

Extended-release of metronidazole drug using chitosan/graphene oxide bio-nanocomposite beads as drug carrier

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1. Thermogravimetric analysis (TGA)

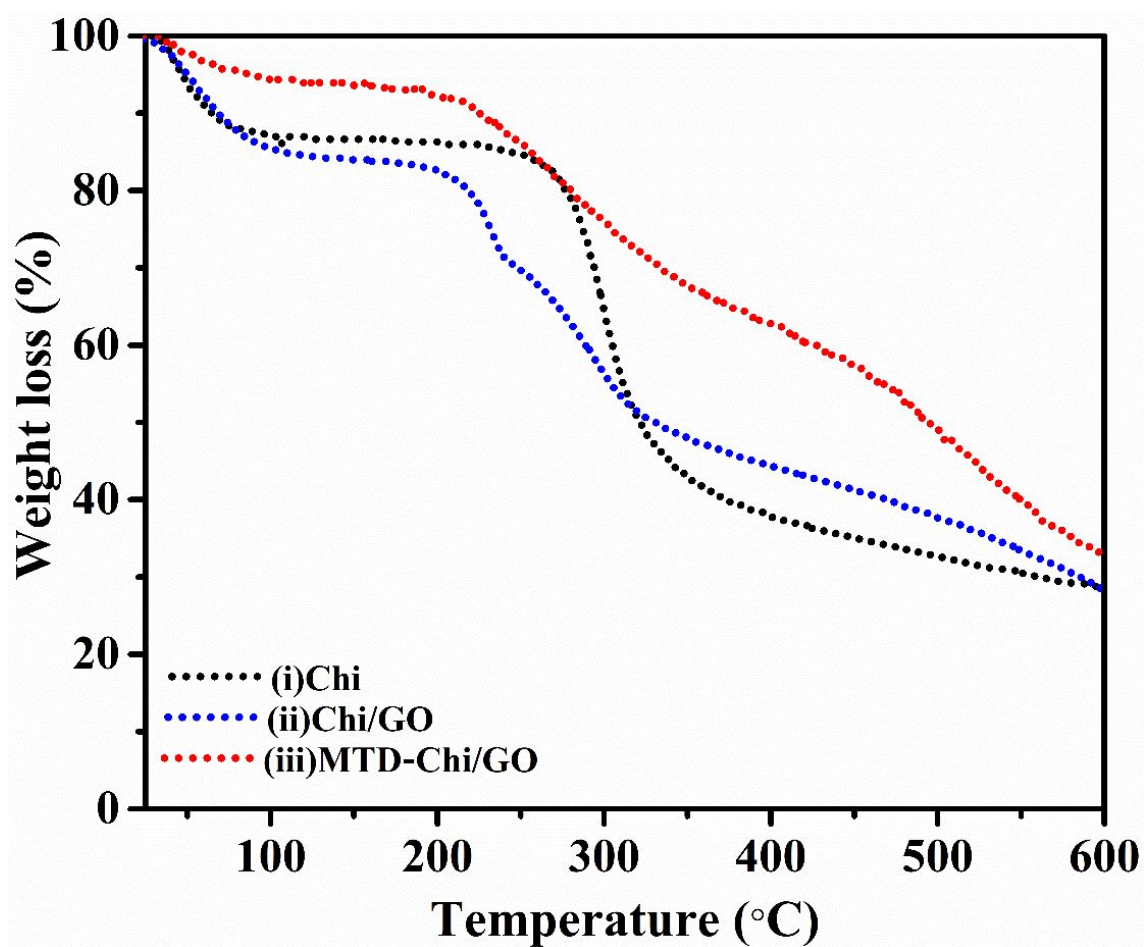


Figure. S1. TGA spectra of (i) Chi, (ii) Chi/GO and (iii) MTD-Chi/GO bio-nanocomposite beads.

2. Digital photograph of pure chitosan, MTD-Chi and MTD-Chi/GO bio-nanocomposite beads

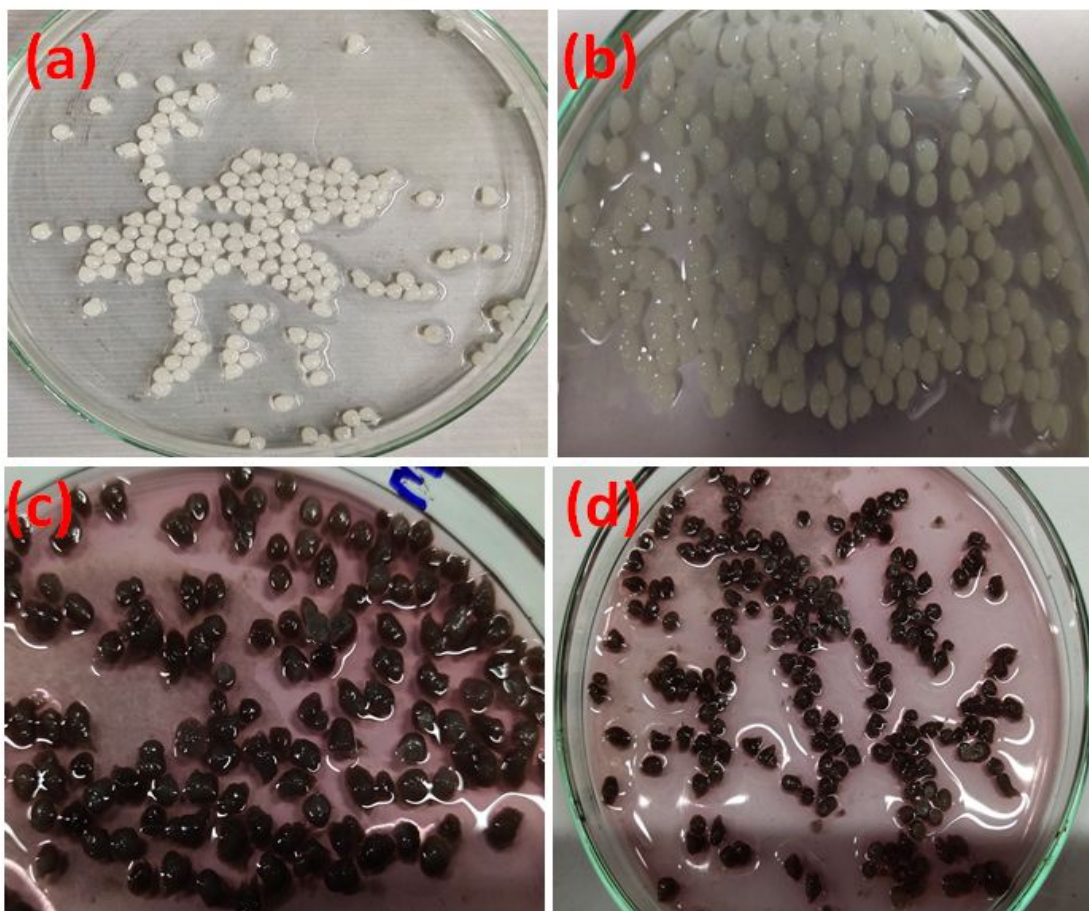


Figure: S2. Digital photograph showing of (a) Pure chitosan (b) MTD-Chi and (c-d) MTD-Chi/GO bio-nanocomposite beads.

3. Drug release kinetics

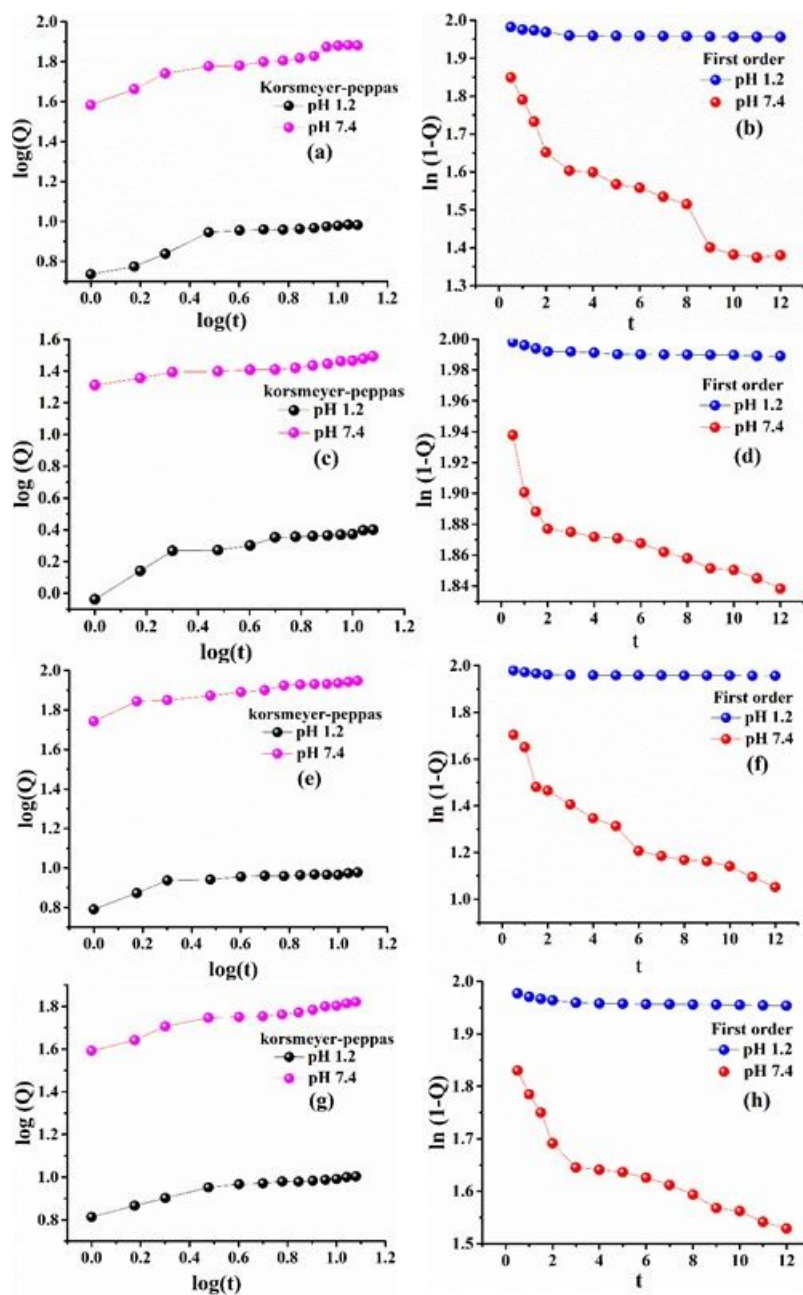


Figure. S3. Drug release kinetics of (a and b) *Korsmeyer-pappas* & *First-order* reaction of MC6, (c and d) *Korsmeyer-pappas* & *First-order* reaction of MC8, (e and f) *Korsmeyer-pappas* & *First-order* reaction of MCG12, (g and h) *Korsmeyer-pappas* & *First-order* reaction of MCG16 at pH 7.4 and pH 1.2 respectively.