The Effect of Blue Light on the Electronic and Structural Properties of Bilirubin Isomers: Insights into the Photoisomerization and Photooxidation Processes

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Support Information

The I/I_0 *vs* exposure time curves, shown in the insets of Figures 2 and 3, were fitted using the following Boltzmann sigmoidal function:

$$\frac{I}{I_0} = m_2 + \frac{m_1 - m_2}{1 + e^{[(t-t_0)/dt]}} \tag{1}$$

In Equation 1, the parameter m_1 is the initial value of I/I_0, m_2 is its final value, t is the center of the function, and dt is a time constant. Table S1 shows the parameters obtained from these fits for all bilirubin solution studied.

Table S1: Boltzmann sigmoidal parameters obtained from the fitting of maximal wavelengths for all bilirubin solutions studied.

Solution	m_1	m_2	t_0	dt
$CHCl_3$	1.00	-0.02	62.84	23.38
milli-Q	1.00	0.10	23.64	10.63
physiological saline	0.99	0.04	37.10	11.37

Figure S1 shows UV–visible absorption spectra measured for a sample of bilirubin in chloroform without radiation exposure during 6 hours, recorded at 1h intervals.

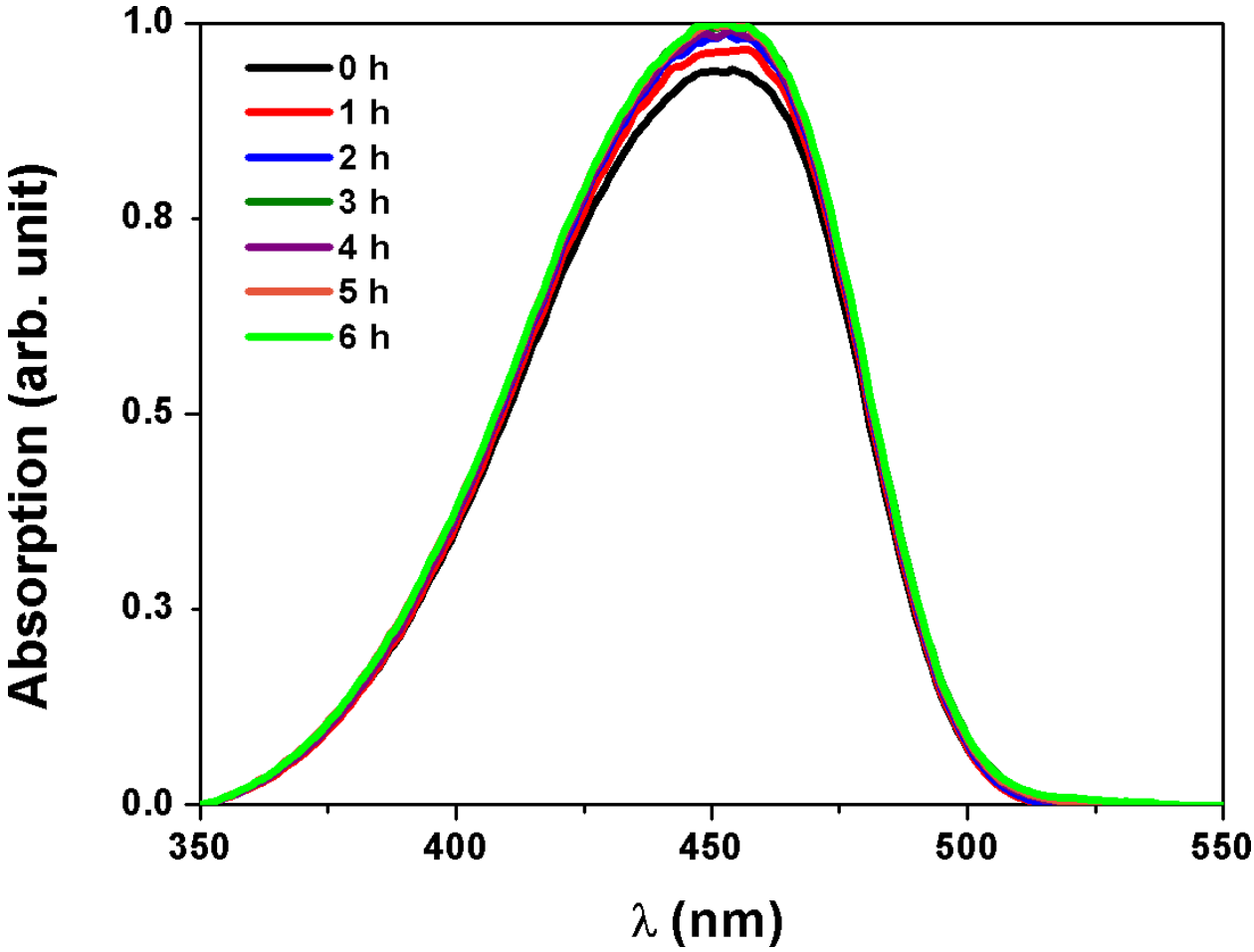

Figure S1: Normalized UV–visible spectra measured for bilirubin sample in chloroform without radiation exposure during 6 hours at 1h intervals.