

SYNTHESIS AND CHARACTERIZATION OF NANOARCHITECTURES FROM MULTIFUNCTIONAL POLYPARAPHENYLENES

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ABSTRACT: Conducting polymers are interesting materials due to their wide range of applications in electronics, sensing, photonics and display applications. The present paper delineates the synthesis and characterization of the three functionalized poly (p-phenylene)s (PPP) (A-C) and solution properties of the polymers. The self-assembly of the polymers were investigated on various substrates and the optical/morphological properties of thin films of these polymers were also studied. The spontaneous self assembling nature of the modified PPP's lead to the formation of thin films on both hydrophilic and modified surfaces.

KEYWORDS: Conducting polymers, funtionalized poly(p-phenylene)s, self-assembly