
CHRISTOPH GUGER

CV

PARTICIPANT AT:

A DIALOGUE WITH THE CEREBRAL CORTEX: CORTICAL FUNCTION AND INTERFACING

April, 29th-30th, 2015, Barcelona

Christoph Guger, CEO of GTEC Medical Bioengineering, **Guger Technologies**, Austria

Mr. Christoph Guger, Dr. studied biomedical engineering at the University of Technology Graz and Johns Hopkins University in Baltimore, USA. He then carried out research work at the Department of Medical Informatics (Prof. Pfurtscheller) at the University of Technology Graz and received his PhD degree in 1999. The topic of his PhD work was the design of an EEG-based brain-computer interface. This was the first real-time BCI system with continuous feedback. He also developed the real-time analysis with common spatial patterns, which is still the fastest and most accurate approach for oscillatory BCIs, and also developed a P300 BCI with very high accuracy and speed. In recent years, he also worked with ALS and tetraplegic patients in different countries.

B-DEBATE IS AN INITIATIVE OF:



CHRISTOPH GUGER

ABSTRACT

PARTICIPANT AT:

A DIALOGUE WITH THE CEREBRAL CORTEX: CORTICAL FUNCTION AND INTERFACING

April, 29th-30th, 2015, Barcelona

Christoph Guger, CEO of GTEC Medical Bioengineering, **Guger Technologies**, Austria

Current and Future Applications of BCIs

Research groups all over the world have been working enthusiastically on Brain-Computer Interfaces (BCIs), which provide a direct connection from the human brain to a computer. BCIs translate brain activity into control signals for numerous applications, including tools to help severely disabled users communicate and improve their quality of life. BCIs have been used to restore movement, assess cognitive functioning, and provide communication and environmental control. Current and future applications based on the three major BCI approaches motor imagery, P300 and steady state visual evoked potentials (SSVEP) will be explained. Furthermore new directions like active and dry electrodes, invasive ECoG systems and advanced VR control will be discussed.

B-DEBATE IS AN INITIATIVE OF:

