

## **Effect of beta tricalcium phosphate ( $\beta$ -TCP) on properties of Mg-Zn composites**

### **Abstract**

In this work, Mg and Zn powder were used to prepare the Mg-Zn/ $\beta$ -TCP composites with different  $\beta$ -TCP composition by using powder metallurgy technique. The composite were mixed using ball mill and compacted at 500 MPa. The composites sintered at 450 °C in tube furnace for two hours. The effects of properties on Mg-Zn with different composition of  $\beta$ -TCP were studied. The results on the effect of  $\beta$ -TCP composition were analyzed in terms of density and microstructural analysis.

**Keywords;** Composites Metallurgy, Magnesium, Powder Metallurgy, Zinc,  $\beta$ -TCP