

Supporting Information

Trans crystallization Behaviors and Strong reinforcement effect of Cellulose nanocrystals on Reinforced Poly (butylene succinate) nanocomposites

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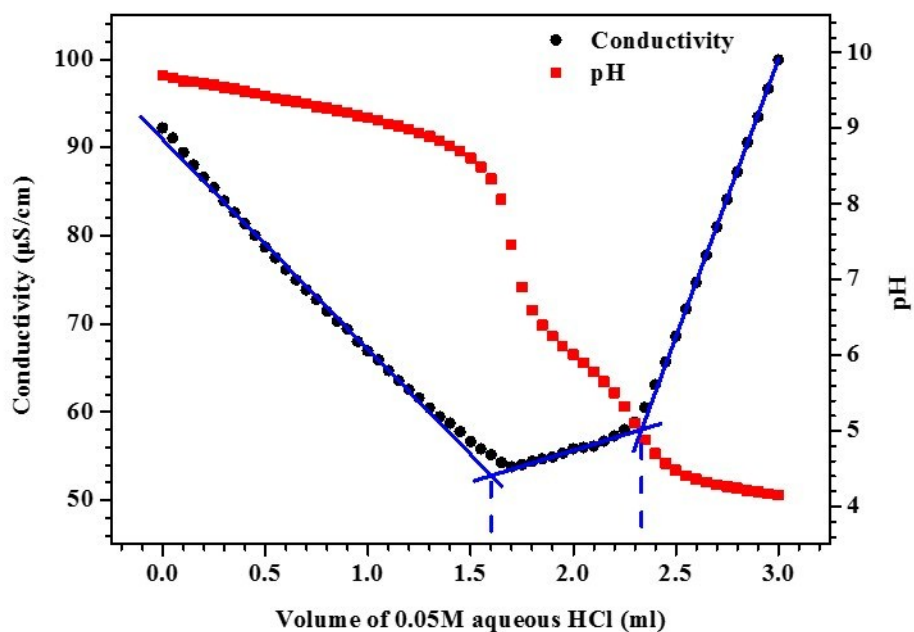


Figure 1S. Activated Na⁺ Activated Na⁺ cation of CNC by Conductometric titration

0.2g of spray-dried CNC powder was containing in 300ml of Ultrapure (milliQ) water and dispersed by ultrasonication. A pH value of the CNC suspension was initialized by 2M NaOH(aq.) until pH 10. Activated Na⁺ cation of CNC was titrated with 0.05M HCl(aq.) step by step. Total amount of added 0.05M HCl(aq.) was 3 ml and the period consist of that 0.05ml of 0.05M HCl(aq.) addition and waiting for 1 min.

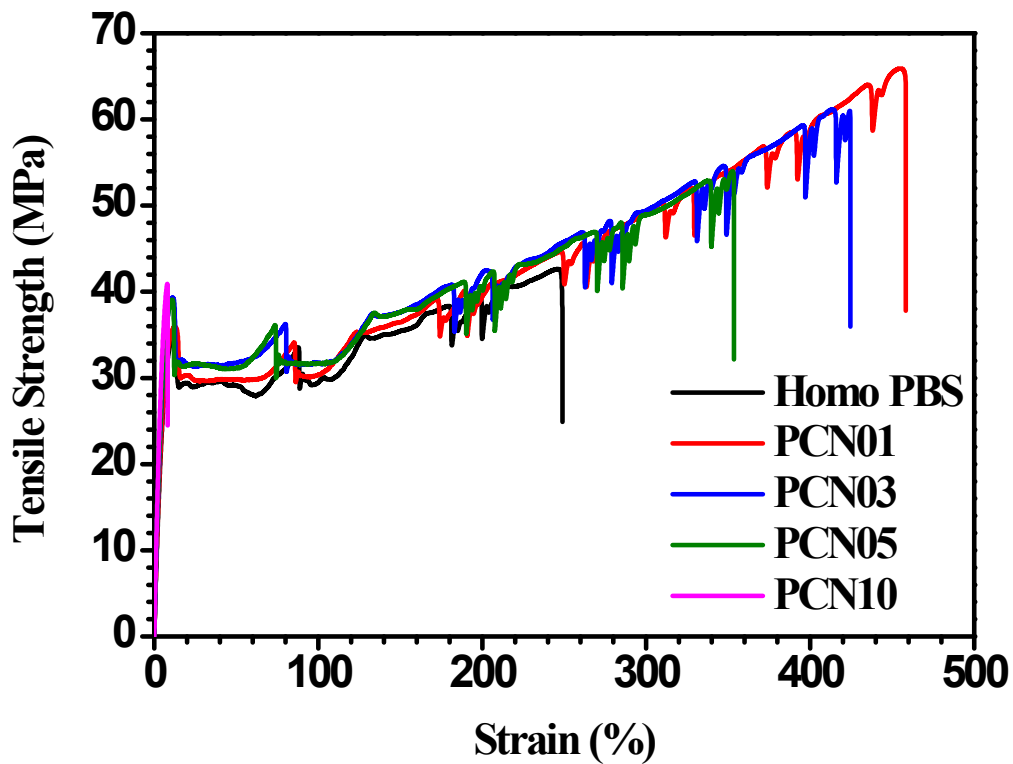


Figure S2. Tensile Properties of Homo PBS and PCN samples: pulling at a rate of 10mm/min

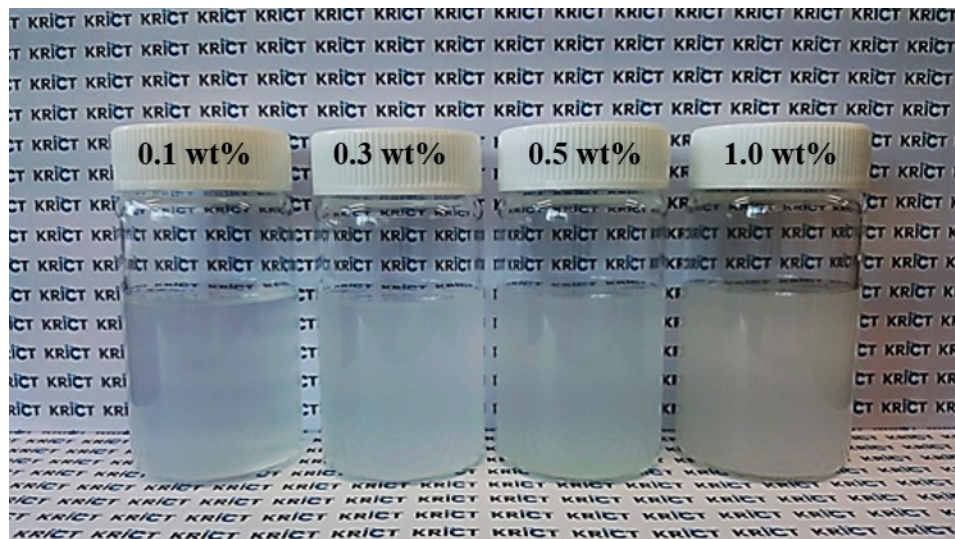


Figure S3. Image of dispersed CNC with increasing concentration in 1,4-butanediol

Movie S1. Mechanical test for PP, Homo PBS and the 0.1 wt.% CNC-loaded nanocomposites