Erratum to: Hydrophobic modification of cellulose nanocrystal via covalently grafting of castor oil

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In the original publication, the formula and the calculated grafting ratio were incorrect, and the correction was depicted as follows:

In virtue of the present proof on the grafting of CO onto the CN, element analysis was used to determine the grafting ratio (x_{Grafting}) of CO, i.e., the weight percentage of NCO-terminated PI-CO in CO-g-CN. Table 3 summarizes the experimental weight fractions of C, H, O, N and S elements for the CN and CO-g-CN and the theoretical values of C, O and N elements for NCO-terminated PI-CO. A small amount of the S element was derived from the sulfonic groups, which formed in the process of H₂SO₄ hydrolysis. According

to the weight fractions of the C element, the grafting ratio was calculated as 17.7 wt% by the following equation:

$$x_{\text{Grafting}} = \frac{W_{\text{CO-g-CN}} - W_{\text{CN}}}{W_{\text{NCO-PI-CO}} - W_{\text{CN}}} \times 100\%$$

where W_{CN} , $W_{\text{CO-g-CN}}$ and $W_{\text{NCO-PI-CO}}$ are the experimental weight percentage of the C element in CN and CO-g-CN and the theoretical weight percentage of the C element in NCO-terminated PI-CO, respectively.

In the part of “**Conclusions**”

The results of FTIR, solid state ¹³C NMR, and XPS proved that the CO was successfully grafted onto the surface of CN, and the weight percentage of grafting chains in CO-grafted CN (CO-g-CN) was determined as 17.7 wt% by element analysis.

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