



SRINIVAS UNIVERSITY

Mangalore-575001, Karnataka (India)

Srinivas Research Centre for Manufacturing Engineering and Technology

Mr. Nagaraja M R

Project 1:

MECHANICAL & ELECTROCHEMICAL CHARACTERISTICS OF ALUMINIUM 6061 ALLOY HYBRID COMPOSITES. (SiC & B₄C)

It is proposed to study the mechanical and corrosion properties of Al6061-SiC-B₄C composite with different Heat treatment processes and compare with as cast specimen. Al6061 is quite a popular choice as a matrix material to prepare MMCs owing to its better formability characteristics. Among different kinds of the recently developed composites, particle reinforced metal matrix composites and in particular aluminium base materials have already emerged as candidates for industrial applications. Silicon Carbide & Boron Carbide reinforced aluminium composites possess a unique combination of high specific strength, high elastic modulus, good wear resistance and good thermal stability than the corresponding non-reinforced matrix alloy system. Hence, SiC-B₄C reinforced aluminium matrix composite has gained more attraction with low cost casting route.

List of conference and journal publication:

1. Nagaraja M R & Prinsterson Lobo, Presented a conference paper titled “Effect of Precipitation Hardening and Deformation Aided Aging Treatment on Simple and Hybrid Aluminium Alloy Composites” proceeding of “National joint conference on Innovations in Engineering & Technology” held during April 2015 at Canara College.

Research Centre Contact details

Co-ordinator: **Mr. Nagaraja M R**

Mobile: 9620356307

Email: nagarajbhat370@gmail.com