



Physicochemical and Photocatalytic Properties under Visible Light of ZnO-Bentonite/Chitosan Hybrid-Biocomposite for Water Remediation

Imane Aadnan ¹, Omar Zegaoui ^{1,*}, Abderrahim El Mragui ¹ and Joaquim Carlos Gomes Esteves da Silva ²

¹ Research team “Materials and Applied Catalysis: MCA”, CBAE Laboratory, URL-CNRST N°13, Faculty of Sciences, Moulay Ismail University of Meknes, Zitoune, Meknès BP. 11201, Morocco; i.aadnan@edu.umi.ac.ma (I.A.); a.elmragui@edu.umi.ac.ma (A.E.M.)

² (UP)—Research Center in Chemistry, DGAOT, Faculty of Sciences, University of Porto, Rua do Campo Alegre, s/n, 4169-007 Porto, Portugal; jcsilva@fc.up.pt

* Correspondence: o.zegaoui@umi.ac.ma

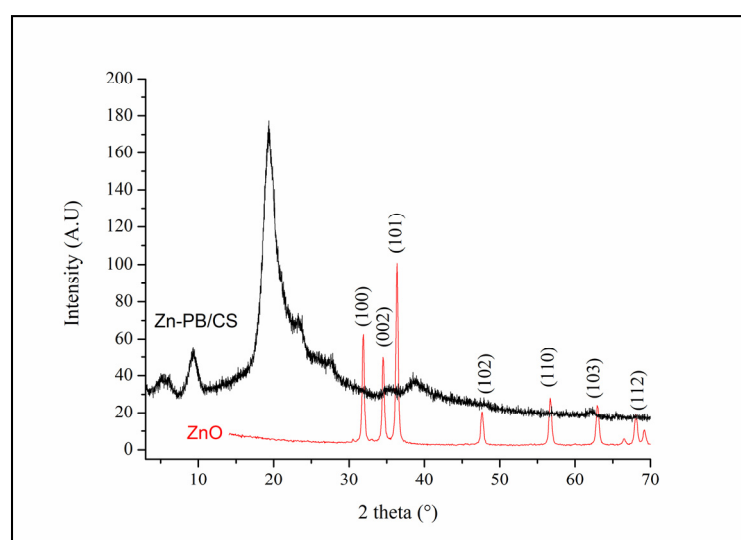


Figure S1. XRD patterns of ZnO and Zn-PB/CS materials.

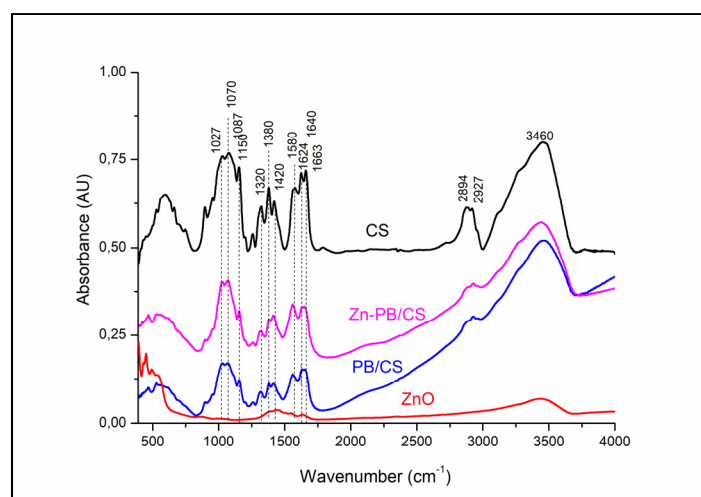


Figure S2. FTIR spectra of CS, PB/CS, ZnO and Zn-PB/CS biocomposites.

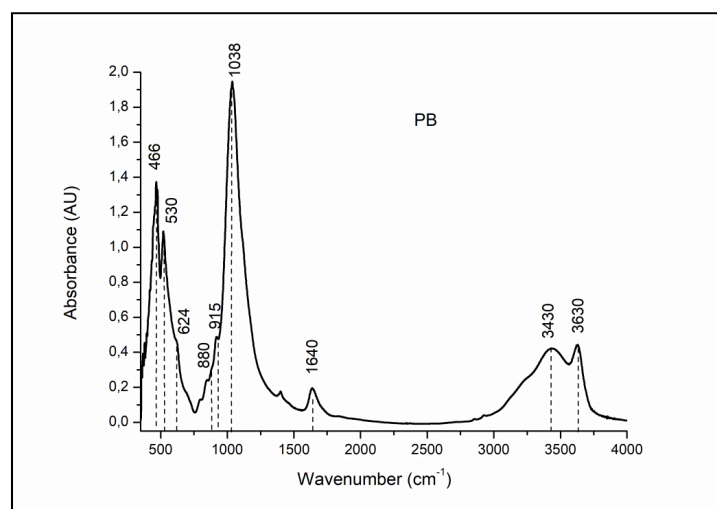


Figure S3. FTIR spectrum of PB sample.

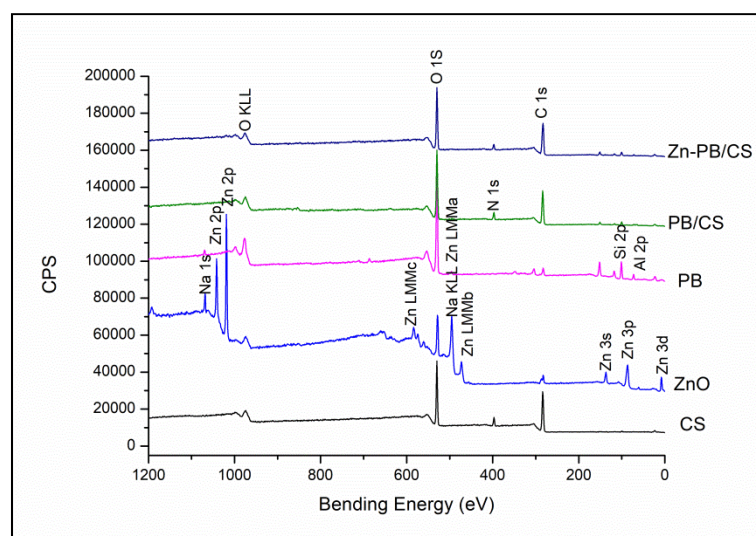


Figure S4. Full scan XPS spectra of the hybrid-biocomposites accompanied with those of PB, ZnO and CS.

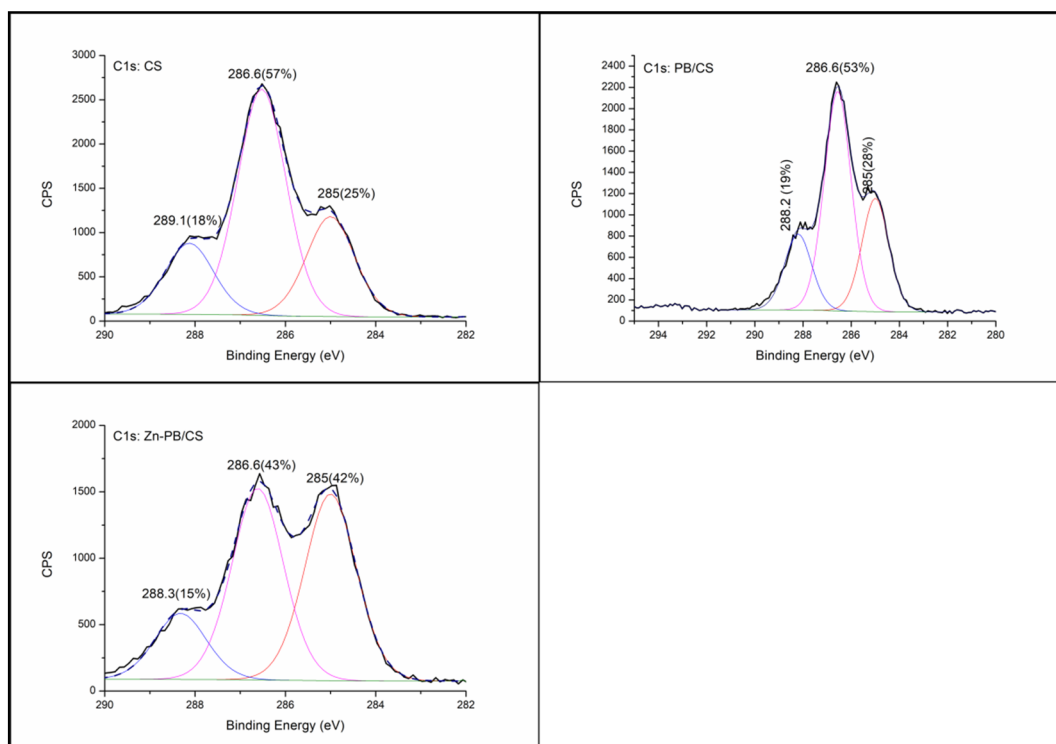


Figure S5. High-resolution XPS spectra of C1s.

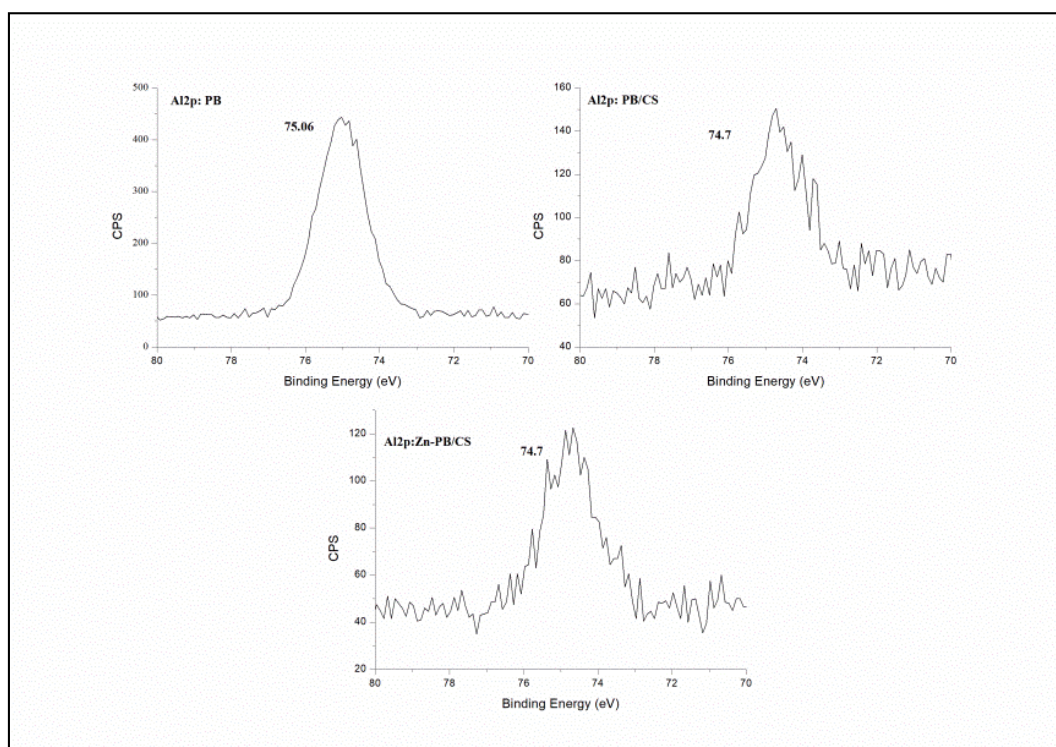


Figure S6. High-resolution XPS spectra of Al2p.

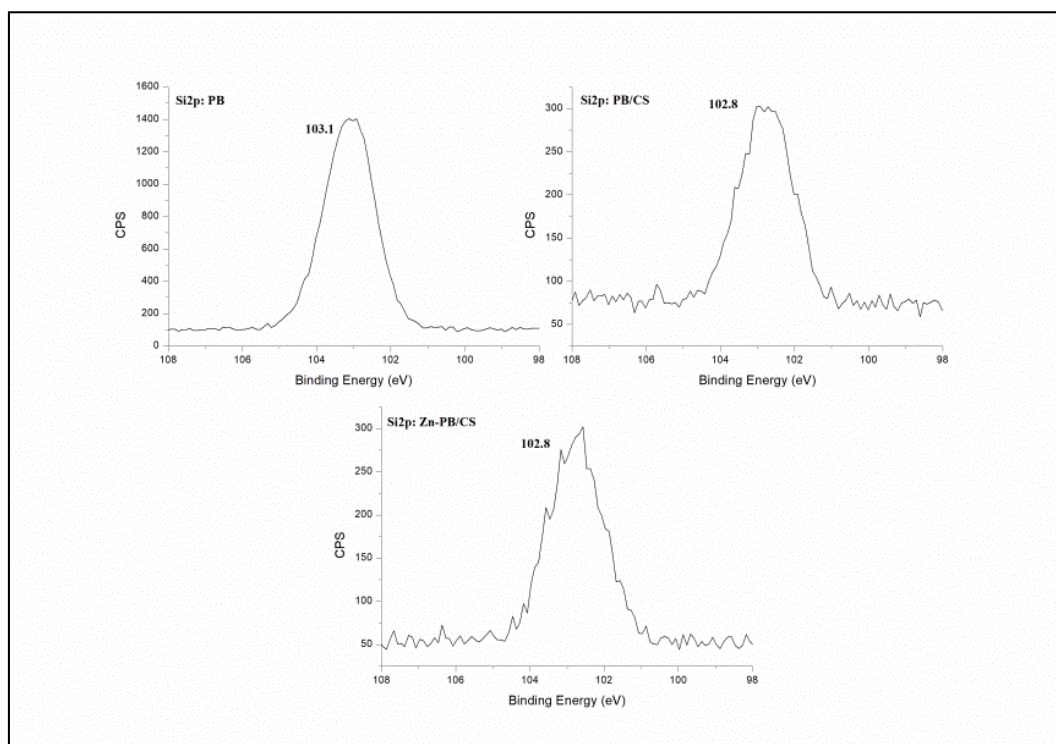


Figure S7. High-resolution XPS spectra of Si2p.

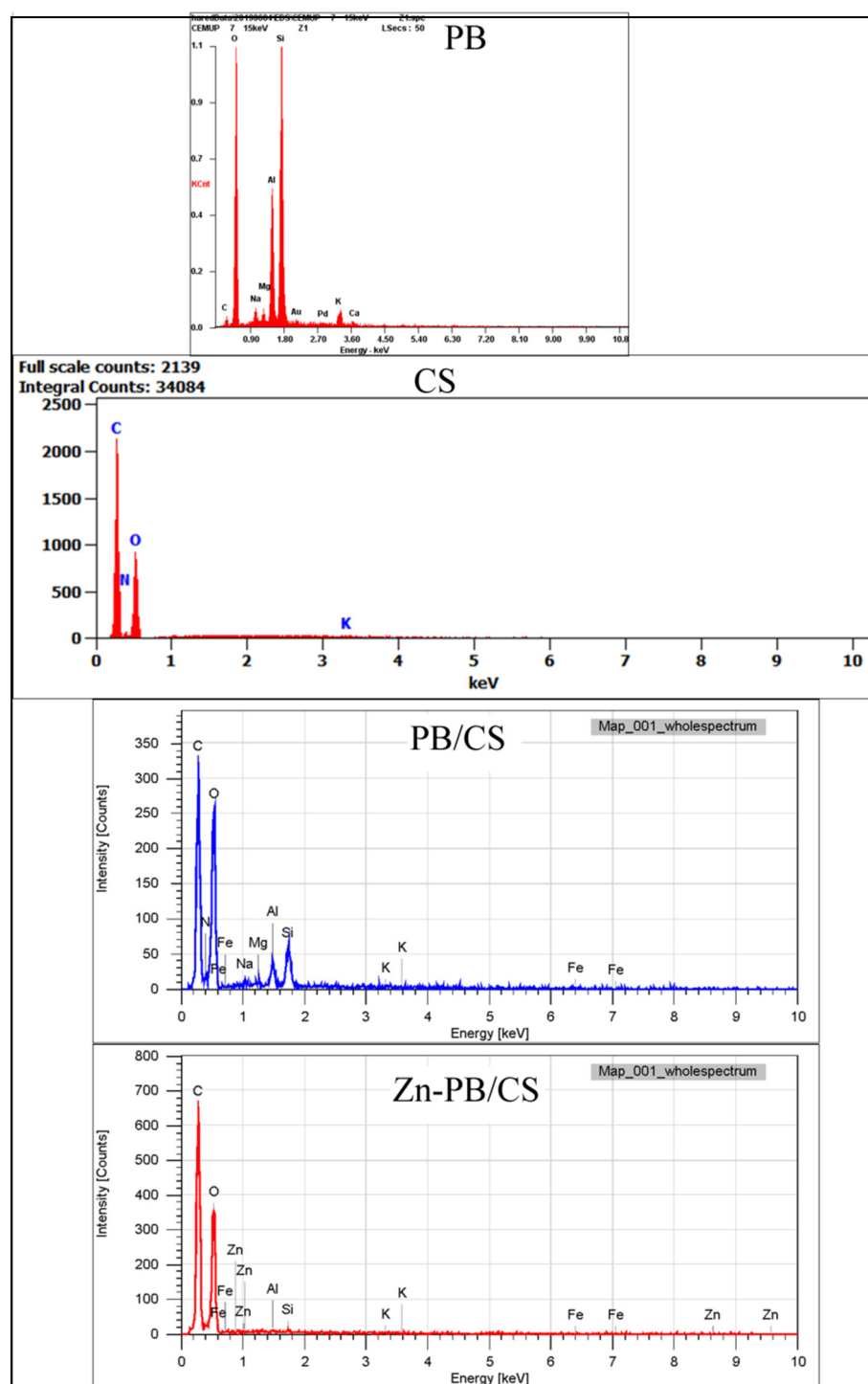


Figure S8. EDS analyses of PB, CS, PB/CS and Zn-PB/CS samples.

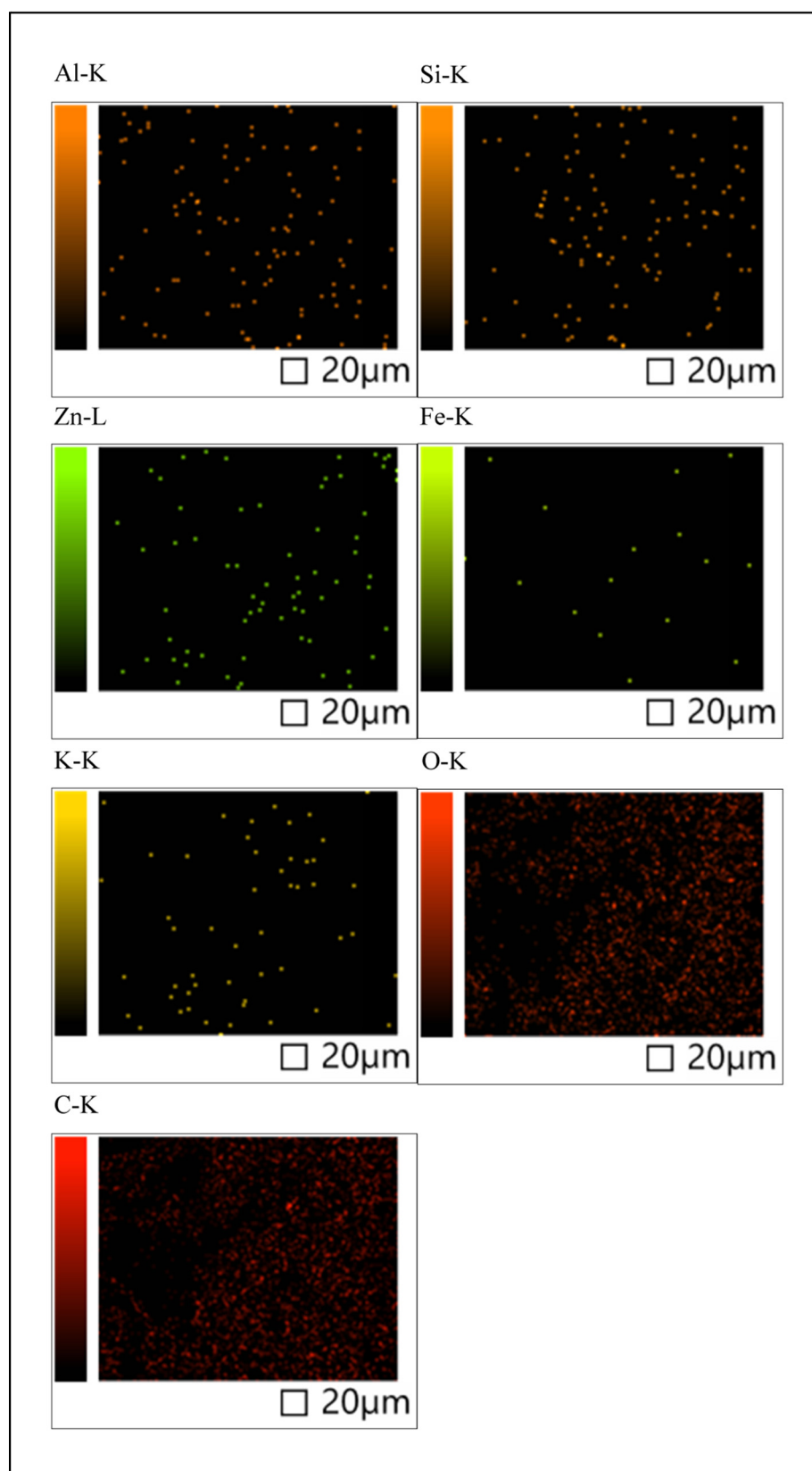


Figure S9. EDS mapping analysis of Zn-PB/CS hybrid-biocomposite.