

Scientific/Educational Workshop

Workshop title

FES cycling for rehabilitation after CNS lesion

Workshop organizer

Lana Popovic-Maneski (Institute of Technical Sciences of the Serbian Academy of Sciences and Arts)

Speakers

Lana Popovic-Maneski,
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Workshop goals

Introduction to FES cycling and associated difficulties (sitting position, dead spot, muscle fatigue, body asymmetry).

Demonstration of methods to reduce muscle fatigue during FES.

Demonstration of a method for automated detection of optimal stimulation pattern for cycling.

Abstract

Physical activity contributes in preventing secondary impairments associated with reduced motor activity (paralysis). FES (Functional Electrical Stimulation) cycling is a recreative and efficient method that can be used to sustain a regular physical activity in patients after lesion of central nervous system. In this workshop, we will practically explore methods to systematically determine and assess the efficiency of different FES cycling protocols. Participants will be able to personally experience effects of FES, as well to test stimulation patterns for cycling and for reduction of muscle fatigue