**Title:** Synthesis and characterization of some modified acrylic polymers

**Abstract:** Polymethylmethacrylate (PMMA) was modified with p-toluenyl hydrazine (A) and hydrazine hydrate (B). The complexes of the modified polymers with copper (II) and nickel (II) ions chlorides and acetates were prepared. The modified polymers and complexes were characterized by elemental analysis and IH spectroscopy. Thermal stabilities of polymer metal complexes were studied using thermogravimetric analysis (TGA). It was found that the thermal stabilities of polymer complexes were higher than the homopolymers.

**Keywords:** Polymethylmethacrylate, p-toluenyl hydrazine, hydrazine hydrate, copper (II) complexes, nickel (II) complexes, elemental analysis, IH spectroscopy, thermogravimetric analysis.

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