

## Contact

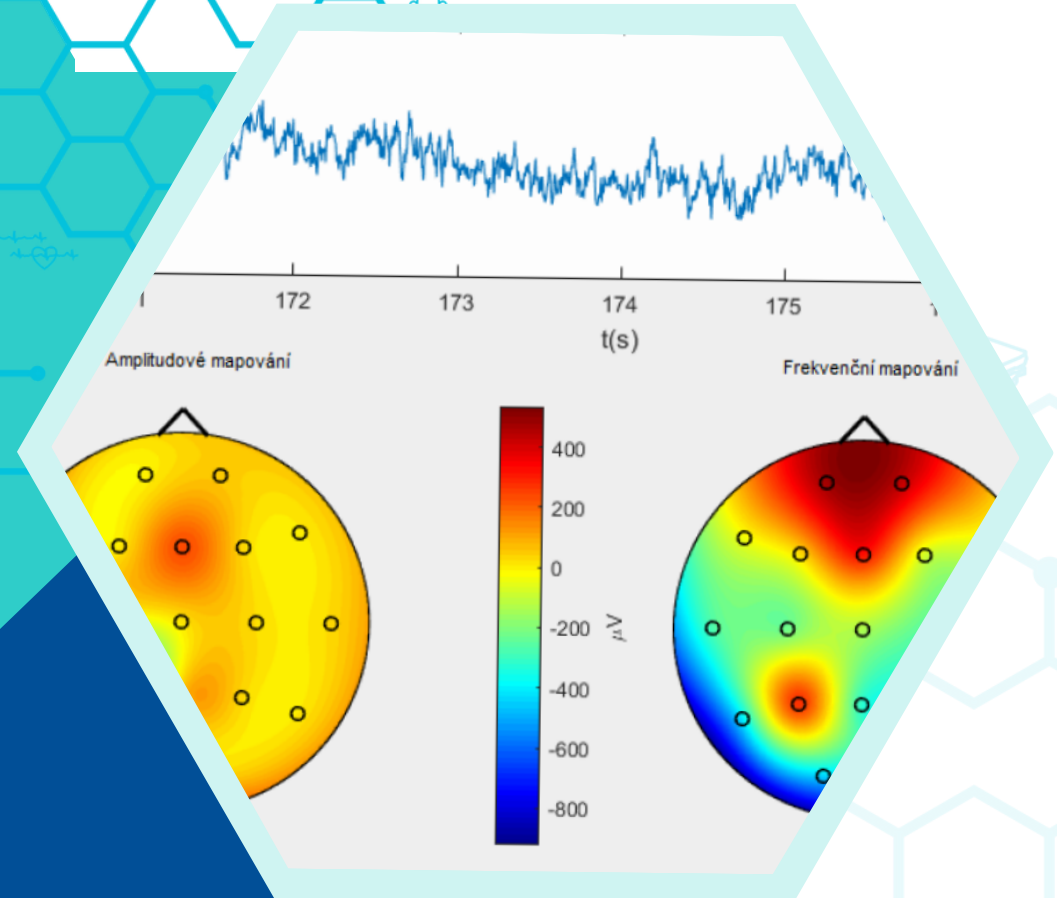
Technical University of Ostrava  
17. listopadu 2172/15  
708 00 Ostrava – Poruba  
info.cbe@vsb.cz

## Partners:



# AMKP

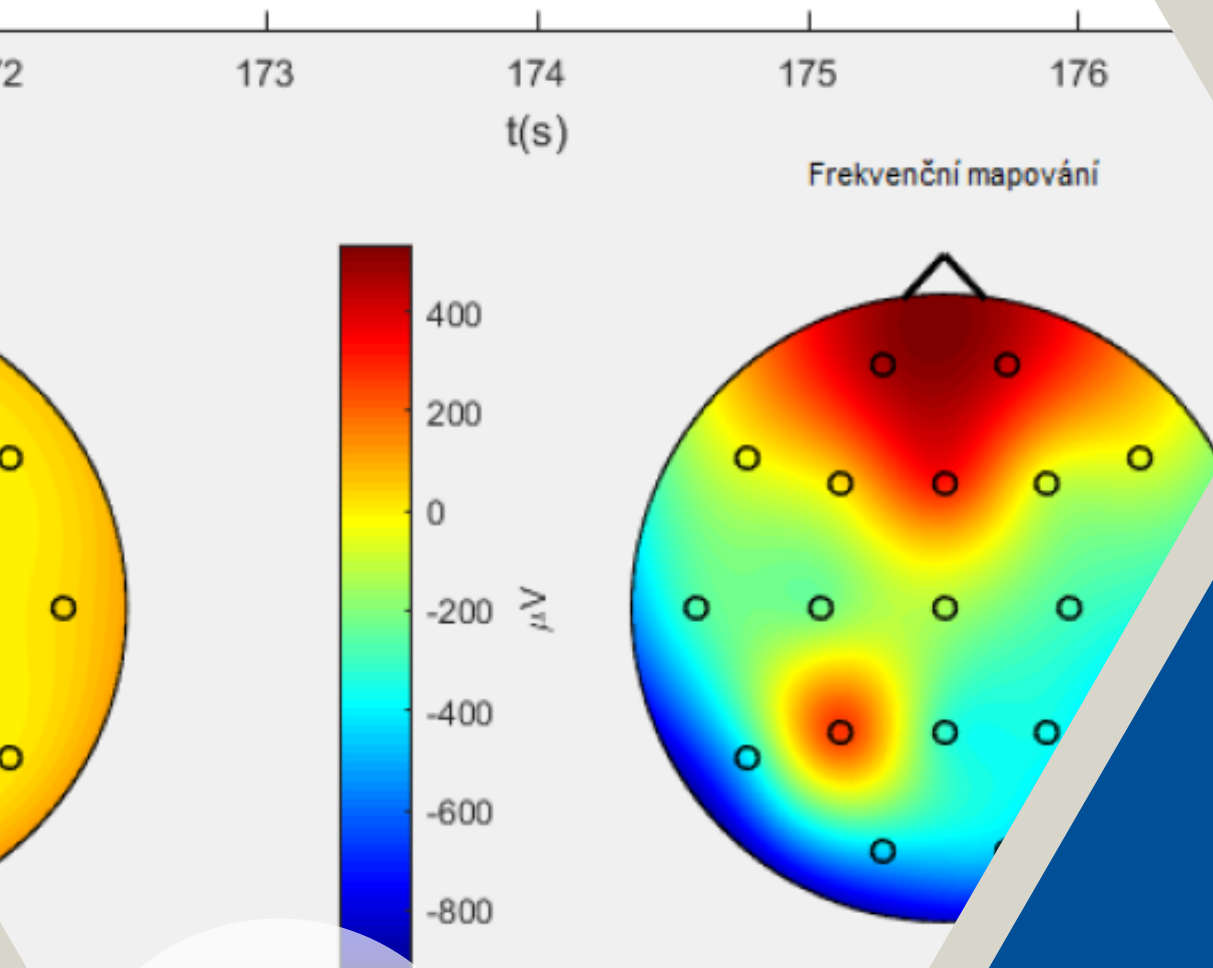
VSB TECHNICAL UNIVERSITY OF OSTRAVA | FACULTY OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE | DEPARTMENT OF CYBERNETICS AND BIOMEDICAL ENGINEERING



**Intelligent  
neuro-rehabilitation  
system**  
for patients with  
acquired brain  
damage in early stages  
of treatment

[instagram.com/kkbi.vsb.cz](https://www.instagram.com/kkbi.vsb.cz)  
[facebook.com/kkbi.vsb.cz](https://www.facebook.com/kkbi.vsb.cz)

Supported by  
TAČR ÉTA



Duration:  
01/2019 - 12/2022

PROJECT NUMBER

TL02000313

The project contributes to the systematisation and increased efficiency of care for patients with acquired brain injury from the acute phases of treatment to the first six months. A comprehensive approach can be achieved using intelligent neurorehabilitation software and hardware that takes into account the extent and degree of disability at each treatment phase, is based on a validated model of cognitive function (CHC model of intelligence), works responsively and, thanks to continuous diagnosis and the ability to learn from its user (machine learning), automatically adapts the type and difficulty of valid and reliable rehabilitation tasks. This makes KR individualised and the process efficient. The system is further complemented by interdisciplinary certified recommendations (guidelines) for the implementation of KR in the different phases of treatment. This comprehensive approach helps to prevent disease chronification, reduce the economic burden and improve the patient's quality of life.