sent the predicted impact energy for A355 reinforced with different weight percentage of SiC particles.

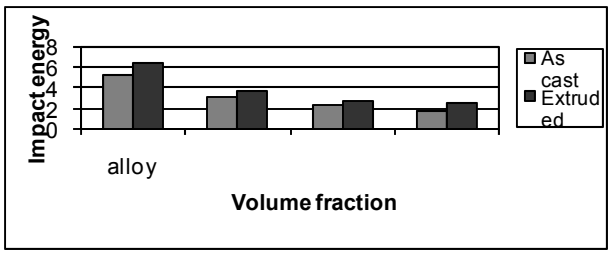


Figure (3): Variation of impact energy for A355 with volume fraction (as cast and as extruded) at liquid fraction 65%.

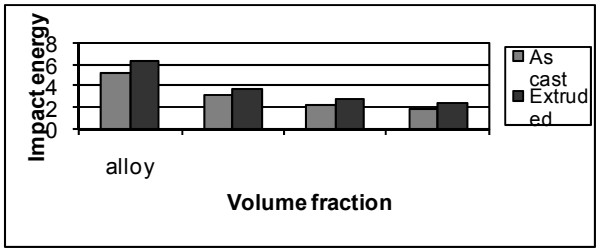


Figure (4): Variation of impact energy for A355 with volume fraction (as cast and as extruded) at liquid fraction 45%.

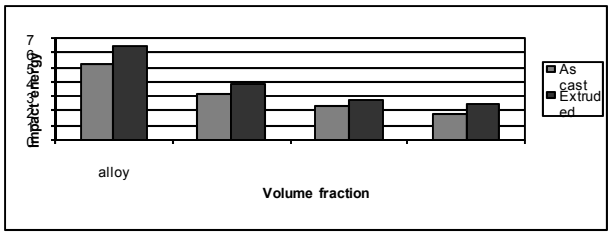


Figure (5): Variation of impact energy for A355 with volume fraction (as cast and as extruded) at liquid fraction 75%.

## Impact tests simulation for A356

Impact dynamic program version 0.7.1 simulated the impact tests for A356 reinforced with different weight percentage of SiC particles. In simulation process the program input were the specimen geometric, alloy type and SiC weight percent. The output is the impact energy (J) in each case. The results show that the impact energy decreases by increasing the volume fraction. The extrusion process improves the impact energy of the composites. Figure (6) represent the predicted impact energy for A356 reinforced with different weight percentage of SiC particles