Electronic Supplementary Material (ESI) for RSC Advances. This journal is © The Royal Society of Chemistry 2015

## Novel Magnetic Antimicrobial Nanocomposites for Bone Tissue Engineering Applications

Arundhati Bhowmick, Arijit Saha, Nilkamal Pramanik, Subhash Banerjee, Manas Das, and Patit

Paban Kundu

## **Supplementary Information**

## Preparation procedure of control sample (BMM-IC)

For the synthesis of BMM IC, 55 wt % CTS (dissolved in 15 ml 100 % formic acid) and 40 wt % of PMMA-*co*-PHEMA were blended using a mechanical stirrer. After that 5 wt % of nano-HAP (in absence of 5 wt % nano-Fe<sub>3</sub>O<sub>4</sub>) was added drop by drop to the resulting mixture with constant stirring and stirred vigorously for overnight to obtain a homogeneous mixture. The resulting mixture was then transferred to polystyrene petri-dishes. Upon evaporation of formic acid at room temperature, film was obtained, which was dried at 60°C for 48 h.

## FTIR spectrum of control sample (BMM-IC)



XRD spectrum of control sample (BMM-IC)

