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## RESEARCH HIGHLIGHTS

The effect of Chenodeoxycholic acid (CDCA) in flexible dye-sensitized solar cell (Flexible DSSC) based on pre-dyed zinc oxide (ZnO) nanoparticles have been researched. Due to the aggregation, the ZnO surface cannot be absorbed, and the electrons are deactivated by the interaction between dyes and dyes that cannot contribute to power generation. Further, reverse electron transfer occurs from the portion where the dye is not adsorbed. Addition of CDCA as a co-adsorbent can suppress dye aggregation and reverse electron transfer. This will make the improvements of density current ( $J_{sc}$ ) and open circuit voltage ( $V_{oc}$ ) values. In this research, the used of D149 dyed and simple pre-dyed ZnO (pd-ZnO) composite has been applied with the coating CDCA method. Also, the comparison between the hot press and without hot press method has been made. The value of efficiency,  $J_{sc}$ , and  $V_{oc}$  shows improvements to 2.70%, 6.37mA/cm<sup>2</sup> and 0.70V respectively.