

Solubility and swelling studies of polymer hybrid-nickel oxide nanocomposite

A. Suhasini^a and K. P. Vinod Kumar^{b*}

^aDepartment of Chemistry, St. Xavier's Catholic College of Engineering, Nagercoil-629 003, Tamilnadu, India

^bDepartment of Chemistry, University College of Engineering, Nagercoil-629 004, Tamilnadu, India

E-mail: nanjilvino@rediffmail.com

Manuscript received online 27 August 2018, accepted 09 October 2018

Polymer nanocomposites involve a very important class of organic-inorganic nanostructured material which has enormous applications in storage, conversion devices. A polymer blend is prepared with polyurethane diol and polycaprolactone with the ratio of 4:1. Nickel oxide nanoparticle of various proportions was added to the polymer blend to obtain a complete polymer nanocomposite. The present work focuses the solubility and swelling studies of polymer nanocomposites prepared.

Keywords: Polycaprolactone, polyurethane diol, nickel oxide nanoparticle, swelling, solubility.
