Electronic Supplementary Material (ESI) for Photochemical & Photobiological Science

Supplementary data

Spectral Characteristics of Carbonyl Substituted 2,2'-Bithiophenes in Polymer Matrices and Low polar Solvents

Martin Danko[1], Anita Andicsová[1], Pavol Hrdlovič[1], Dušan Račko[1], Daniel Végh[2]

[1]Polymer Institute, Slovak Academy of Sciences, Dúbravská cesta 9,
SK-845 41 Bratislava, Slovak Republic
[2]Department of Organic Chemistry, Slovak University of Technology, Radlinského 9,
SK-812 37 Bratislava, Slovak Republic

Supplementary data contain absorption and emission spectra of studied derivatives in cyclohexane, toluene at concentration $1x10^{-5}$ mol L^{-1} and in PS, PMMA and PVC polymer matrices at concentration $2x10^{-3}$ mol kg^{-1}.

Figure S1-A: Absorption spectra of **1-BT**, **2-BTCF**, **3-BTCN**, **4-BTCE** and **5-BTFL** in cyclohexane measured at $1x10^{-5}$ mol L^{-1}.

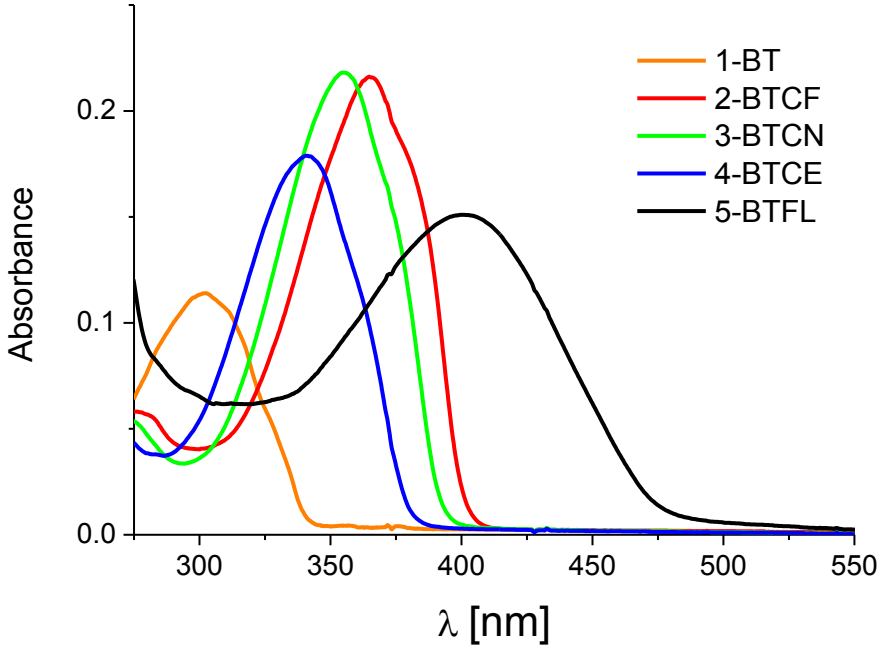

Figure S1-B: Normalized emission spectra of **1-BT**, **2-BTCF** and **3-BTCN** in cyclohexane measured at $1x10^{-5}$ mol L^{-1}; (excitation wavelength was set up at 302 nm for **1-BT**, 365 nm for **2-BTCF** and 355 nm for **3-BTCN**).

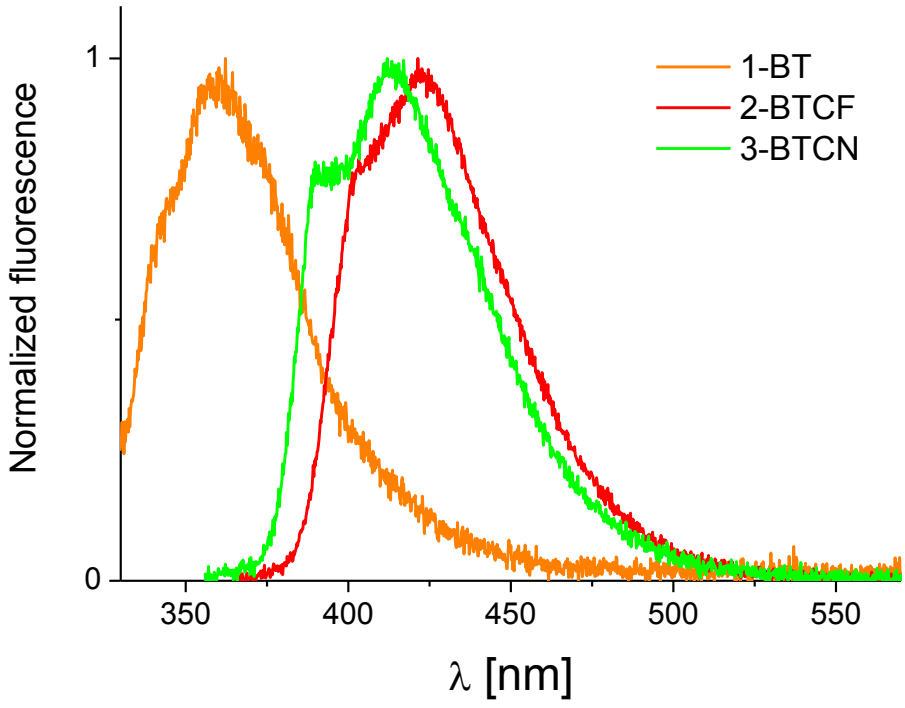

Figure S2-A: Absorption spectra of **1-BT**, **2-BTCF**, **3-BTCN**, **4-BTCE** and **5-BTFL** in toluene measured at $1x10^{-5}$ mol L^{-1}.

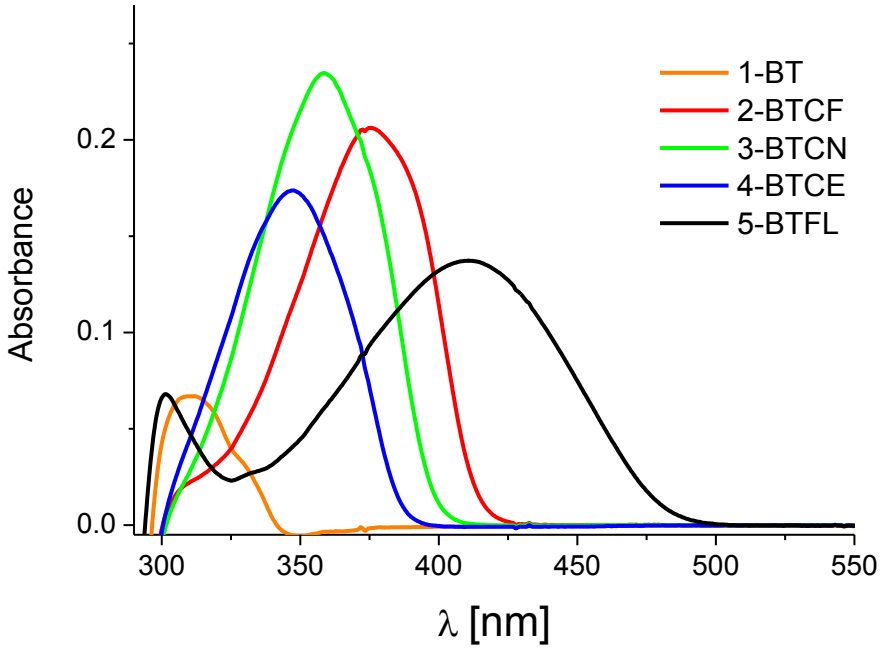

Figure S2-B: Normalized emission spectra of **1-BT**, **2-BTCF**, **3-BTCN** and **4-BTCE** in toluene measured at $1x10^{-5}$ mol L^{-1}; (excitation wavelength was set up at 312 nm for **1-BT**, 376 nm for **2-BTCF**, 358 nm for **3-BTCN** and 347 nm for **4-BTCE**).

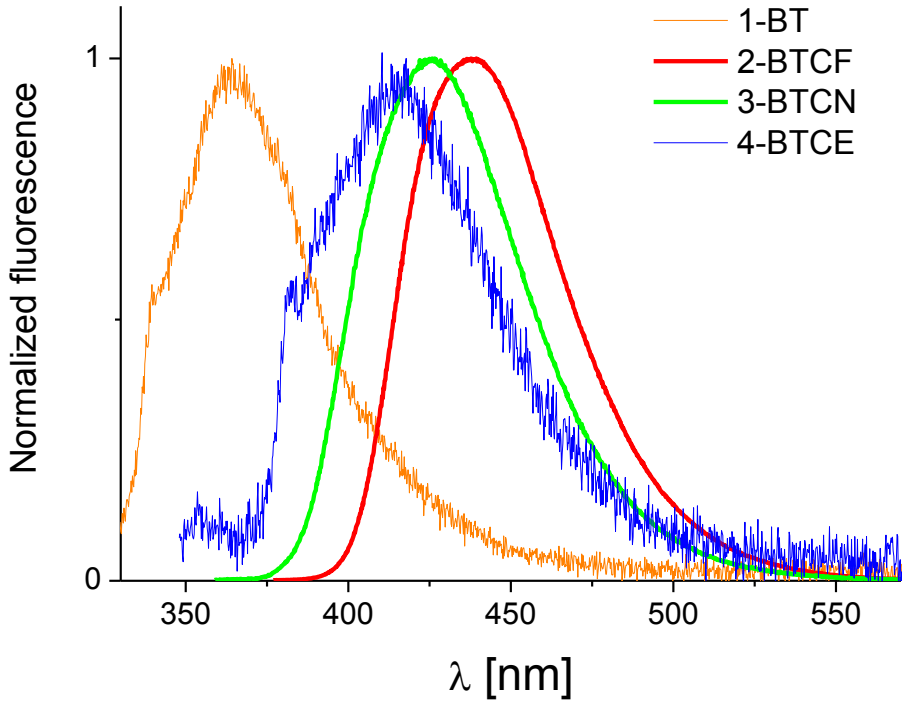

Figure S3-B: Normalized emission spectra of **1-BT**, **2-BTCF**, **3-BTCN**, **4-BTCE** and **5-BTFL** in PS measured at $2x10^{-3}$ mol kg^{-1}; (excitation wavelength was set up at 305 nm for **1-BT**, 377 nm for **2-BTCF**, 362 nm for **3-BTCN**, 349 nm for **4-BTCE** and 412 for **5-BTFL**).

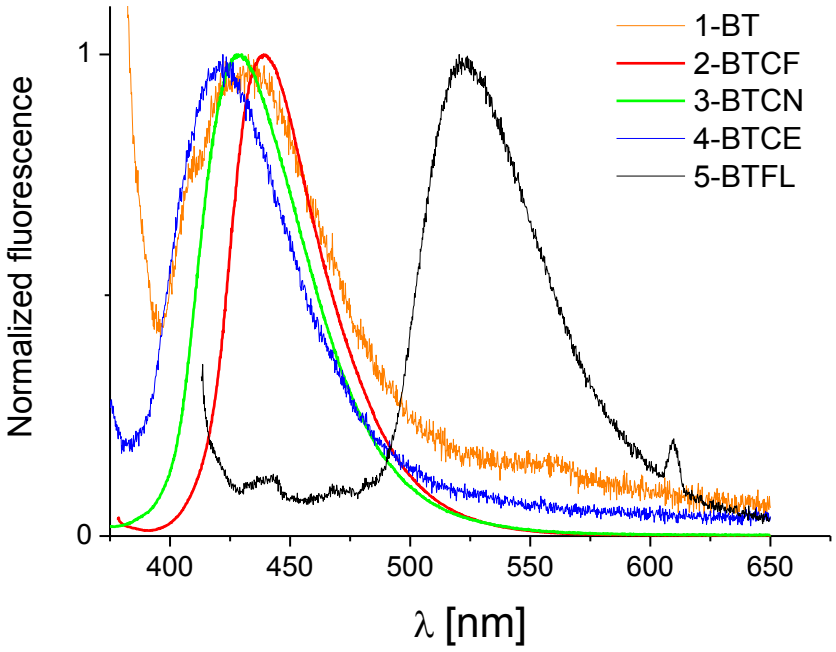

Figure S4-A: Absorption spectra of **2-BTCF**, **3-BTCN**, **4-BTCE** and **5-BTFL** in PMMA measured at $2x10^{-3}$ mol kg^{-1}.

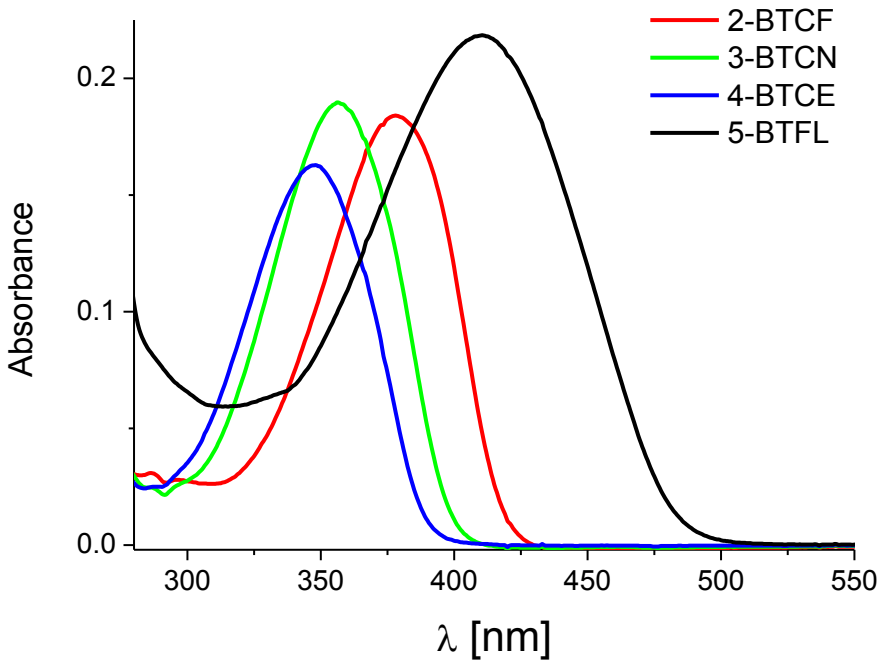

Figure S4-B: Normalized emission spectra of **1-BT**, **2-BTCF**, **3-BTCN** and **4-BTCE** in PMMA measured at $2x10^{-3}$ mol kg^{-1} ; (excitation wavelength was set up at 303 nm for **1-BT**, 377 nm for **2-BTCF**, 356 nm for **3-BTCN** and 347 nm for **4-BTCE**).

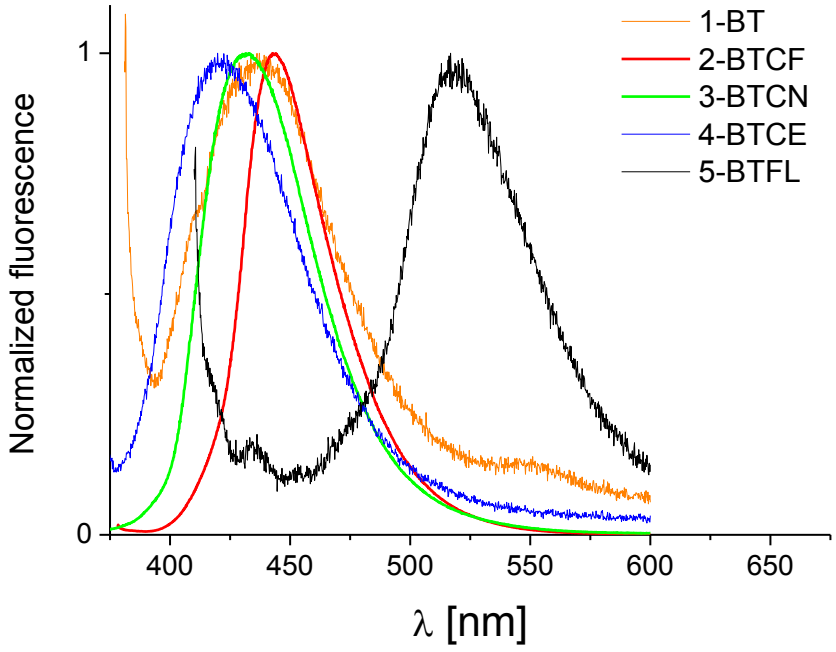

Figure S5-A: Absorption spectra of **1-BT**, **2-BTCF**, **3-BTCN**, **4-BTCE** and **5-BTFL** in PVC measured at $2x10^{-3}$ mol kg^{-1}.

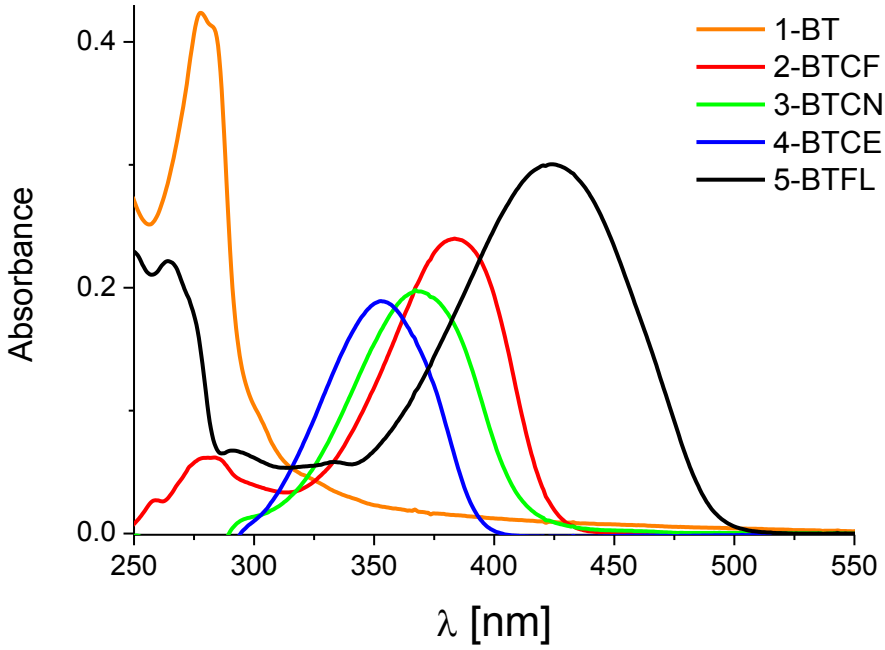

Figure S5-B: Normalized emission spectra of **1-BT**, **2-BTCF**, **3-BTCN**, **4-BTCE** and **5-BTFL** in PVC measured at $2x10^{-3}$ mol kg^{-1}(excitation wavelength was set up at 305 nm for **1-BT**, 384 nm for **2-BTCF**, 365 nm for **3-BTCN**, 355 nm for **4-BTCE** and 423 for **5-BTFL**).