## Supporting Information for

# Cationic and Radical Polymerization Using a Boron-ThienothiopheneTriphenylamine Based D- $\pi$-A Type Photosensitizer Under White LED Irradiation 

Ali Suerkan ${ }^{1}$, Recep Isci ${ }^{1 *}$, Turan Ozturk ${ }^{1,2}$ and Yusuf Yagci ${ }^{1 *}$<br>${ }^{1}$ Department of Chemistry, Istanbul Technical University, 34469, Maslak, Istanbul, Turkey ${ }^{2}$ TUBITAK UME, Chemistry Group Laboratories, 41470, Gebze, Kocaeli, Turkey

Table of Contents:

Figure S1. A photoreactor capable of providing white LED........................................ 2
Figure S2. Network formation by photopolymerization: TEGDMA, PTEGDMA, BADGE and PBADGE respectively $1 \mathrm{a}, 1 \mathrm{~b}, 2 \mathrm{a}$, and 2 b2
Figure S3. Purified cross-linked polymers: PBADGE (1a) and PTEGDMA (2a) ..... 3
Figure S4. Photographs of DMB-TT-TPA under UV light in different solvents ..... 3
Figure S5. GPC Traces of PSty, PIBVE, PMMA and PCHO ..... 4
Figure S6. ${ }^{1} \mathrm{H}$-NMR Spectra of the polymers in $\mathrm{CDCl} 3(500 \mathrm{MHz})$ ..... 4
Figure S7. CV spectra of the polymers ..... 5
Figure S8. CV calibration ..... 5


Figure S1. A photoreactor capable of providing white LED light.


Figure S2. Network formation by photopolymerization: TEGDMA, PTEGDMA, BADGE and PBADGE respectively $1 \mathrm{a}, 1 \mathrm{~b}, 2 \mathrm{a}$, and 2 b .


Figure S3. Purified cross-linked polymers: PBADGE (1a) and PTEGDMA (2a).


Figure S4. Photographs of DMB-TT-TPA under UV light in different solvents (from left to right; hexane, toluene, tetrahydrofuran, dichloromethane, acetonitrile and dimethyl sulfoxide, respectively.)


Figure S5. GPC Traces of PSty, PIBVE, PMMA and PCHO.


Figure S6. ${ }^{1} \mathrm{H}-\mathrm{NMR}$ Spectra of the polymers in $\mathrm{CDCl}_{3}(500 \mathrm{MHz})$.


Figure S7. CV Spectra of the polymers (using DMB-TT-TPA sensitizer).


Figure S8. Cyclic voltammogram of ferrocene in 0.1 M TBAPF6 acetonitrile electrolyte; Pt working electrode, Pt counter, Ag wire reference, scan rate $=0.1 \mathrm{~V} \mathrm{s-1)}$

