

## **DEVELOPMENT OF A METHOD FOR THE PRODUCTION OF ALUMINUM METAL FOAMS**

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### **ABSTRACT**

Metal foam development is being very challenging process due to the problems incurred during the processing. Various methods have been developed since the 1950's but the commercialization of these processes are still not possible, because of the foams obtained are of inconsistent properties, cost of production, non homogeneous distribution of pores. Obtaining the near net shape (NNS) is another problem in the metal foam production. Although lot of problems involved in the development of metal foams, research people has attracted to the metal foams because of its attractive properties like acoustic damping, bomb mitigation, light weight etc. Especially research on developing Al foam has become more because of its potential application in many engineering fields. The attempt has been made in this work to develop a near net shape of Al foam using NaCl as the space holder in the Al matrix casting the molten metal around sand balls. The problems associated in the process and its effect on the density and porosity of the foam were discussed.

**KEYWORDS:** Al Foams, Density, NaCl, Porosity, Space Holder, Sand Balls