

## Hydroxyapatite in Materials for Medical Applications

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**Hydroxyapatite is ceramic material with properties and composition similar to the bone tissue. This makes it a suitable choice for biomaterials. However, hydroxyapatite alone has poor mechanical properties. Present paper shows two possible applications of hydroxyapatite in materials intended for medical applications. 1. Hydroxyapatite can be used as a layer which causes the material to be more bioactive. In this article the layer of HA is applied on WE43 by plasma spraying and structure, composition and adhesive properties are measured. 2. Hydroxyapatite can serve as reinforcement in metallic composite materials. Present work sum up properties of composite materials with 2, 5 and 10 wt.% of HA that were prepared by powder metallurgy route. The structure, hardness and compressive mechanical properties are characterized.**

**Keywords:** Hydroxyapatite, magnesium, composite, plasma, coating.

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