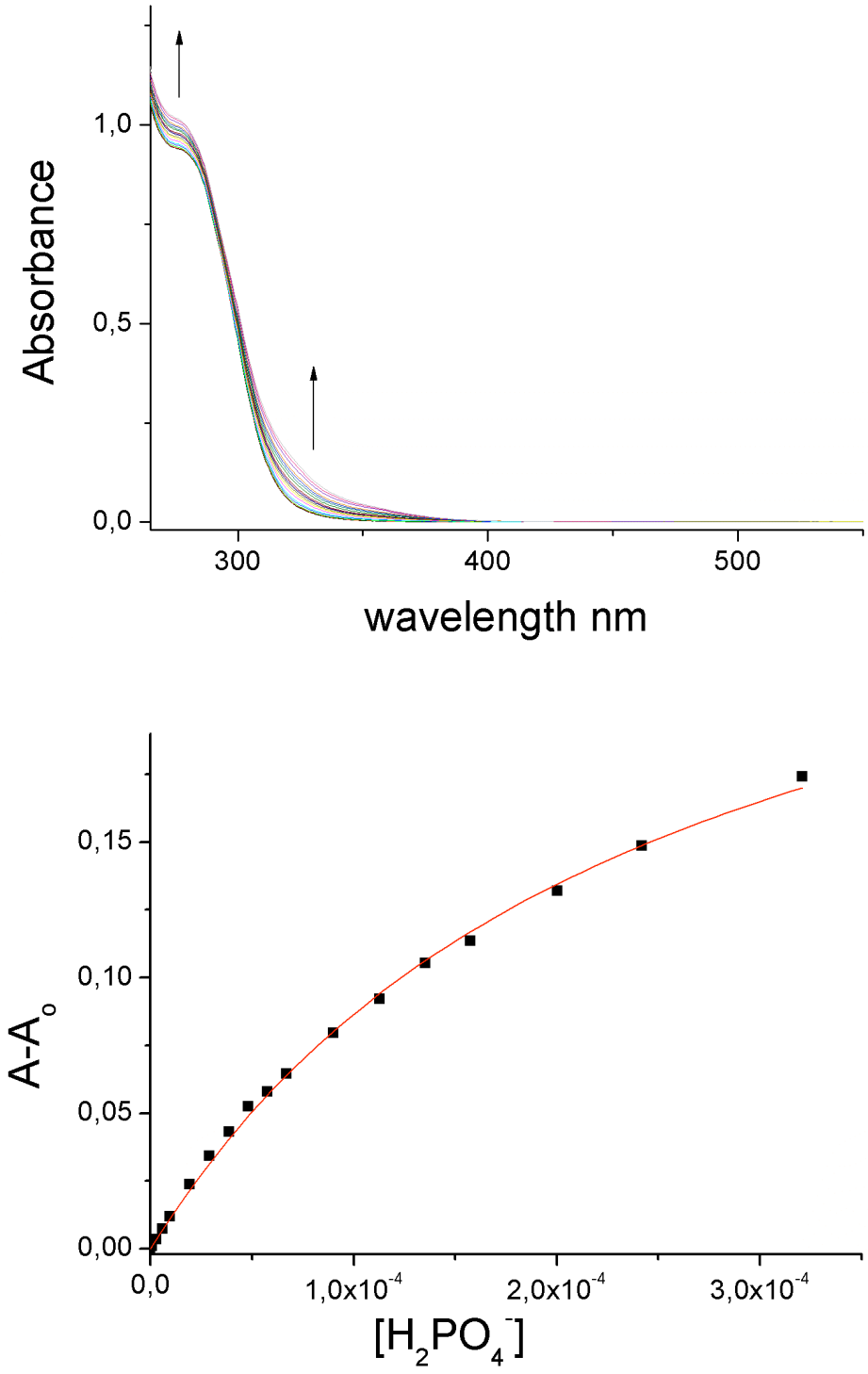

Figure S15 a) UV–vis absorption spectrophotometric titration of compound **5** with TBA dihydrogenphosphate in DMSO at 25 ºC. b) Variation of absorbance at 330 nm versus concentration of dihydrogenphosphate. The trend line is the result of the non linear least-square fit of the experimental data according to $A\text{-}A_0=B\times[G^-]/(1+(K\times[G^-])$.

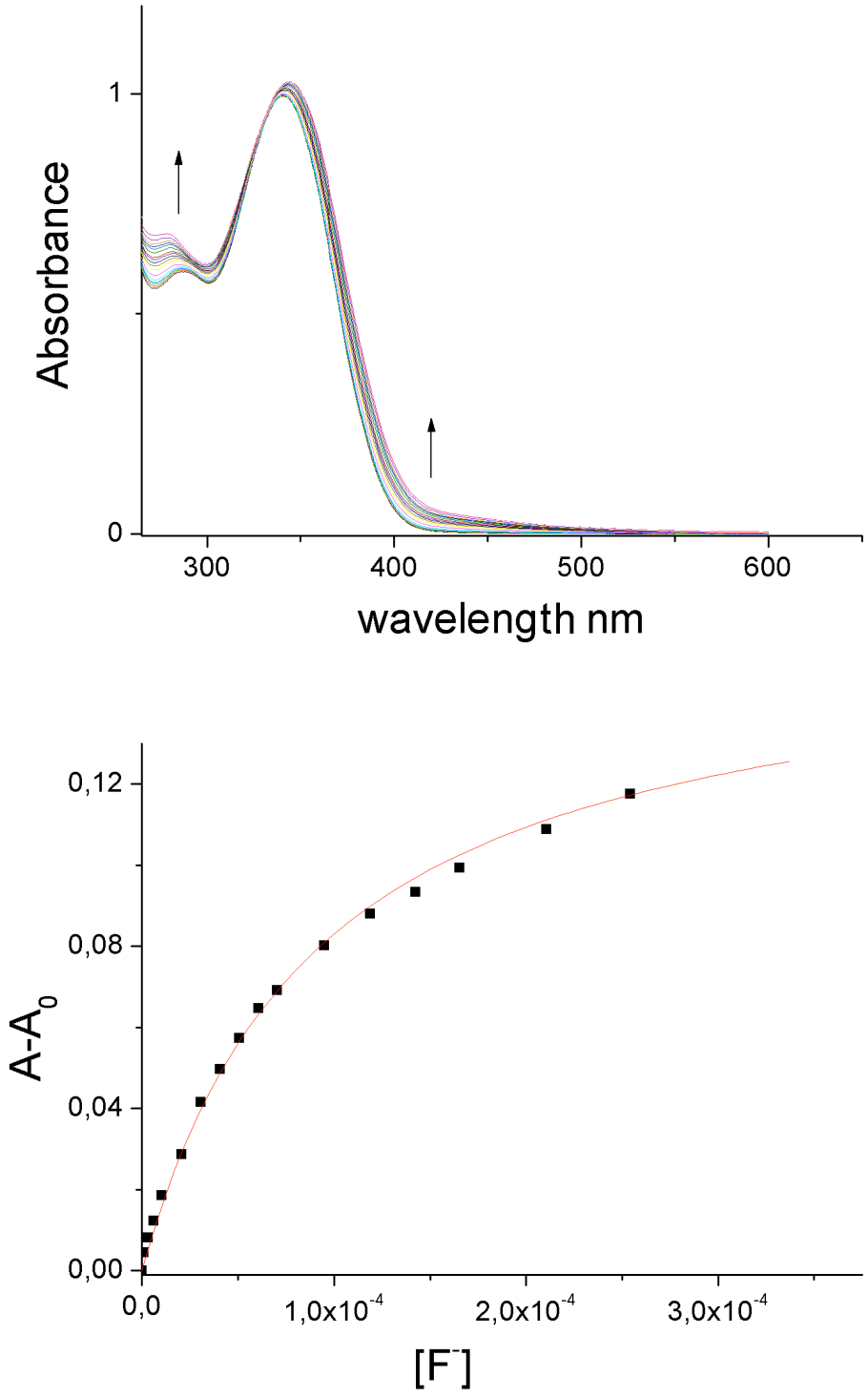

Figure S16 a) UV–vis absorption spectrophotometric titration of compound **6** with TBA fluoride in DMSO at 25 ºC. b) Variation of absorbance at 400 nm versus concentration of fluoride. The trend line is the result of the non linear least-square fit of the experimental data according to $A\text{-}A_0=B\times[G^-]/(1+(K\times[G^-])$.

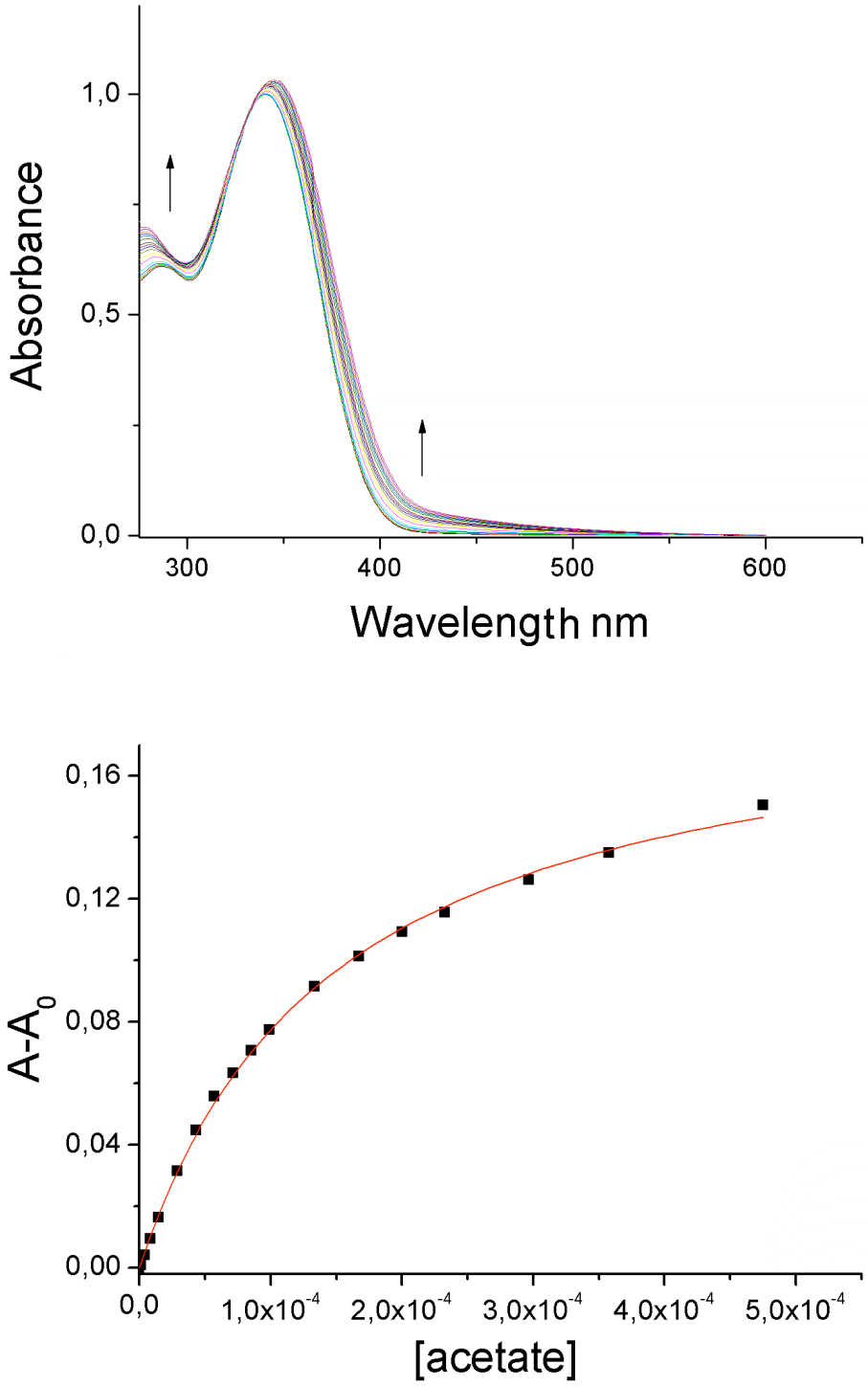

Figure S17 a) UV–vis absorption spectrophotometric titration of compound **6** with TBA acetate in DMSO at 25 ºC. b) Variation of absorbance at 400 nm versus concentration of acetate. The trend line is the result of the non linear least-square fit of the experimental data according to $A\text{-}A_0=B\times[G^-]/(1+(K\times[G^-])$.

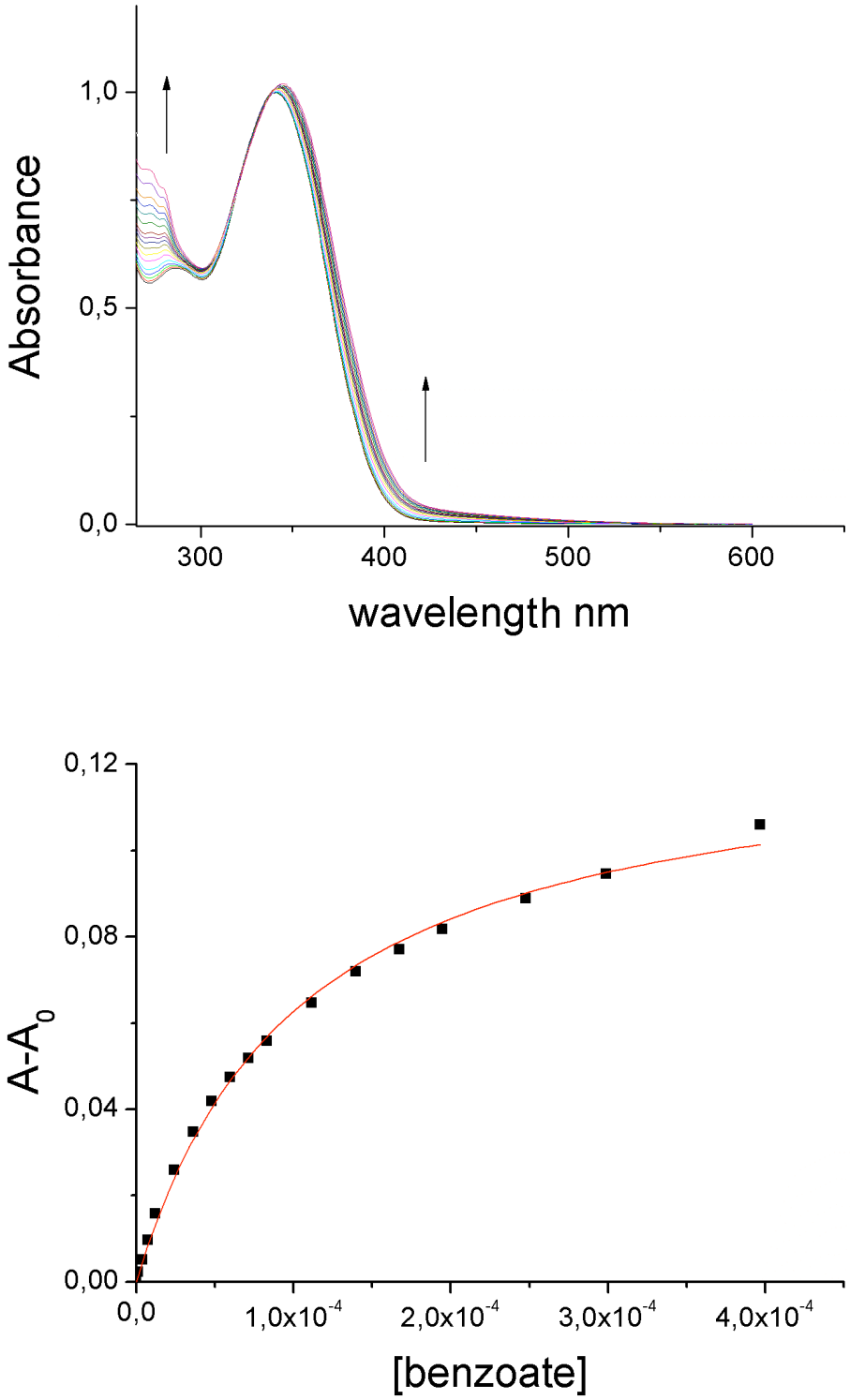

Figure S18 a) UV–vis absorption spectrophotometric titration of compound **6** with TBA benzoate in DMSO at 25 ºC. b) Variation of absorbance at 400 nm versus concentration of benzoate. The trend line is the result of the non linear least-square fit of the experimental data according to $A\text{-}A_0=B\times[G^-]/(1+(K\times[G^-])$.

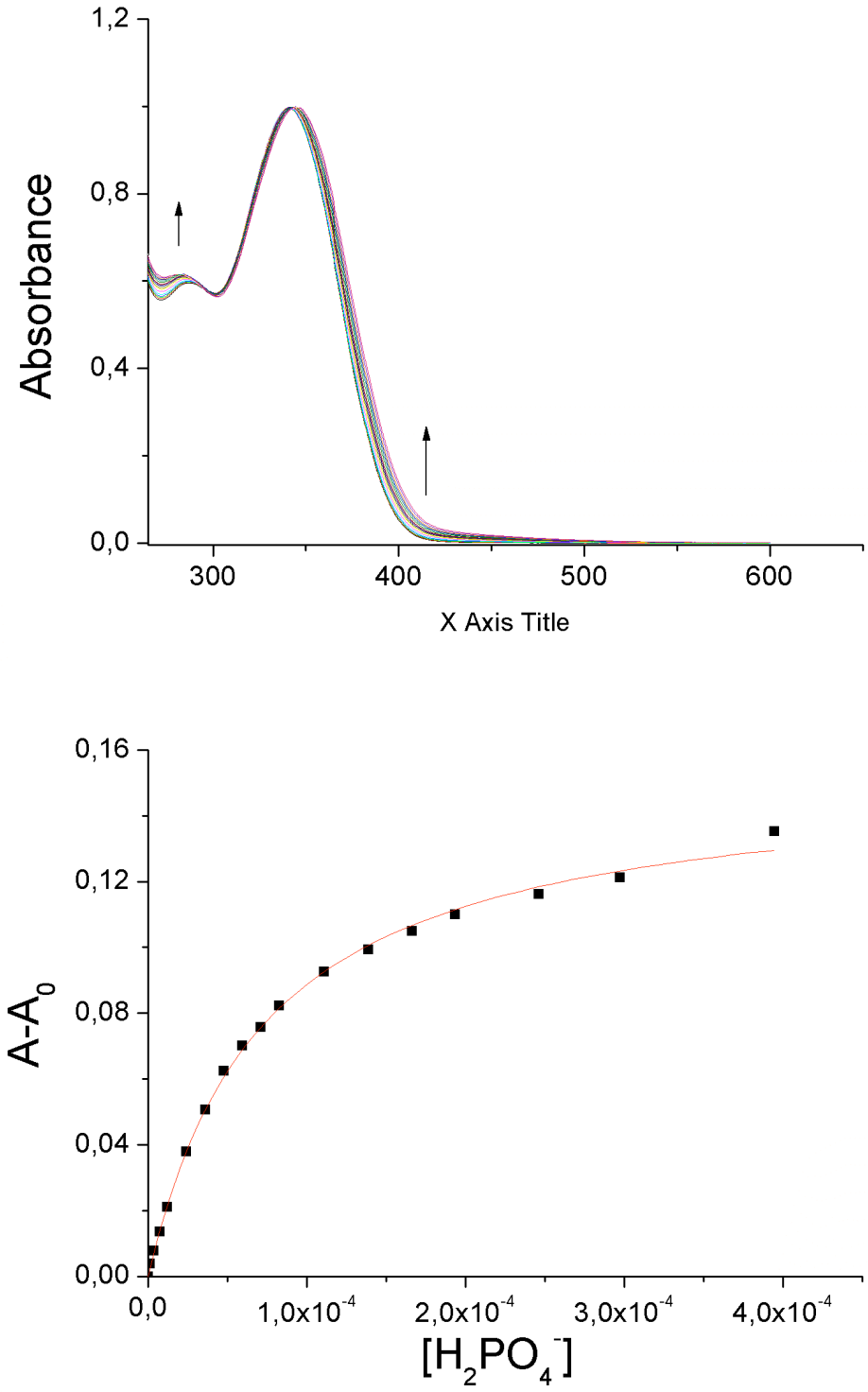

Figure S19 a) UV–vis absorption spectrophotometric titration of compound **6** with TBA dihydrogenphosphate in DMSO at 25 ºC. b) Variation of absorbance at 400 nm versus concentration of dihydrogenphosphate. The trend line is the result of the non linear least-square fit of the experimental data according to $A\text{-}A_0=B\times[G^-]/(1+(K\times[G^-])$.

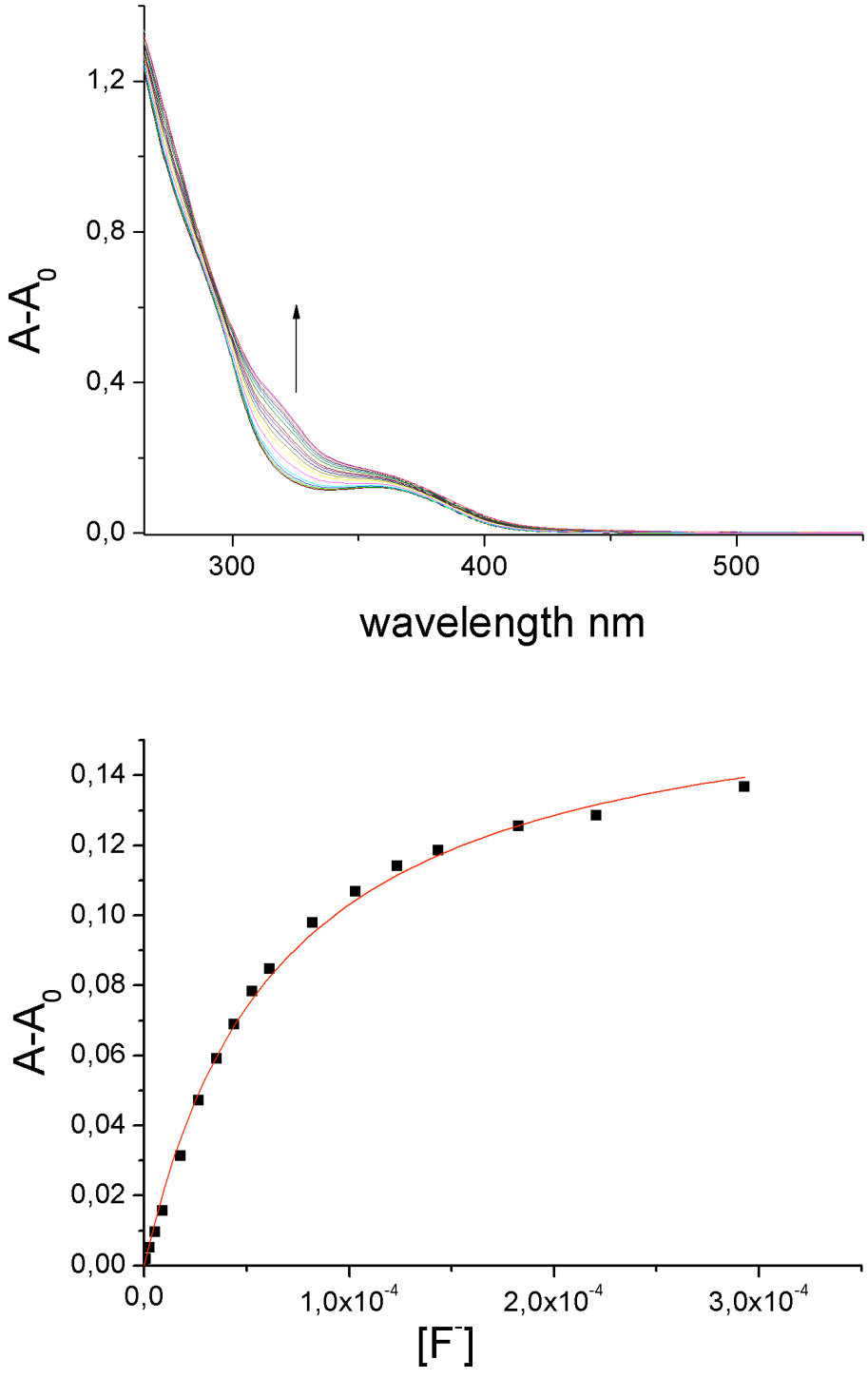

Figure S20 a) UV–vis absorption spectrophotometric titration of compound **7** with TBA fluoride in DMSO at 25 ºC. b) Variation of absorbance at 330 nm versus concentration of fluoride. The trend line is the result of the non linear least-square fit of the experimental data according to $A-A_0=B\times[G^-]/(1+(K\times[G^-])$.

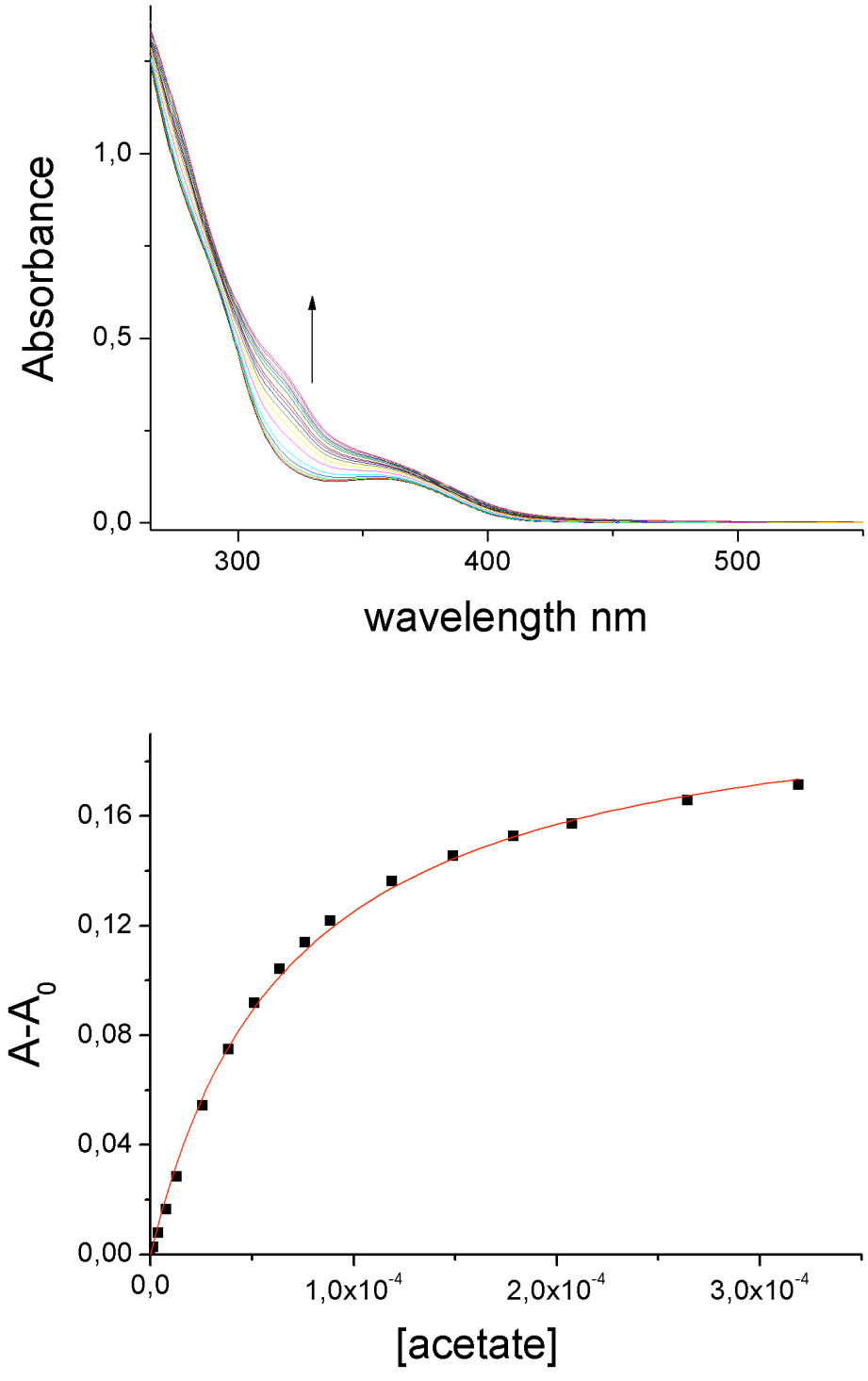

Figure S21 a) UV–vis absorption spectrophotometric titration of compound **7** with TBA acetate in DMSO at 25 ºC. b) Variation of absorbance at 330 nm versus concentration of acetate. The trend line is the result of the non linear least-square fit of the experimental data according to $A\text{-}A_0=B\times[G^-]/(1+(K\times[G^-])$.

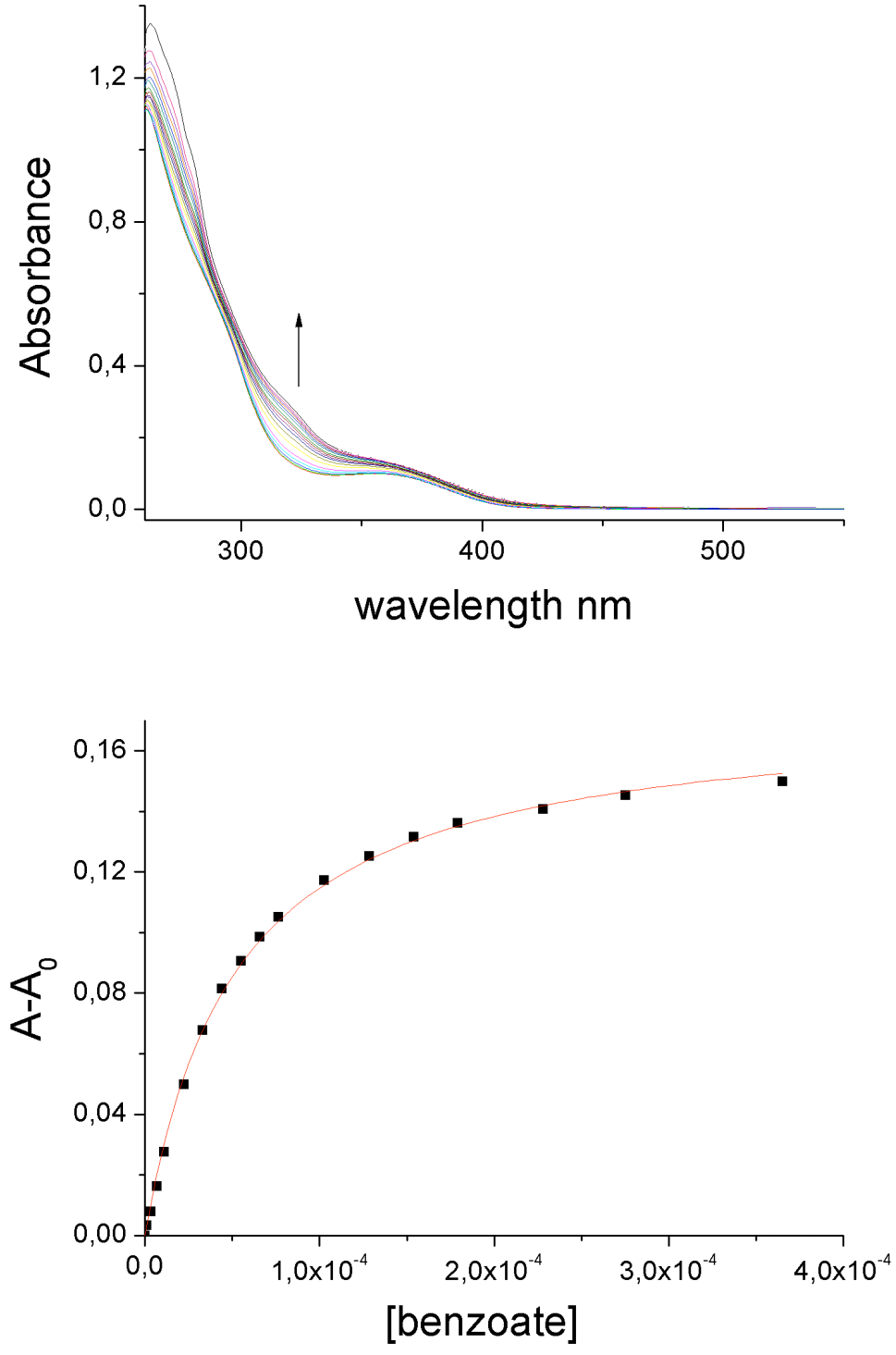

Figure S22 a) UV–vis absorption spectrophotometric titration of compound **7** with TBA benzoate in DMSO at 25 ºC. b) Variation of absorbance at 330 nm versus concentration of benzoate. The trend line is the result of the non linear least-square fit of the experimental data according to $A\text{-}A_0=B\times[G^-]/(1+(K\times[G^-])$.

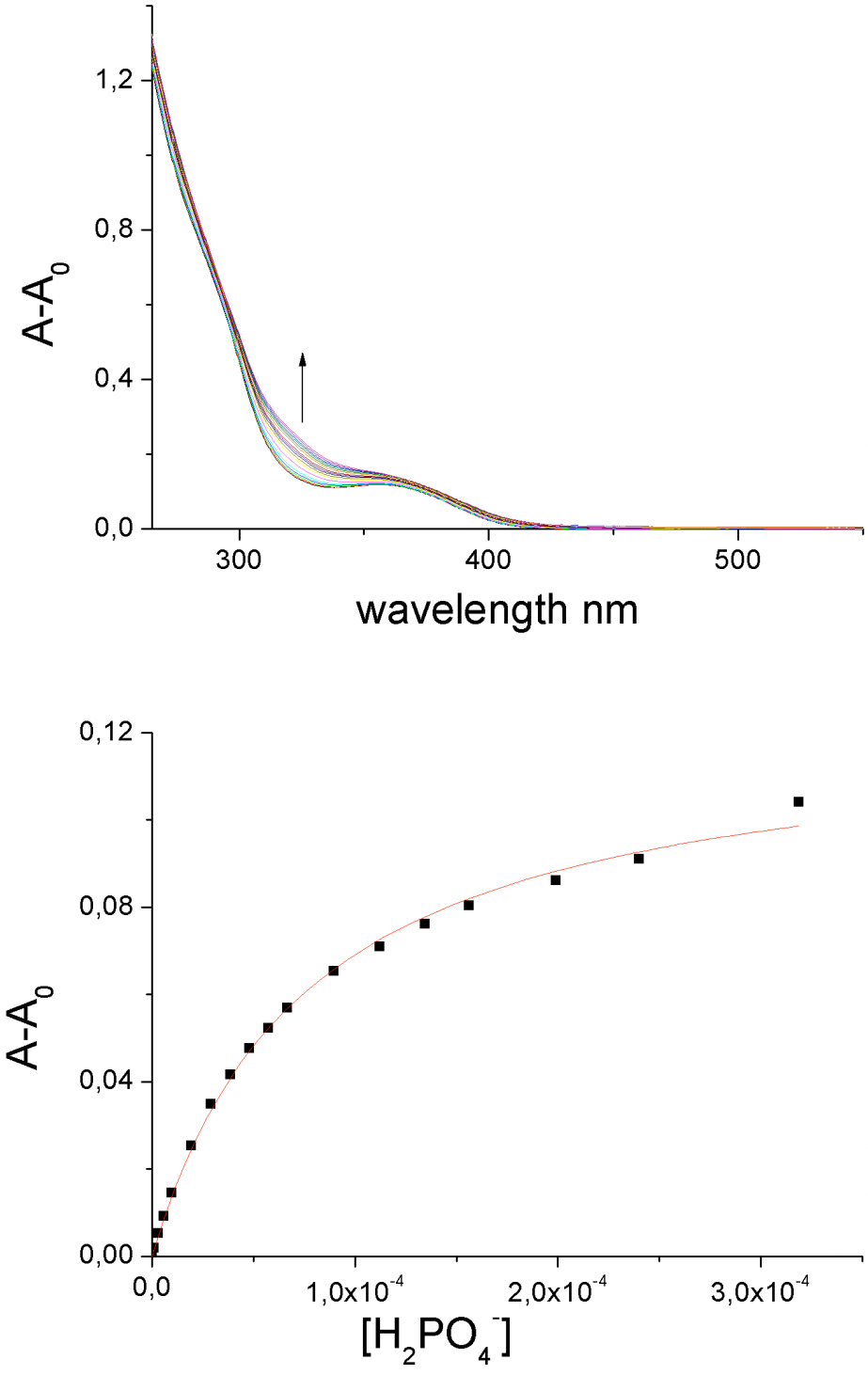

Figure S23 a) UV–vis absorption spectrophotometric titration of compound **7** with TBA dihydrogenphosphate in DMSO at 25 ºC. b) Variation of absorbance at 330 nm versus concentration of dihydrogenphosphate. The trend line is the result of the non linear least-square fit of the experimental data according to $A\text{-}A_0=B\times[G^-]/(1+(K\times[G^-])$.