MedTech West

Towards a more natural control of artificial limbs through an osseointegrated implant

Presented by Max J. Ortiz C. Biomedical signals and systems, Chalmers University of Technology

It is a fact widely known that the bottleneck in advanced robotic prostheses is the lack and instability of biosignals to precisely control several degrees of freedom. In order to solve these issues, our group has developed the first bidirectional interface that allows a permanent communication into the human body. This made possible, for the first time, the chronic implantation of electrodes in nerves and muscles of an amputee patient. This breakthrough has open unique and exciting research possibilities to understand and predict complex limb motions through the decoding of bioelectric signals; as well as to study perception through neurostimulation. We also address analog and digital electronics such as biopotential amplifiers and microcontrollers; as well as signal processing, pattern recognition and control algorithms.

A light lunch will be served to those who have registered to seminars@medtechwest.se by Friday April 26. Please write " April 30" in the subject line.

April 30 2013

11:30 - 12:15 (-13:00 incl lunch)

Lokal Förmaket, Vita stråket 12,

Sahlgrenska Universitetssjukhuset

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