## **Abstract**

DPP-based polymer designated as PDPPDTT flanked with dithienothiophene was reported. The stability of PDPPDTT polymer was investigated through various parameters such as solubility, effect of temperature, solvent effect and by the addition of ZnO/TiO<sub>2</sub> Nanoparticles. PDPPDTT polymeric Nanoparticles were synthesized by Nanoprecipitation method. Synthesis of Organic-Inorganic Nanohybrids such as PDPPDTT doped ZnO nanoparticles was also reported. Characterization of samples was done through various spectroscopic techniques such as UV/Visible spectroscopy, Particle Size Analyzer and Photoluminescence spectroscopy.

$$C_{10}H_{21}$$
 $C_{8}H_{17}$ 
 $C_{8}H_{17}$ 
 $C_{8}H_{17}$ 
 $C_{10}H_{21}$ 
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 $C_{10}H_{21}$ 

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