## **New Journal of Chemistry**

## **Electronic Supplementary Information**

## Zinc(II) Phthalocyanine-Viologen Dyads: Synthesis, Electrochemistry, Spectroelectrochemistry, Electrodeposition, and Electrochromism

Burak Yıldız<sup>a,b</sup>, Erem Ahmetali<sup>a</sup>, Özlem Budak<sup>c</sup>, Atıf Koca<sup>c,\*</sup>, M. Kasım Şener<sup>a,\*</sup>

<sup>a</sup> Department of Chemistry, Faculty of Arts and Sciences, Yıldız Technical University, Esenler, 34210 İstanbul, Turkey

<sup>b</sup> Program of Refinery and Petrochemical Technology, Aliağa Vocational Training School, Ege University, Aliağa, 35800 İzmir, Turkey

<sup>c</sup> Department of Chemical Engineering, Faculty of Engineering, Marmara University, Kadıköy, 34722 İstanbul, Turkey

\* Corresponding authors.

E-mail addresses: akoca@marmara.edu.tr (A. Koca),

mkasimsener@gmail.com (M. K. Şener)



Fig. S1. FT-IR spectrum of ZnPc-Br.



Fig. S2. MALDI-TOF MS spectrum of ZnPc-Br (matrix: 2,5-Dihydroxybenzoic acid).



Fig. S3. <sup>1</sup>H-NMR spectrum of **ZnPc-Br** in DMSO-*d*<sub>6</sub> (\* indicates residual solvent peaks).



Fig. S4. UV-vis spectrum of ZnPc-Br in DMSO (concentration:  $10^{-5}$  M).



Fig. S5. FT-IR spectrum of ZnPc-V.



**Fig. S6.** MALDI-TOF MS spectrum of **ZnPc-V** (matrix: α-cyano-4-hydroxy-cinnamic acid).



**Fig. S7.** <sup>1</sup>H-NMR spectrum of **ZnPc-V** in DMSO- $d_6$  (\* indicates residual solvent peaks).



Fig. S8. UV-vis spectrum of ZnPc-V in DMSO (concentration:  $10^{-5}$  M).



Fig. S9. FT-IR spectrum of ZnPc-MV.



Fig. S10. MALDI-TOF MS spectrum of ZnPc-MV (matrix: α-cyano-4-hydroxy-cinnamic acid).



**Fig. S11.** <sup>1</sup>H-NMR spectrum of **ZnPc-MV** in DMSO-*d*<sub>6</sub> (\* indicates residual solvent peaks).



**Fig. S12.** UV-vis spectrum of **ZnPc-MV** in DMSO (concentration:  $10^{-5}$  M).