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**Effect of Magnesium and Calcium on Purity of Rice Husk Ash based silicon**[1] GBADEBO TAOFEEK YUSUF, Osun State Polytechnic - Iree — This paper describes the effect of reducing agents on purity of rice husk based silicon. The rice husk samples were subjected to thermal treatment at 900°C to extract the silica. The silica extracted was subsequently analyzed for the initial impurities and treated with magnesium and calcium powder. The silicon obtained when magnesium was used to reduce the silica resulted in higher purity than that of the Calcium. It follows therefore that magnesium is thermodynamically favourable to reduce $SiO_2$ than Calcium. However the two products gave silicon purities in the range of 94.93% to 96.03%. The result shows that the range of purity meets the requirement as starting raw material for the semiconductor grade silicon. Keywords: Purity, Rice husk ash, Silicon, Magnesium, Calcium.

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