

## **ABSTRACT:**

### **Title:**

The comparative kineziologic analysis of forward stroke on wheelchair and crawling.

### **Objectives of the Thesis:**

The aim of the thesis is to compare muscle activity of selected muscles in shoulder girdle during forward stroke on wheelchair and crawling.

### **Method:**

Surface electromyography combined with kinematography analysis used synchronized video recording.

### **Results and Conclusions:**

As the research shows, there is a difference in muscle activity (timing) between forward stroke on wheelchair and during crawling. It was proved that the activity of forward stroke on wheelchair does not have natural locomotive character.

### **Keywords:**

Forward stroke on wheelchair, crawling, shoulder girdle, surface electromyography, kinematics analysis.