



## International Journal on Recent Researches In Science, Engineering & Technology

A Journal Established in early 2000 as National journal and upgraded to International journal in 2013 and is in existence for the last 10 years. It is run by Retired Professors from NIT, Trichy.

It is an absolutely free (No processing charges, No publishing charges etc) Journal Indexed in DIIF and SJIF.

Research Paper

Available online at: [www.jrrset.com](http://www.jrrset.com)

Chief Editors 1 : Dr. M.Narayana Rao, Ph.D., Rtd. Professor, NIT, Trichy.

(Engg.&Technology division)

2 : Dr. N.Sandyarani, Ph.D., Professor,

Chennai based Engg.College, (Science division)

ISSN (Print) : 2347-6729

ISSN (Online) : 2348-3105

Volume 2, Issue 3,  
March 2014

DIIF IF :1.46

SJIF IF: 1.329

---

### Studies On Corrosion Resistance Properties of Mg Alloy Friction Stir Weldments-Issues and Challenges

R. Jayaraman and Dr. T. Balusamy

**Abstract** - Extensive data has been reported in literature on the tensile strength values of Mg alloys including Mg alloy friction stir weldments. The effect of the various alloying elements on resistance, poisson ratio, thermal conductivity corrosion resistance etc, have also been reported in the literature. An attempt is made in this paper to make an exhaustive review of recent research papers published on corrosion resistance of friction stir weldments of Mg and other alloys and to critically discuss the issues and challenges associated with the corrosion resistance of friction stir weldments. Various conclusions drawn from of the present work are presented. The major contribution of the present work lies, in updating the research findings on corrosion resistance of friction stir weldments. This study is likely to pave way for developing technologies for improving the corrosion resistance of friction stir weldments. Though the paper concentrates on Mg alloys, a comprehensive study of other alloys like Al is also made to have an indepth understanding of the latest work conducted in the current field.