

Supplementary Information

1. Figures:



Figure: Prepared ZnO nanoparticles

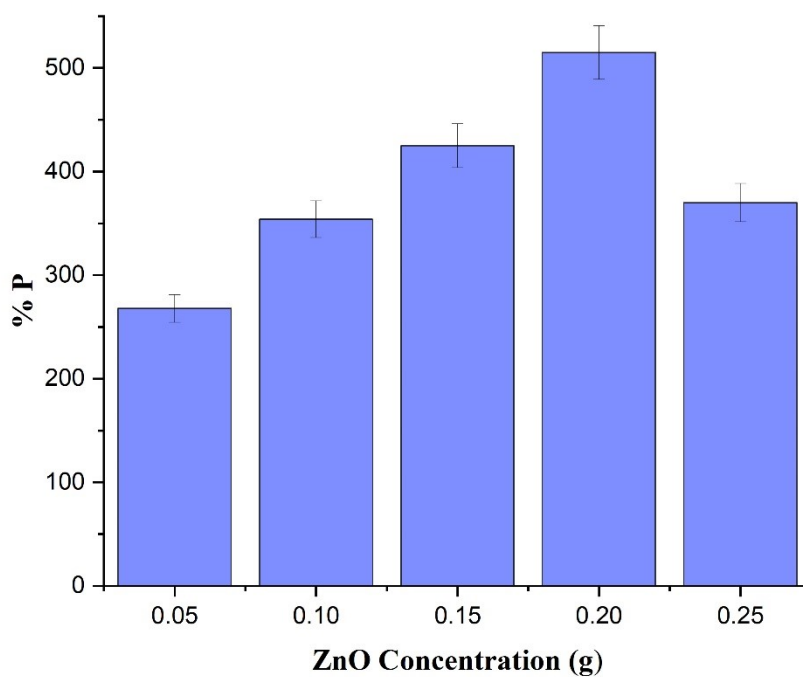


Figure: Optimized reaction conditions with maximum %P for hydrogel nanocomposite

2. List of Abbreviations

ZnO- Zinc oxide

BM- *Butea monosperma*

AA- Acrylic acid

PAA- Poly acrylic acid

APS- Ammonium persulphate

MBA- N,N-methylene bisacrylamide

dH₂O- Distilled water

P_s- Percentage swelling

FTIR- Fourier transform infrared spectroscopy

XRD- X-ray diffraction

TGA- Thermogravimetric analysis

FE-SEM- Field emission scanning electron microscopy