World Academy of Science, Engineering and Technology International Journal of Chemical and Materials Engineering Vol:9, No:07, 2015

## Synthesis and Charaterization of Nanocomposite Poly (4,4' Methylenedianiline) Catalyzed by Maghnite-H+

Authors: A. Belmokhtar, A. Yahiaoui, A. Benyoucef, M. Belbachir

**Abstract :** We reported the synthesis and characterization of nanocomposite poly (4,4' methylenedianiline) via chemical polymerization of monomers 4,4' methylenedianiline by ammonium persulfate (APS) at room temperature catalyzed by Maghnite-H+. A facile method was demonstrated to grow poly (4,4' methylenedianiline) nanocomposite, which was carried out by mixing Ammonium Persulfate (APS) aqueous and 4,4' methylenedianiline solution in the presence of Maghnite-H+ at room temperature The effect of amount of catalyst and time on the polymerization yield of the polymers was studied. Structure was confirmed by elemental analysis, UV vis, RMN-1H, and voltammetry cyclique.

**Keywords:** charaterization, maghnite-h+, polymerization, poly (4,4' methylenedianiline)

Conference Title: ICNSE 2015: International Conference on Nanomaterials Science and Engineering

Conference Location: Istanbul, Türkiye Conference Dates: July 29-30, 2015