

# The Effect of the Nano Silicon Carbide on Mechanical Properties of Aluminium

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## ABSTRACT

*This study focuses on nano silicon carbide particulate-reinforced metal-matrix composites processing route using different powder metallurgy techniques; cold press-sintered, hot press-vacuum and effect of milling process. SiC particulates, whose diameters 50~200 nm were chosen for incorporated into Al-3wt% SiC. The microstructures of the samples were investigated by means scanning electron microscopy and correlated to their mechanical properties.*

**Keywords:** *Powder metallurgy, compaction, sintering, nano particles*