BEST: International Journal of Management, Information Technology and Engineering (BEST: IJMITE)
ISSN 2348-0513
Vol. 2, Issue 7, Jul 2014, 85-92

STRUCTURAL AND OPTICAL STUDIES OF CuO DOPED POLYANILINE

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ABSTRACT

Polyaniline/CuO composites at different weight percentages are synthesized by chemical oxidative polymerization method. The composites have been synthesized with various compositions (10, 15, and 20 wt %) of cupric oxide in PANI, the chemical characterization are made using XRD (X-ray diffraction), FT-IR (Fourier transform spectroscopy), UV–vis (ultra-violet visible spectrophotometer), The PL(Photoluminescence spectroscopy) techniques confirms the synthesis of the polyaniline and CuO doped polyaniline composite. The surface morphology of these composites is studied with scanning electron micrograph (SEM).

KEYWORDS: Conducting Polyaniline, XRD, SEM, FTIR, UV-Visible, PL, Nanocomposites Polyaniline