



Hemp Club



Co-funded by the COSME
programme of the European
Union

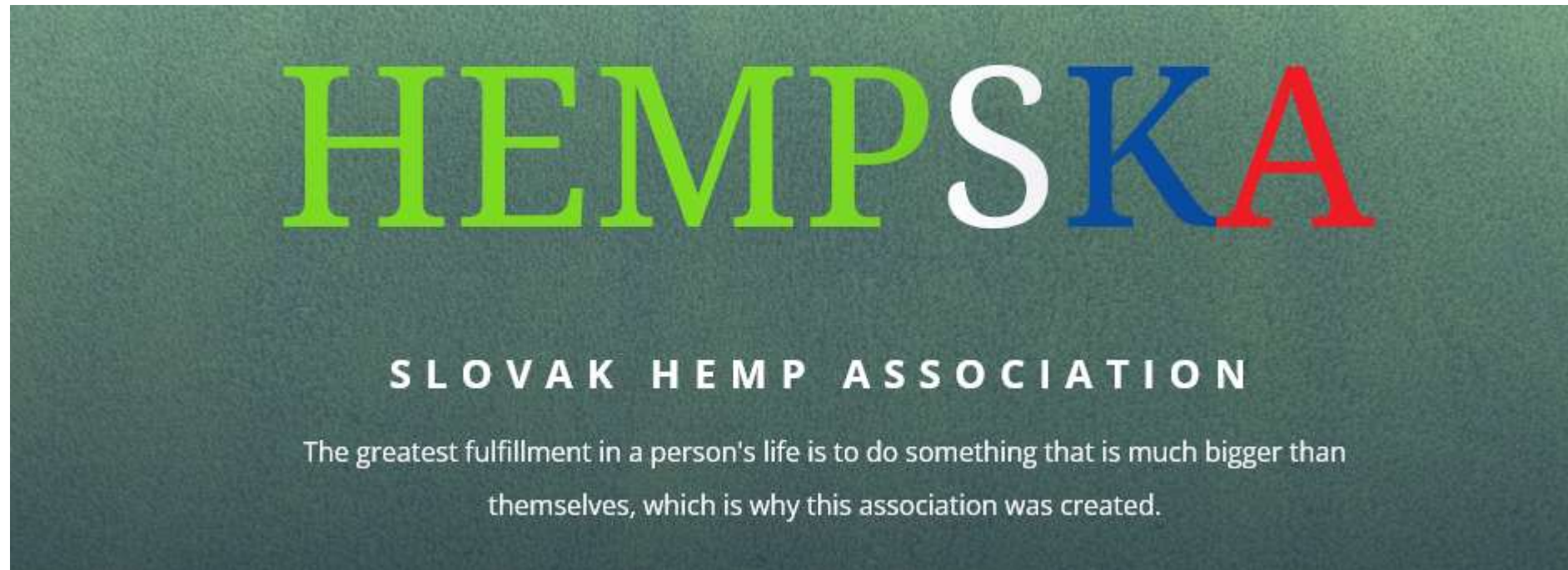
Total budget: EUR 587 972.48 |

Total funding: EUR 462 976.00

Slovak Hemp Association

HEMPSKA.org

HEMPSKA (short) is the Slovak Hemp Association. Its mission and objective is to support its members in the cooperation, R&D projects, Education and Lobby. HEMPSKA is a member of EIHA.



HEMPSKA Projects

Ongoing projects and/or developed technologies where members of HEMPSKA are participating:

- Spectrometry analysis of cannabinoids and harvest date prediction.
- Special flower harvester.
- Tetrafluoroethene cannabinoids extraction.
- Carbon offset platform.

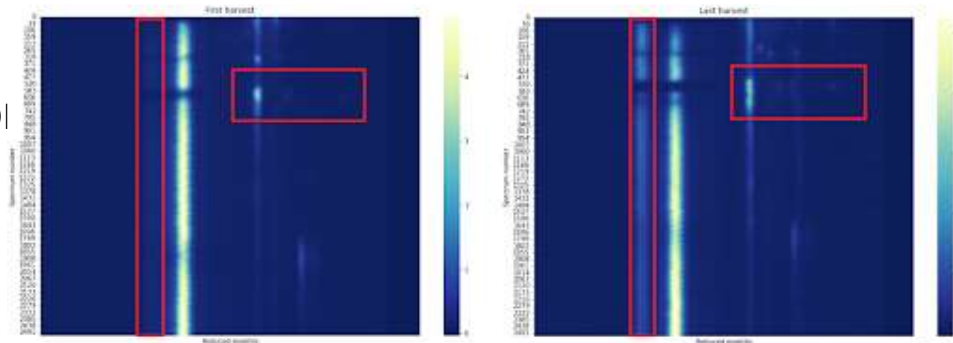


HEMPSKA Projects

Ion Mobility Spectrometry for Rapid HEMP Potency Testing - spectrometric testing of technical hemp

Partners: Slovak Technical University & Masatech.eu

Abstract. The amount of CBD in technical hemp is one of the key harvesting factors for farmers. The solutions that currently exist for them are both time consuming and costly. In our project, we focused on determining the **day of harvesting** the hemp based on **data from the ion mobility spectrometer**. In our project, we worked with samples of cannabis collected every two days for one month. Data were represented using spectra captured every 180 ms. We appropriately preprocessed, cleaned, normalized, selected the most appropriate predictors, aggregated into one row for each measurement and trained regression models that were able to correctly predict the day of harvest with a **mean error of about 1.7 day**. Research the work is not yet final, it offers opportunities for



HEMPSKA Projects

Special flower harvester.

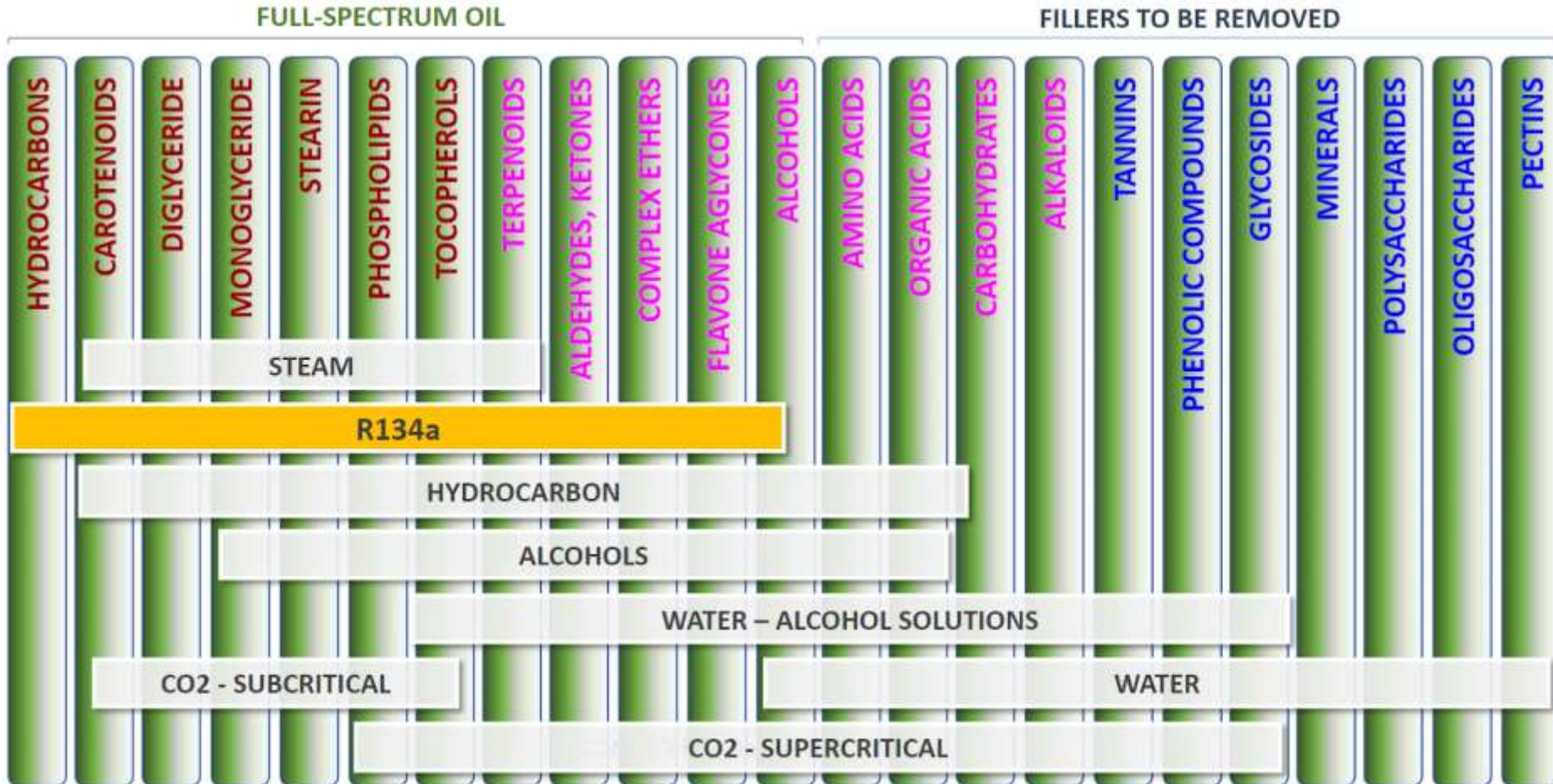
Partners: HempBona.eu



HEMPSKA Projects

Tetrafluoroethene cannabinoids extraction.

Partners: Tetraextraction.com



HEMPSKA Projects

Carbon offset platform.

Partners: Slovak Technical University

Aim of the project: Provide additional funding for HEMP farmers

Carbon sequestration - comparison (approximate)

Hemp

1 hectare

10 tons of CO₂ per year

Annual growth cycles

It offsets the CO₂ production of two passenger cars annually

Forest

1 hectare

2.5 tons of CO₂ per year

It grows for several years;
you have to wait for an adult forest



HEMPSKA

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