

## **A THREE PHASE INVERTER WITH A NEUTRAL LEG, IMPLEMENTATION BY SPACE VECTOR MODULATION USING IGBT**

**Y. K. KANSE<sup>a</sup>, B. V. BARBADEKAR<sup>b</sup> AND S. P. PATIL<sup>c</sup>**

<sup>a</sup> KBP College of Engineering and Poly. Satara 415 001 (Maharashtra) India

<sup>b</sup> Principal, Universal Engineering College Pune, Pune, India

<sup>c</sup> Principal, Karmyogi Engineering College, Pandharpur, India.

### **Abstract**

A Three Phase Four Leg Inverter for Unbalanced Load is designed, developed, implemented and presented in this paper. The out put voltage comparison of four different schemes used for the four leg inverter is carried out by tabulating the results and the deviation of out put voltage is noted down by considering the standard values. The design concept along with wave forms are given. It is seen that the control strategy based on symmetrical component gives better results.

-----  
**Keywords :** Space Vector Modulation (SVM), Pulse Width Modulation (PWM), Radio Frequency Interference (RFI), Digital Signal Processing (DSP), Insulated Gate Bipolar Transistor (IGBT).