

## Supplementary information

### **Aromatic Ring Size Effect on the Photophysics and Photochemistry of Styrylbenzothiazoles**

Mohammed K. Awad<sup>†</sup>, Morad M. El-Hendawy,<sup>†‡</sup> Tarek A. Fayed,<sup>†</sup> Safaa H. Etio,<sup>†</sup> Niall  
J. English<sup>‡</sup>

<sup>†</sup> *Chemistry Department, Faculty of Science, Tanta University, Tanta, EGYPT*

<sup>‡</sup> *The SFI Strategic Research Cluster in Solar Energy Conversion and the Centre for  
Synthesis and Chemical Biology, School of Chemical and Bioprocess Engineering,  
University College Dublin, Belfield, Dublin 4, Ireland*

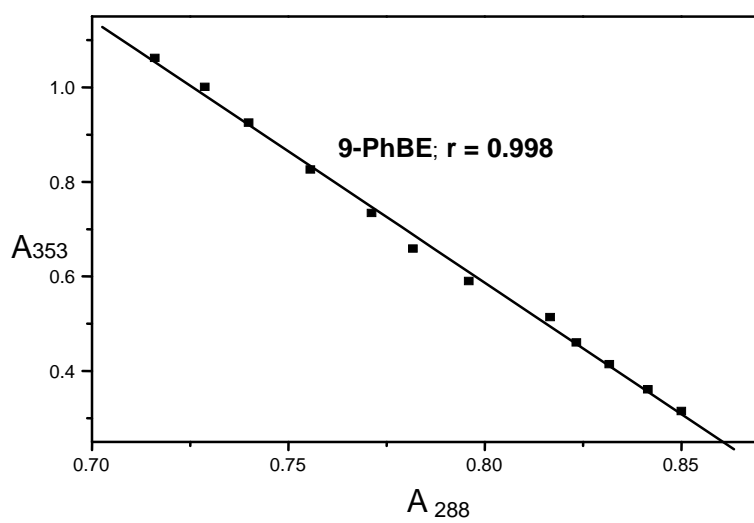
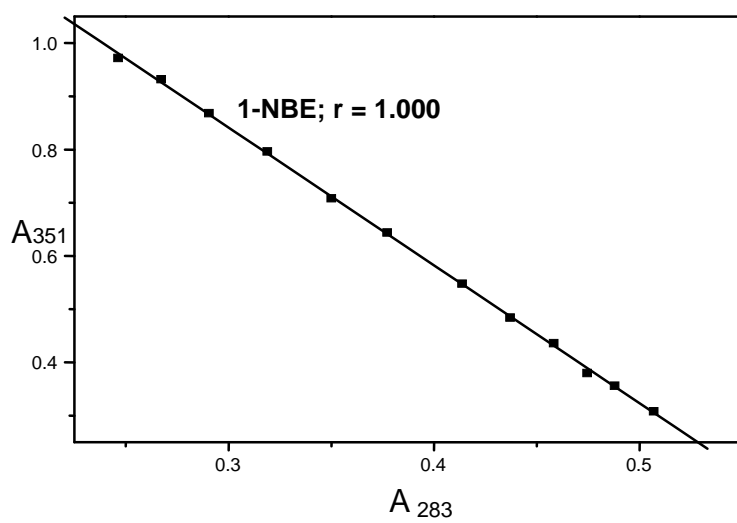
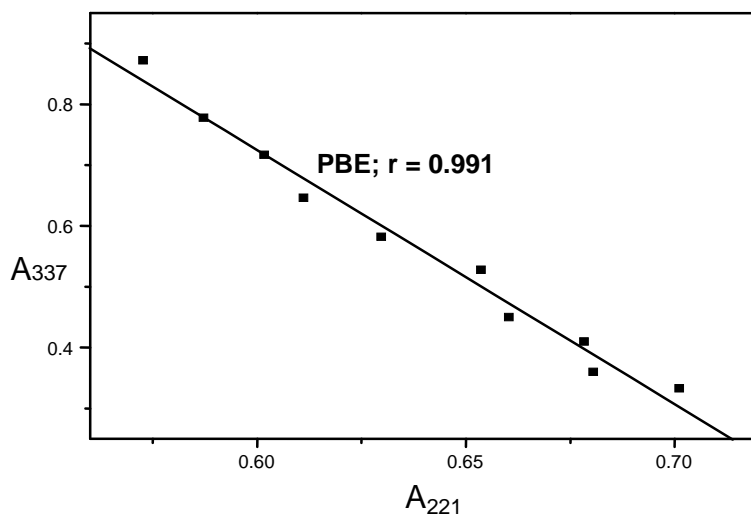


Fig. S1. Demonstration of linear correlation between the monitored absorbance changes between the two maxima (cisiod region and lower frequency region of the absorption spectra) of PBE, 1-NBE and 9-PhBE in MeCN, measured immediately after irradiation at 334 nm for definite time intervals as presented on Fig. 5.

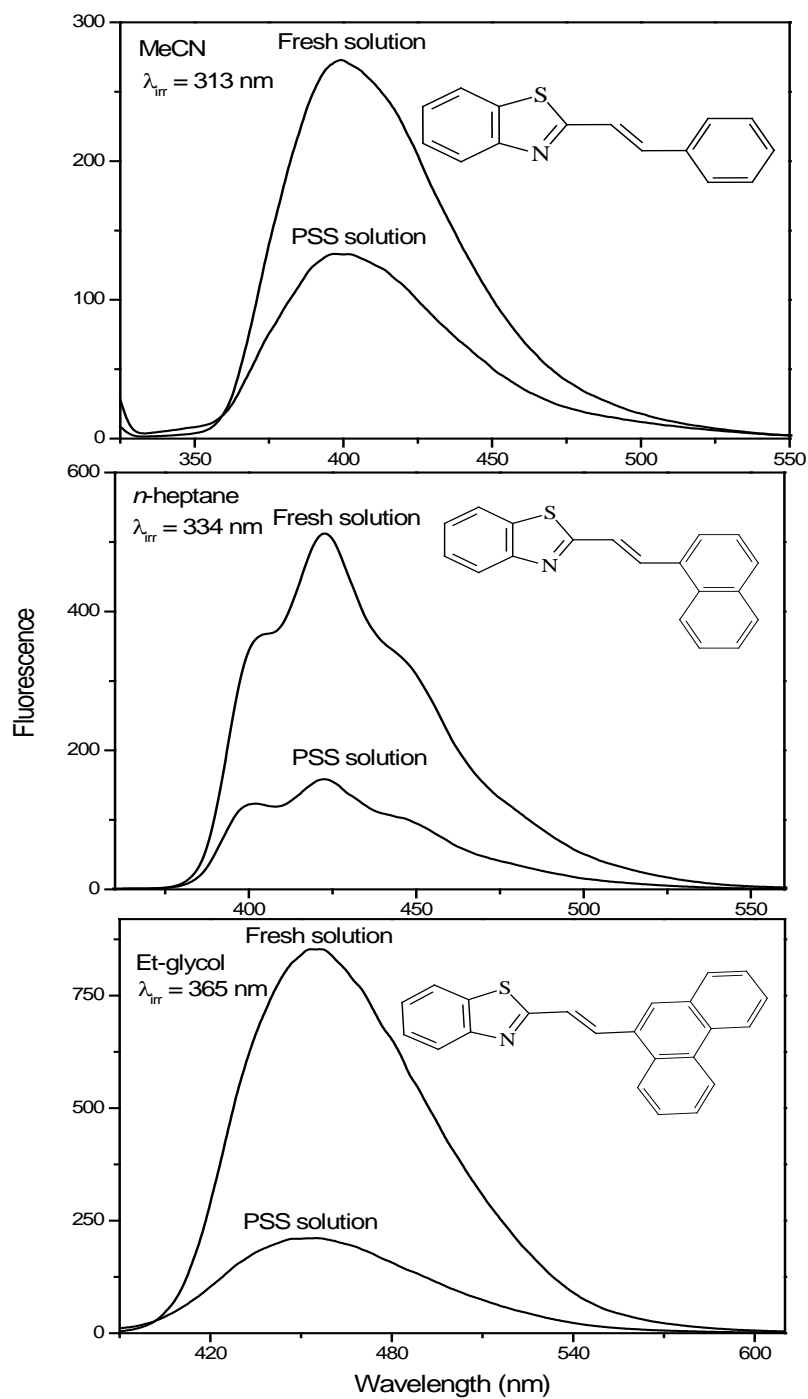


Fig. S2. Fluorescence spectra recorded before irradiation and at the photo-stationary state for PBE, 1-NBE and 9-PhBE.

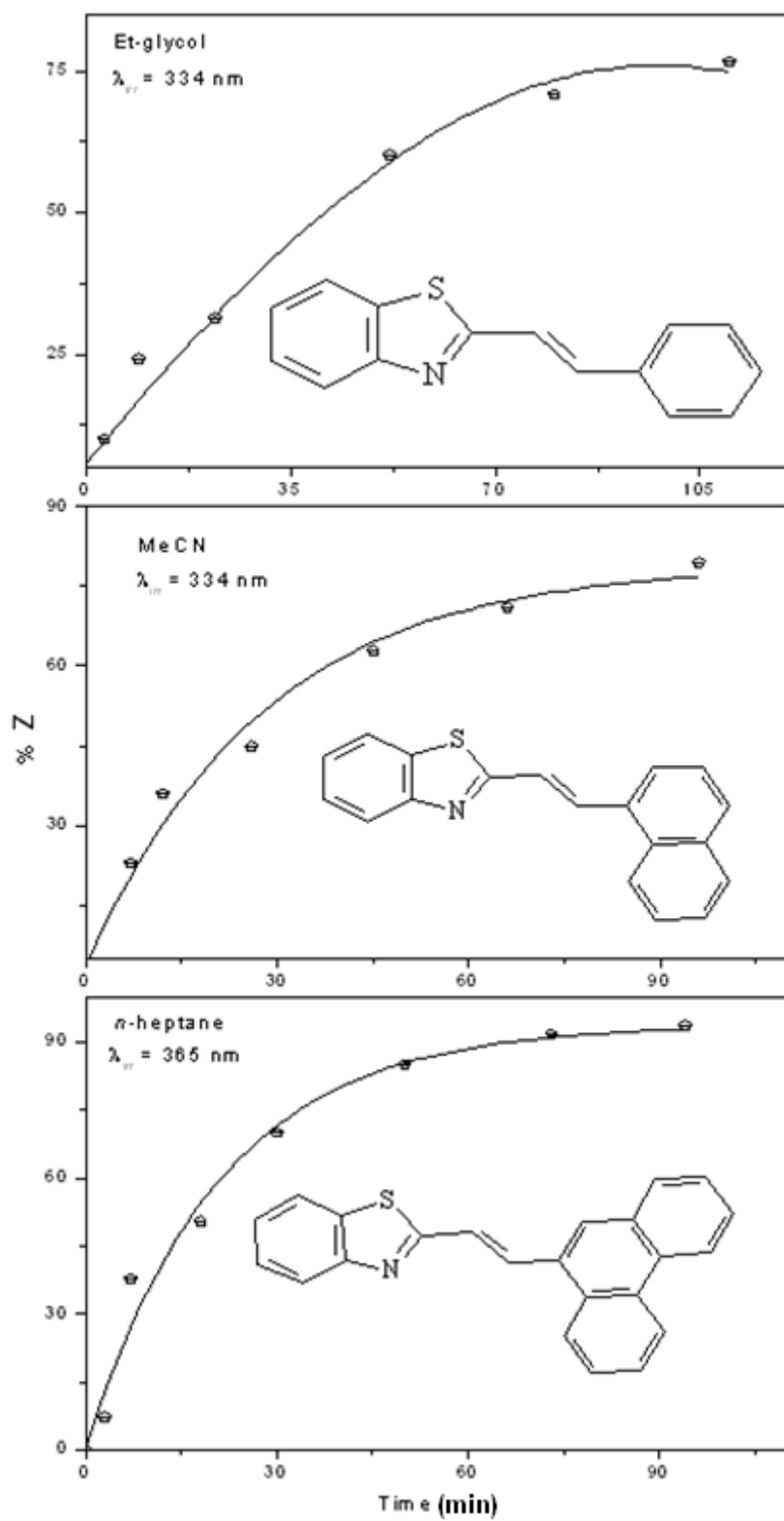


Fig. S3. Growth of the percentage of Z-isomer (% Z) of PBE, 1-NBE and 9-PhBE versus irradiation time.