**Supporting Information**

**Porous polystyrene/zinc oxide nanocomposite fibers for photocatalytic degradation of Azocarmine G dye**

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**Supporting Information 1:** XRD pattern of the ZnO particles



**Figure S1.** XRD pattern for the ZnO.

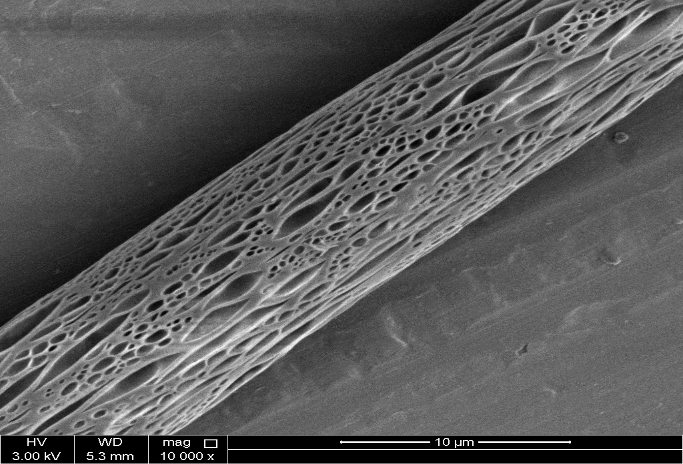
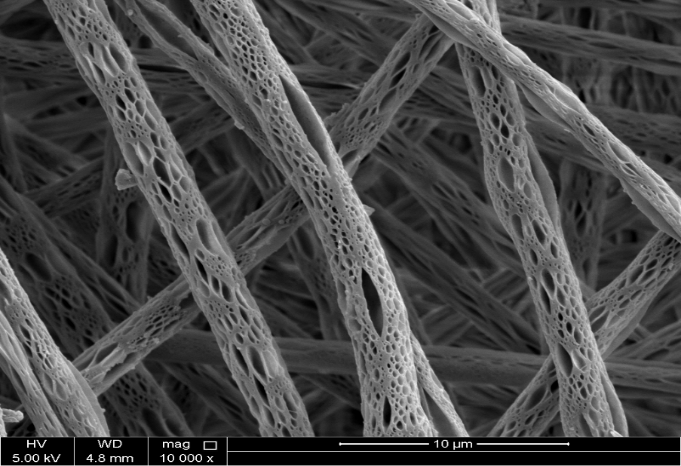
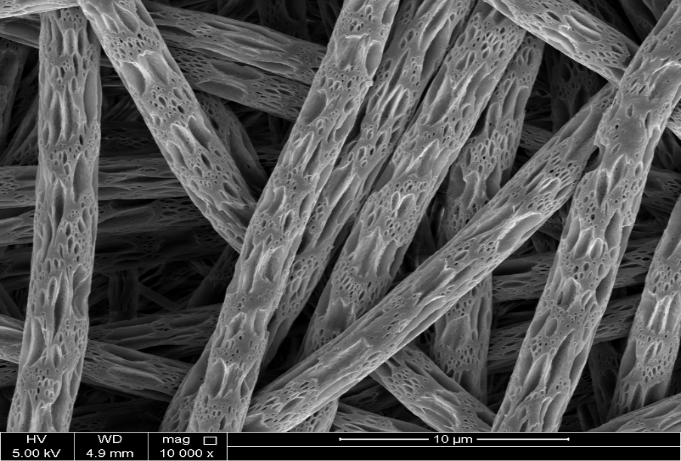
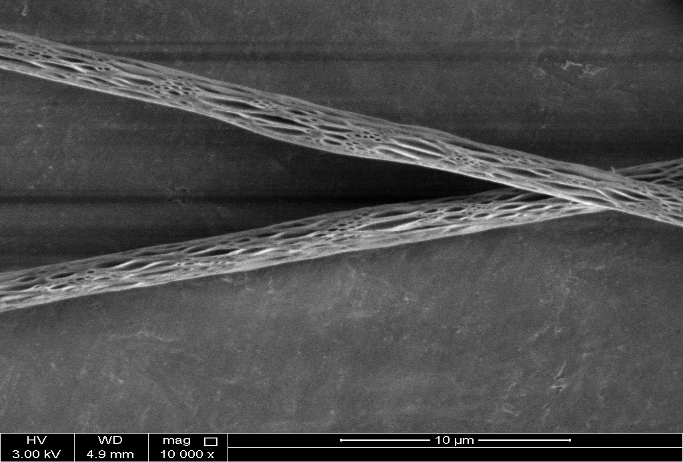
**Supporting Information 2:** SEM images of the PS nanocomposites

d)

c)

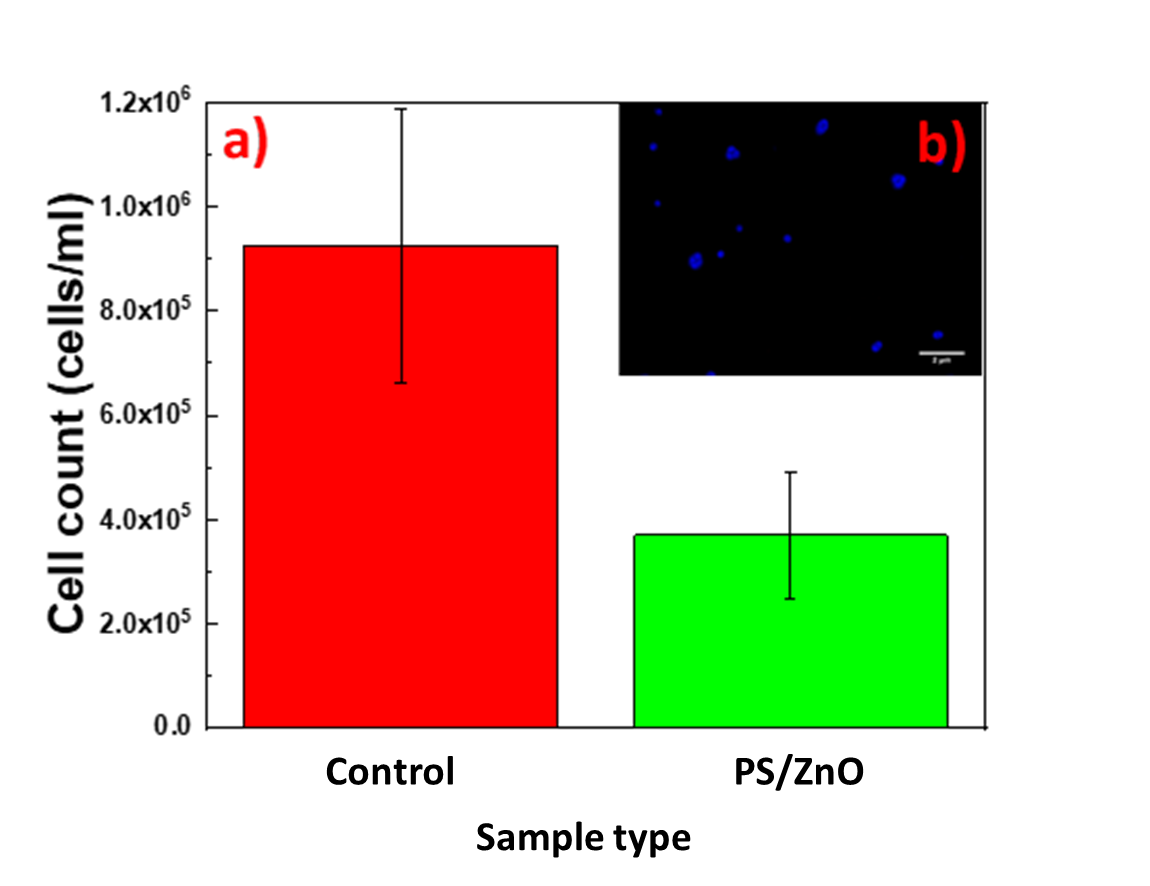
b)

a)



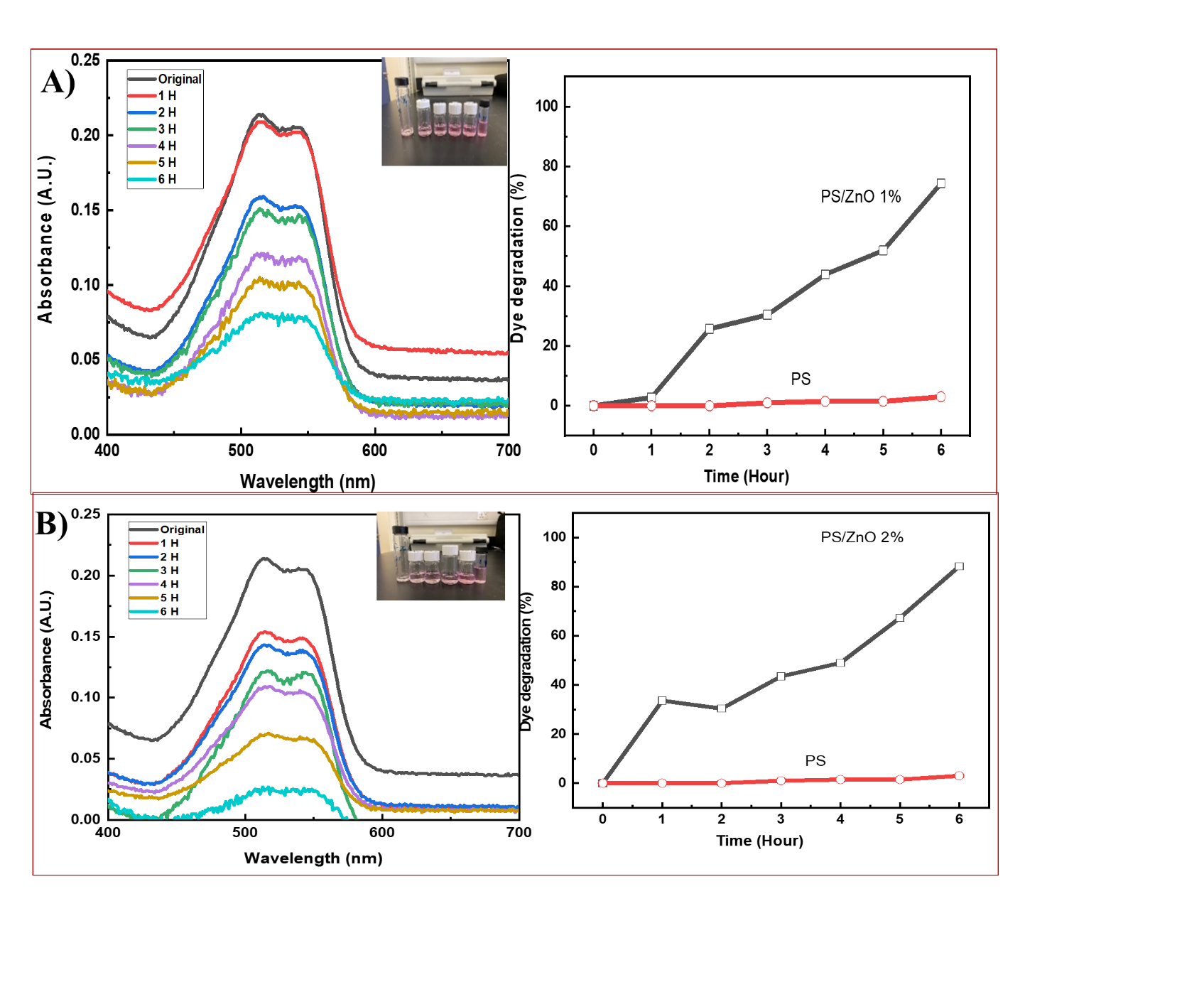
**Figure S2.** SEM images of a) PS b) PS/ZnO 1% c) PS/ZnO 2% and d) PS/ZnO 3%.

**Supporting Information 3:** Comparison between bacterial growth on a control and the PS composite.



**Figure S3**. a) Comparison of bacterial cell growth on control filter and PS/ZnO nanocomposite, b) example of strained bacteria under 60x magnification.

**Supporting Information 4:** Photocatalytic degradation of Azocarmine dye using the PS nanocomposite.



**Figure S4.** Photocatalysis of A) PS/ZnO 1% and B) PS/ZnO 2%