

Article

Photochemical degradation of cyanides and thiocyanates from an industrial wastewater

Juan José Viña Mediavilla¹, Begoña Fernandez Perez^{1*}, Maria C. Fernandez de Cordoba², Julia Ayala Espina¹, and Conchi O. Ania^{2,3*}

¹ Escuela Técnica Superior de Ingeniería de Minas, Universidad de Oviedo, 33001 Oviedo, Spain; UO45242@uniovi.es; fernandezbegona@uniovi.es; jayala@uniovi.es

² CEMHTI, CNRS (UPR 3079), Université d'Orléans, 45071 Orléans, France; conchi.ania@cnrs-orleans.fr; maria.fdecordoba@cnrs-orleans.fr

³ Instituto Nacional del Carbón (INCAR, CSIC), Apdo. 73, 33080 Oviedo, Spain; conchi.ania@cnrs-orleans.fr;

* Correspondence: conchi.ania@cnrs-orleans.fr; Tel.: +33-(0)-238-255-513; fernandezbegona@uniovi.es;

Supplementary Information File

Table S1. Main characteristics of commercial TiO₂ used as photocatalyst.

	Area _{BET} (m ² g ⁻¹)	VPORES ^A (cm ³ g ⁻¹)	Optical Band gap (eV)	Surface pH
TiO ₂ -P25	53	0.083	3.2	6.4

^A evaluated at relative pressure of 0.99 from N₂ adsorption isotherms at 77 K

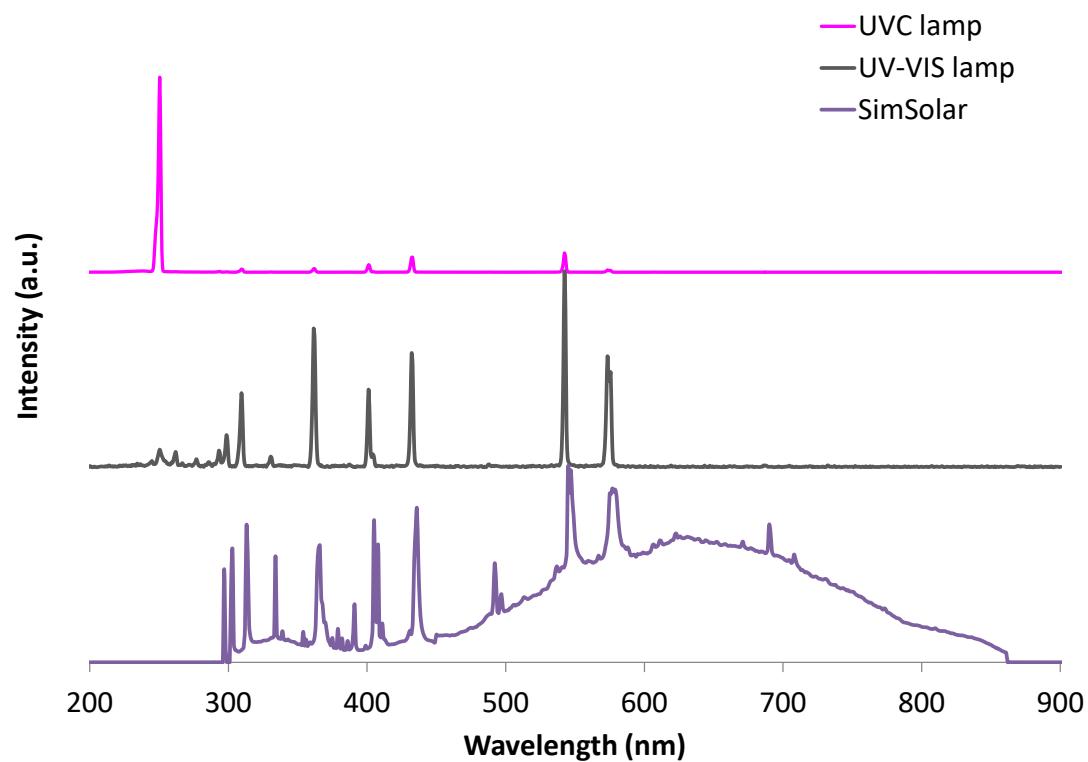


Figure S1. Emission spectra of the illumination sources.

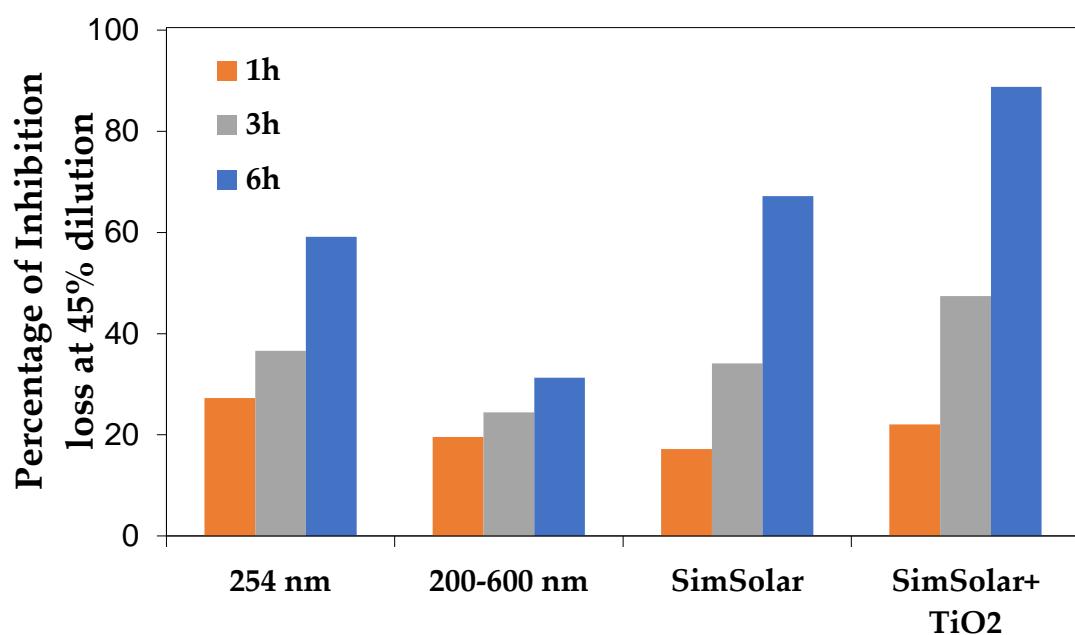


Figure S2. Bioluminescence inhibition loss at 45% dilution of the wastewater exposed to illumination under different conditions during 1,3 and 6 hours.