

A NOVEL GREEN SYNTHESIS OF NICKEL OXIDE NANOPARTICLES USING ARABIC GUM

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Abstract. Present work involves synthesis of NiO nanoparticles using Arabic gum by the sol-gel method. The synthesized NiO nanoparticles were characterized by Fourier transform infrared spectroscopy (FTIR), field emission scanning electron microscopy (FESEM) and X-ray powder diffraction (XRD). It was shown that the synthesized NiO nanoparticles of cubic phase have a spherical shape and an average size of 34 nm.

Keywords: NiO, Arabic gum, biosynthesis, sol-gel, nanoparticles.

Received: 18 February 2017/ Revised final: 13 May 2017/ Accepted: 15 May 2017