

Supplementary Materials: Immobilised Cerium Doped Zinc Oxide as Photocatalyst for the Degradation of Antibiotics and the Inactivation of Antibiotic Resistant Bacteria

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UVVIS Absorbance

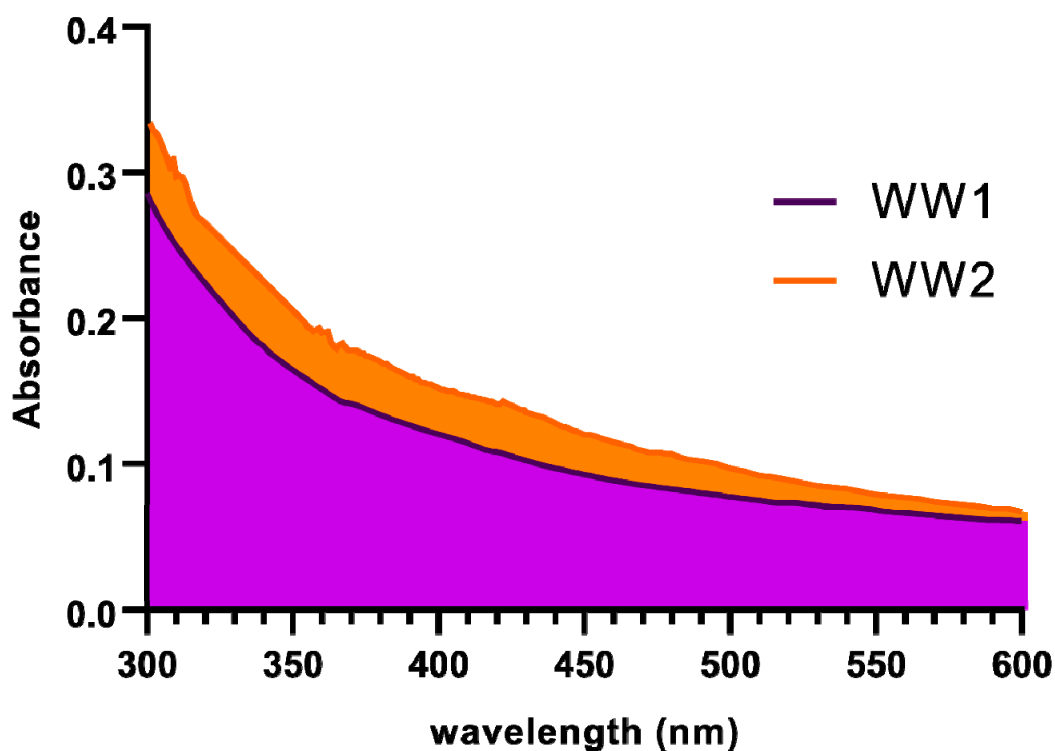


Figure SI1 – Absorbance spectra of wastewater samples (WW1 and WW2) used for disinfection experiments, using a 1 cm cell.

OSRAM DULUX L BL UVA 18W/78 2G11

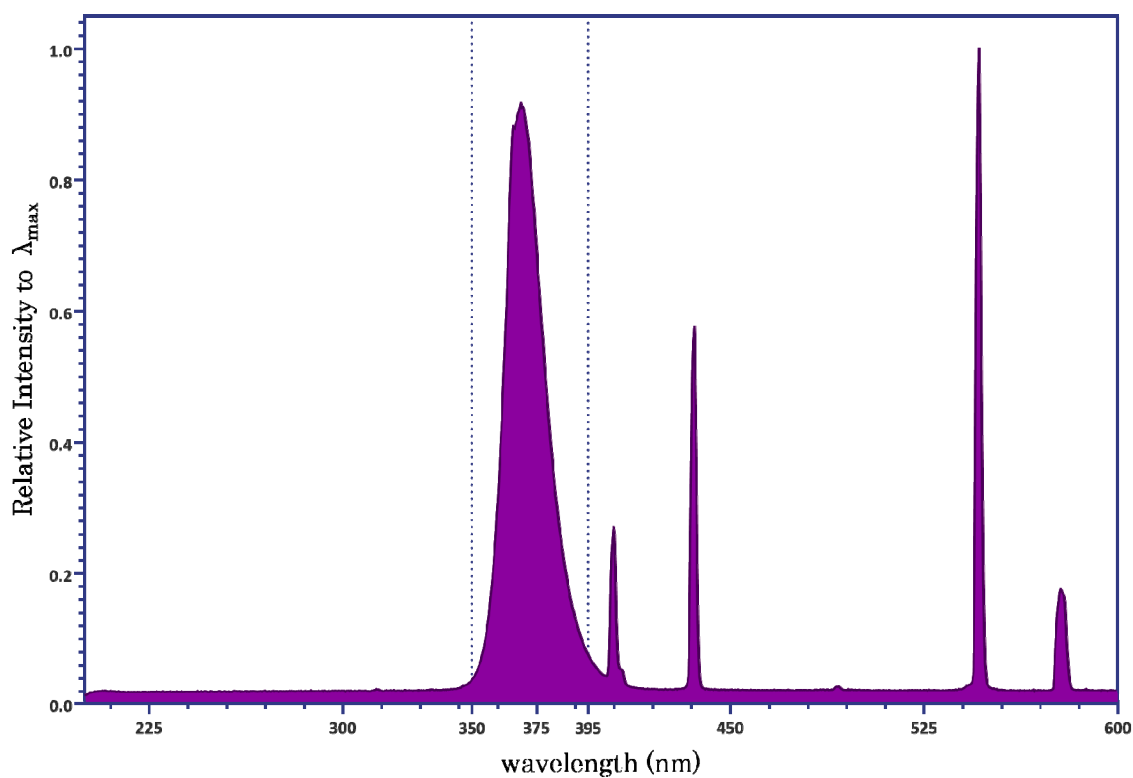


Figure SI2 - Relative Intensity Spectrum of Osram UVA 18W/78 CFL.

Table SI1 – chemical structure, M_w , pK_a and selected reaction monitoring (SRM) transitions between the precursor ion and the two most abundant fragment ions for each antibiotic.

Analyte	Chemical structure	$M_w(\text{g mol}^{-1})$	pK_a	SRM1	SRM2
Trimethoprim		290.32	7.12	252.10 > 156.00	252.10 > 92.10
Sulfamethoxazole		253.28	$pK_{a1} = 1.6$; $pK_{a2} = 5.7$	290.80 > 230.00	290.80 > 123.05