

## Supporting Information

**Metal oxide nanoparticles Functionalized Sebacic Acid grafted PHEAM nanocarriers for enriched activity of Metronidazole against food borne bacteria: *in vitro* and *in vivo* study**

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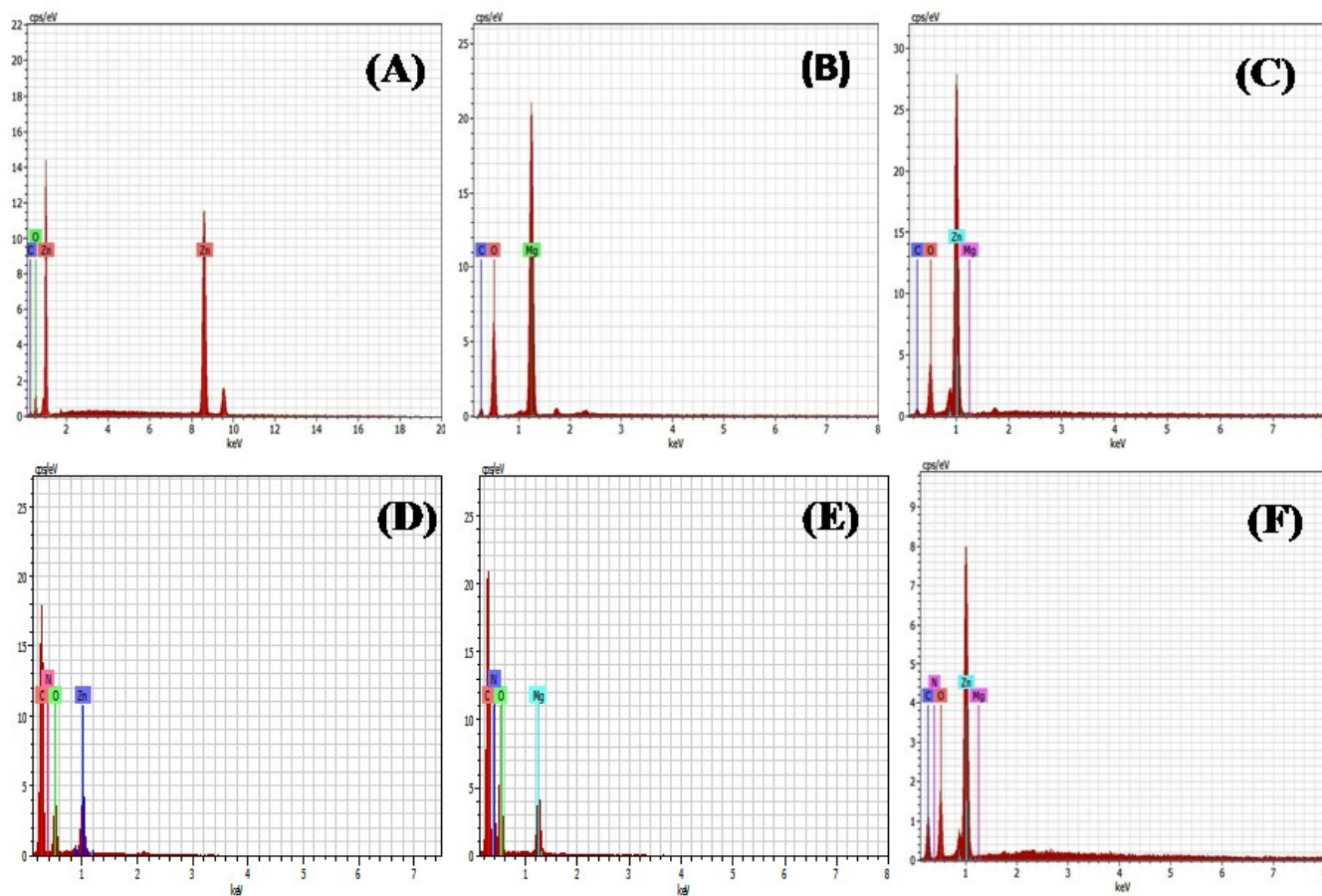
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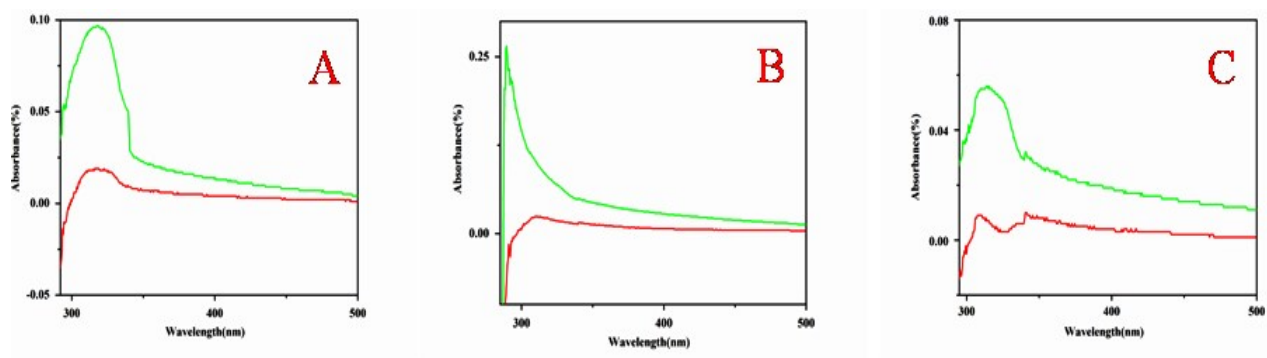
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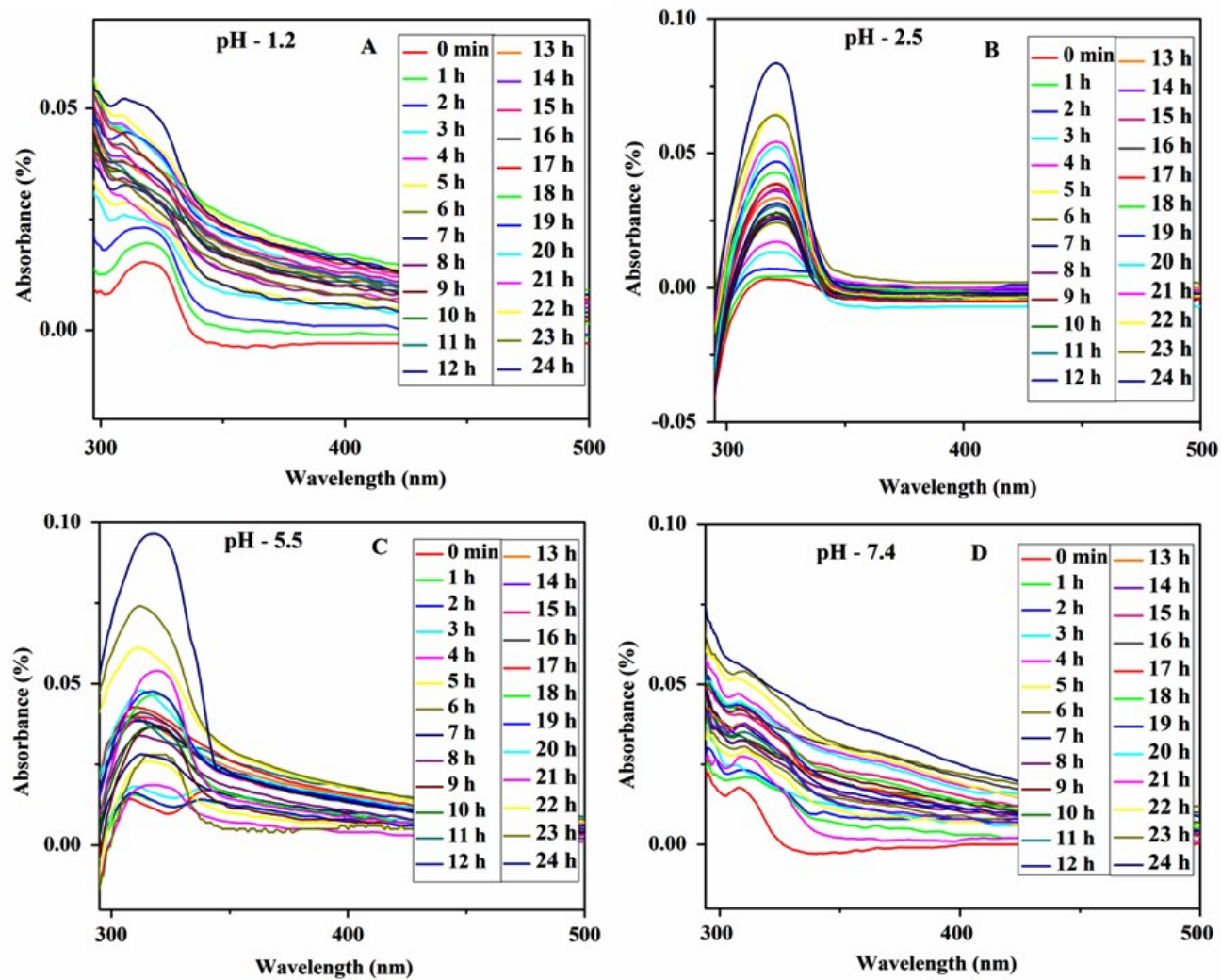
## Supplementary figures



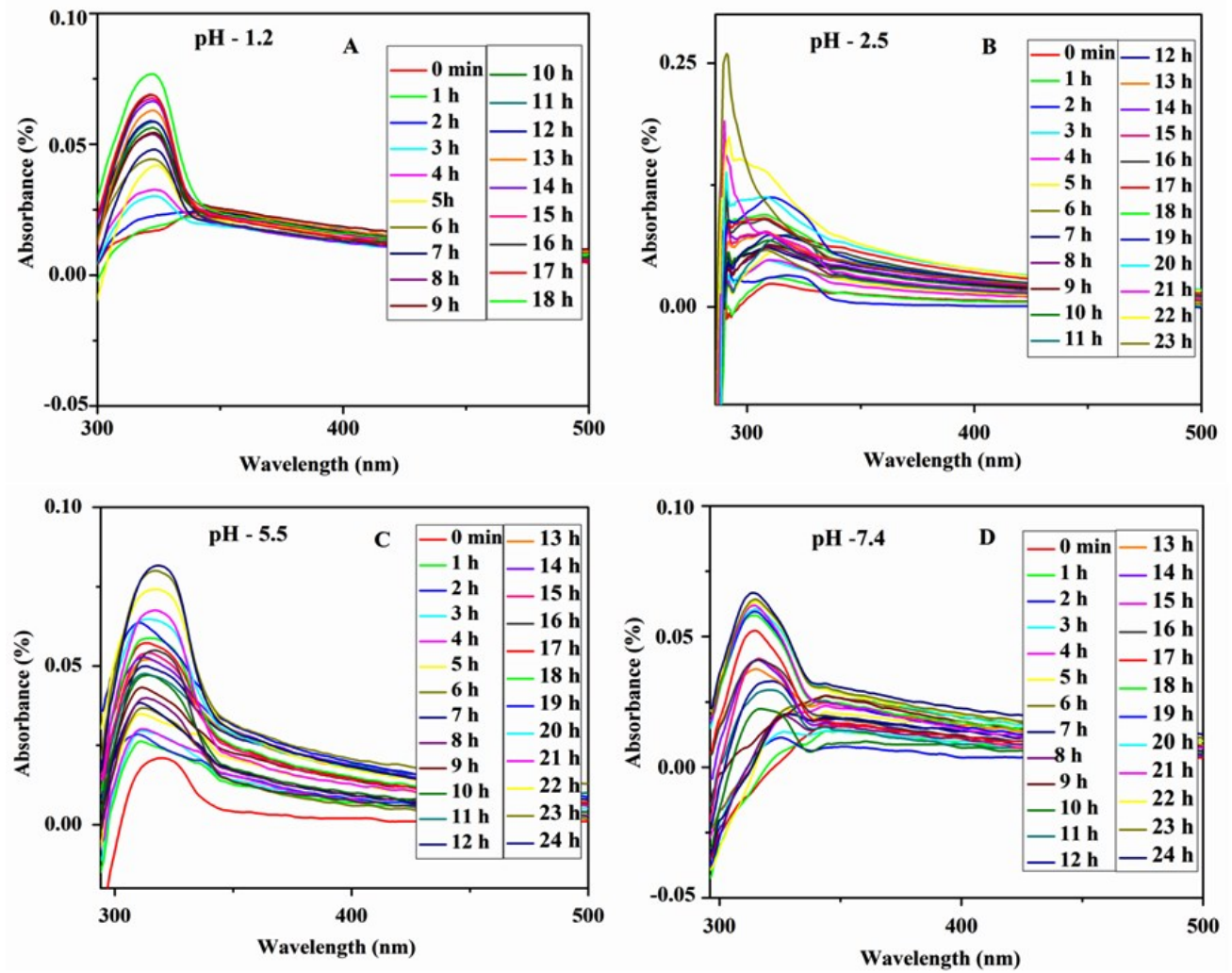
**Figure S1.** EDX spectrum of ZnO/SA-g-PHEMA (A), MgO/SA-g-PHEMA (B), MgO-ZnO/SA-g-PHEMA (C), ZnO/SA-g-PHEMA-MTZ (D), MgO/SA-g-PHEMA-MTZ (E), MgO-ZnO/SA-g-PHEMA-MTZ (F).



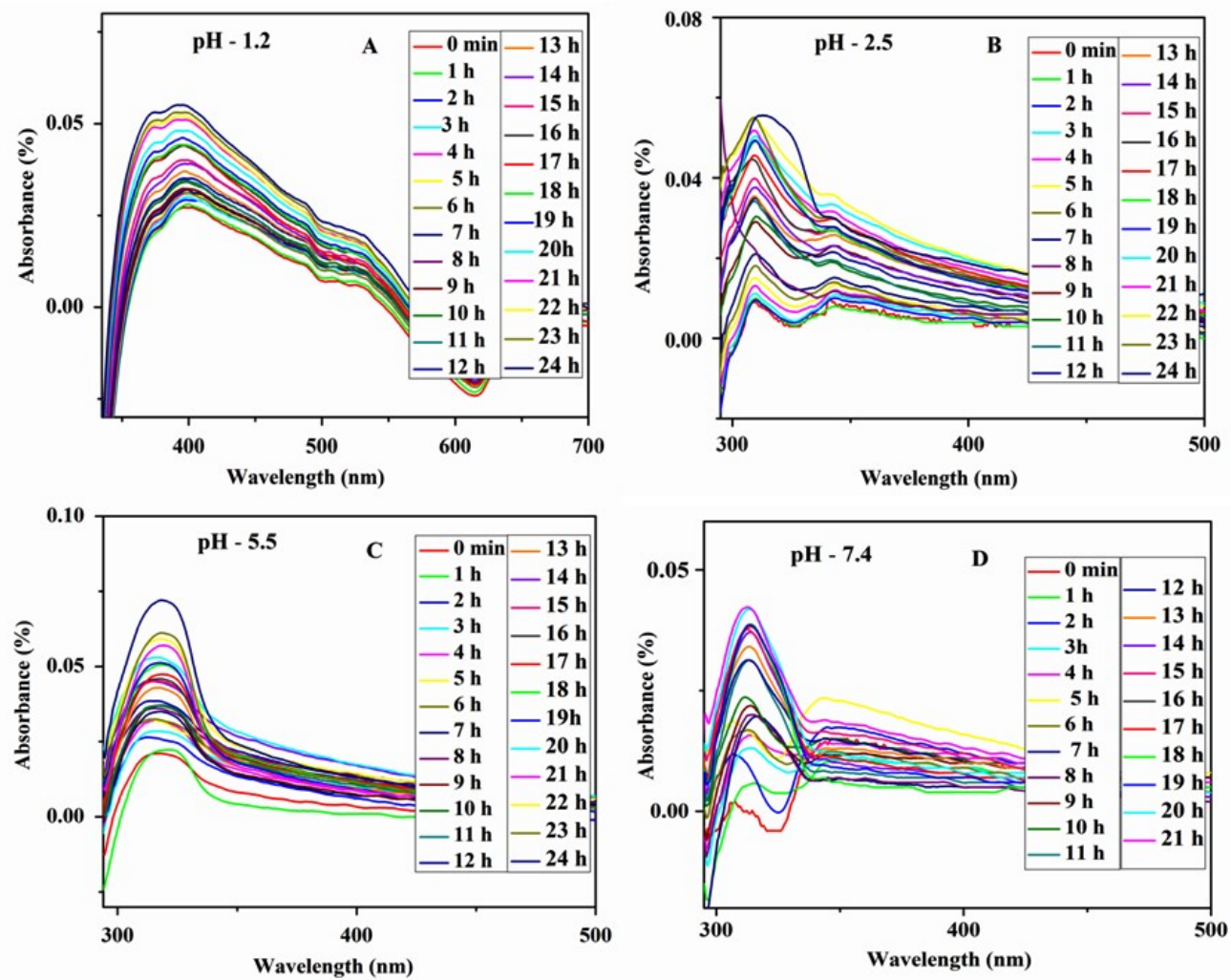
**Figure S2(A-C).** Encapsulation efficiency of ZnO/SA-g-PHEMA-MTZ (A), MgO/SA-g-PHEMA-MTZ (B), MgO-ZnO/SA-g-PHEMA-MTZ (C).



**Figure S3(A-D).** *In vitro* drug release of ZnO/SA-g-PHEMA for the pH- 1.2, 2.5, 5.5, 7.4.



**Figure S4(A-D).** *In vitro* drug release of MgO/SA-g-PHEMA for the pH- 1.2, 2.5, 5.5, 7.4.



**Figure S5(A-D).** *In vitro* drug release of MgO-ZnO/SA-g-PHEMA for the pH- 1.2, 2.5, 5.5, 7.4.