

**Establish electromyography measurement and control technique by
virtual instrument**

Yao, Kai-chao; Huang, W.-T. ; Chiang, J.-S

Abstract

In this research, electromyography measurement and control technique are designed and constructed. The structure of virtual instrument built by software part, Labview · hardware part, DAQ card and some external circuits is applied in the development process. This research integrates industry needing oriented technology - physiological measurement of medical industry, advanced technology - virtual instrument and medical knowledge - physiology. Practical measurements have been carried out to demonstrate the capabilities of this new measurement technique. Further, the development of this technique can be applied in several applications such as, for sever disability, wheelchair control and computer mouse control.

Key words: Electro-oculogram; Labview; Measurement;
Virtual instrument