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(57) Abstract :
The work deals with the investigation of the mechanical behaviour of Aluminium6063 alloy composites reinforced by Zircon sand(ZrSiO4) and Alumina(Al2O3) particles with a total reinforcement in Wt% is 8, and in this hybrid reinforcement the variations (0+8)%, (2+6)%, (4+4)%, (6+2)%, (8+0)% were taken in to account for investigating the properties such as density tensile strength and hardness of the composites synthesised by Stir casting technique. The study of the mechanical properties indicates variances in the tensile strength and hardness values for the composite combinations. According to experimental research, the (4+4) wt% combination is the best volume fraction for hybrid reinforcement in Al 6063 alloy based on microstructure and mechanical characteristics.

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