**Modification of Conductive Polymers Nanostructures via Cellulose Nanocrystals**

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**Abstract:** Conductive polymers polypyrrole (PPY) were prepared by in-situ polymerization of pyrrole monomers (PY) in presence of cellulose nanocrystals (CNC). Results shows that pure polypyrrole showing obvious different morphological structure than PPY synthesized in presence of CNC during polymerization. However, CNC acts as a template to modify PPY nanostructures. On the other hand, the presence of cellulose fibers does not change the morphology of PPY. The alterations were observed via field-emission scanning electron microscopy (FESEM) and the elements of surface were detected by Energy Dispersive X-ray Spectroscopy (EDX).