**Processing and characterization of Tungsten reinforced Bulk Metallic Glass composites through casting route**

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**ABSTRACT (First level heading, Capital, Times New Roman, 12, Bold)**

The aim of the present work is to fabricate and characterize the tungsten reinforced Hf-based bulk metallic glass composites through suction casting method. This is a unique process to produce the composites. Optimization of the parameters was done to attain the amorphous phase in the matrix. The alloy of nominal composition Hf55Cu28Ni5Al12 and different diameters of W-wires such as 300µm and 100µm has been used for this study. Different volume fractions such as 5%,10% 15% and 20% reinforcement were added to the matrix to understand the effect of reinforcement size on the glass forming ability and mechanical properties .Structural evaluation of the composites was done by the XRD and optical microscopy. Compression testing was done to evaluate the mechanical properties of the samples.

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*Keywords: Bulk metallic glass, suction casting technique.*