

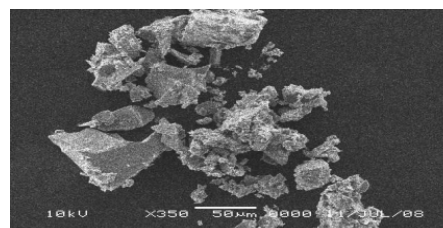
Evaluation of Surface Modified Magnetic Nanoparticles (MNPs) on Human Prostate Carcinoma Cells

SIGNIFICANT FINDINGS:

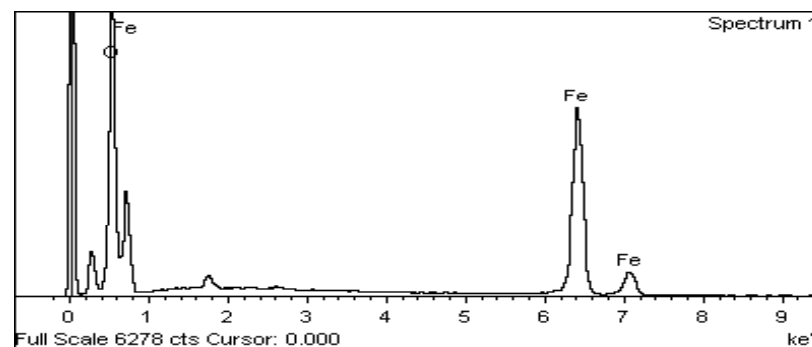
1. Manipulate the physical and chemical surface properties of magnetic nanoparticles (MNPs) with polymers (gum arabic and sodium citrate)
2. Evaluate the influence of polymers on surface charge of MNPs
3. Determine the cell viability when exposed to polymer-coated MNPs

AUTHOR(S):

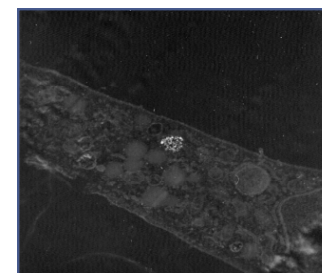
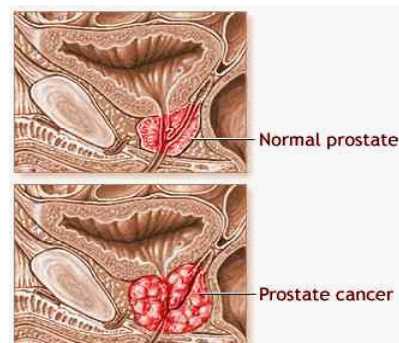
Nefertiti Patrick, Gary Harris, James Mitchell, Winston Anderson, Arthur Thorpe and Otto Wilson



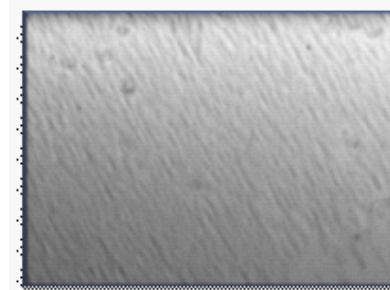
Element	Weight %	Atomic %
O K	38.26	68.39
Fe K	61.74	31.61
Totals	100.00	100.00



ELEMENTAL ANALYSIS OF NON-COATED MNPs BY ENERGY DISPERSIVE X-RAY SPECTROSCOPY



SODIUM CITRATE COATED MNPs VISIBLE WITHIN A VACUOLE OF A PROSTATE CANCER CELL (8,000X)



DIRECTIONAL GROWTH OF PROSTATE CANCER CELLS AFTER 48 HOUR EXPOSURE TO MNP AND MAGNETIC FIELD (B = 0.8 kG)