

## **Preparation and characterization of co-ha powder using modified electroless method**

### **Abstract**

CO-HA composite produced by simple electroless deposition method was studied. From the particle size analysis by Malvern particles analyzer its shows that 19% increment in average of the particle size powder increase after the electroless process with higher cobalt (II) chloride and reduction agent concentration. By EDX and XR-D analysis it was confirmed that cobalt metal was deposited onto HA and contribute to uniform distribution in morphologies by SEM analysis. The Vickers hardness result of up to 430HV was achieved after sintering process at 1250°C. The experimental results demonstrated that the Co-HA powder was successfully prepared by using this method and provide distinct advantages such as uniformity of deposition at lower cost and simple process.

**Keywords;** Cobalt, Deposition, Electroless, Hydroxyapatite (HA)