

# MSE SEMINAR

April 21, 2017  
113 McBryde Hall  
3:30 – 4:30 PM  
Refreshments at 3:00 PM

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## “A review on mechanical alloying process”

### **ABSTRACT:**

Mechanical alloying is an extensively used processing technique in the metal processing industry. A lot of non-equilibrium alloy phases and intermetallics can be produced using this technique. Mechanical Alloying is a complex process that requires the optimization of a number of process variables involved (for example milling time, milling speed, ball-powder weight ratio, etc.) in order to achieve the desired microstructure and physical/chemical properties, since in most cases the properties of these materials (at the bulk level), as when produced by conventional melting and casting methods are considerably different. The aim of this project is to review the findings of research in this area and to discuss the significance of the process variables involved and how they relate to the process as a whole and how it determines the performance characteristics of the so formed material.

### **BIOSKETCH:**

Mohamed Faizan is currently pursuing M.Eng. (Master of Engineering) in Materials Science and Engineering. He received his B.S. in Mechanical Engineering from BMS College of Engineering, Bangalore, India in 2013. He is advised by Dr. William Reynolds on his project.