

**Supplementary Information for**  
**Okra Micro-Cellulose Crystal (MCC) and Micro-Clay Composites for the Remediation**  
**of Copper, Nickel and Dye (Basic Yellow II) from Wastewater**

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XRD analysis of pure fibers, clay and composites was undertaken to find the crystallinity which is carried out at room temperature with a D-8 ADVANCE Bruker diffractometer operating at 40 kV and 30 mA, using radiation ( $\lambda = 0.1546$  nm) in a  $2\theta$  range of  $5\text{--}35^\circ$  at a scan rate of  $4^\circ \text{ min}^{-1}$ . The crystallinity ( $X_c$ ) values of these specimens were estimated from this X-ray diffraction measurements using the following equation (1):

$$X_c(\%) = 100 \times \frac{S_c}{S_a + S_c} \dots\dots\dots(1)$$

where  $S_c$  and  $S_a$  are crystalline and amorphous diffraction peak areas, respectively. The percentage of crystallinity ( $X_c$ ) was calculated by a paper-cutting method using the paper weight of respective areas (Figure S1) [1].

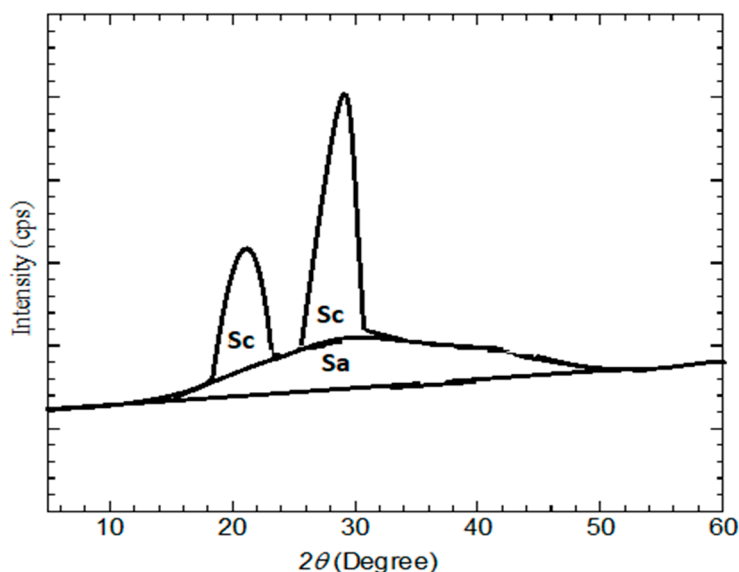


Figure S1. Determination of crystallinity (%) by paper cutting method using  $S_c$  and  $S_a$ .

**Reference**

1. Rahaman, M.H.; Tsuji, H. Isothermal crystallization and spherulite growth behavior of stereo multiblock poly (lactic acid) s: effects of block length. Journal of Applied Polymer Science 2013, 129, 2502-2517