



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

(Division of Electrical and Electronics Engineering)

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 JIR, DIIF and SJIF.

Research Paper

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

ISSN (Print) : 2347-6729

ISSN (Online) : 2348-3105

Volume 5, Issue 6,  
June 2017

JIR IF : 4.334

DIIF IF : 1.46

SJIF IF : 1.329

---

## Sensorless Field Oriented Control Using Mras To Estimate The Rotor Speed

S.Tamilan and Dr. Sridhar

### Abstract

In this paper the authors opened a new horizon to speed sensorless field oriented control for which they had introduced the MRAS to estimate the rotor speed. Their contribution is widely used and referred because identification of speed is more robust than calculation of speed. Has proposed a Rotor Flux based MRAS (RF-MRAS) technique to estimate the rotor speed based on rotor flux error between the outputs of two estimators known as the reference model and the adjustable model which are the voltage and current models of the rotor flux. The performance is acceptably good but, it suffers from parameter variation, pure integration and initial condition problems.