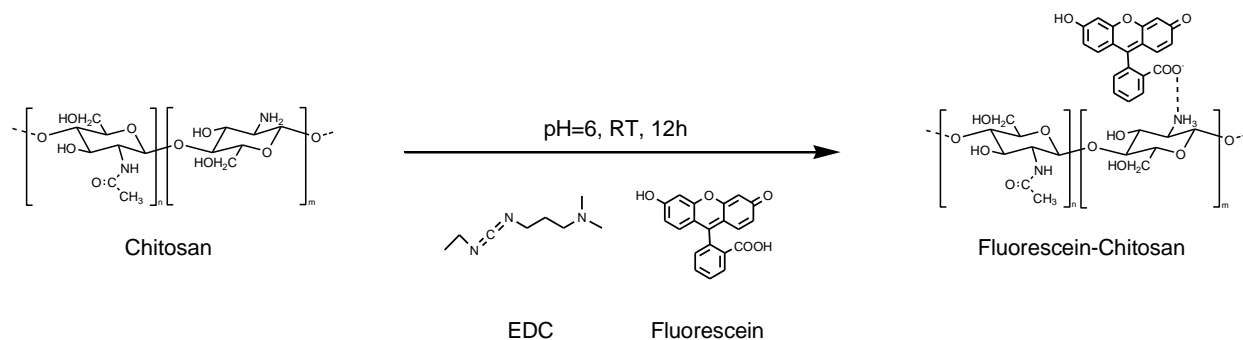


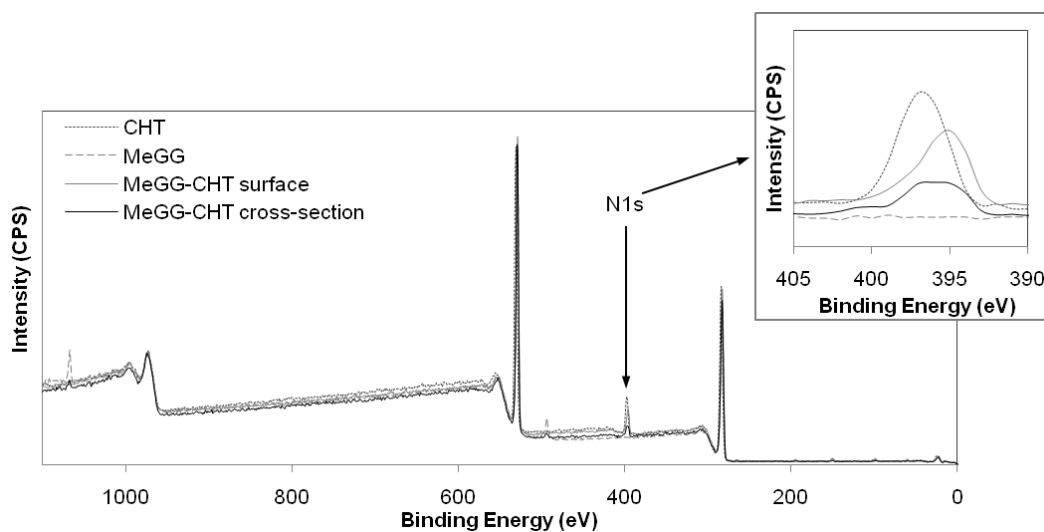
## Supplementary Information

Schematic representation of the chemical reaction followed to produce fluorescein-labeled CHT (Fig. S1) used for analyzing the distribution of CHT through the xz axis of PEC MeGG-CHT hydrogel.



**Fig. S1** Schematic representation of the chemical reaction for producing fluorescein-labeled CHT (fluorescein-CHT).

The elemental analysis summarized in Table 2 was calculated based on the survey spectra depicted in Fig. S2. The percentages of the elements were calculated by the areas under the specific peaks.



**Fig. S2** Survey spectra of CHT, MeGG and the surface and cross-section of MeGG-CHT PEC hydrogel.