

EU Brokerage Event

on Industrial KET* in Horizon Europe

*Key Enabling Technologies

10th November 2022 • Strasbourg

Conference &
Bilateral/B2B Meetings

Calls
2023- 2024

Project idea/ Field of expertise:

IoT integration of agricultural production processes powered by agrivoltaics

Organisation Name:

Faculty of Engineering, Czech University of Life Sciences Prague

cooperation with

Research Institute of Agricultural Engineering, p. r. i.

Addressed topic(s):

Horizon Europe Cluster 4

C4_D4_23 - IoT multi technology integration

C4_D4_23 - multi-scale modelling

C4_D4_24 - towards AI-powered robots

C4_D2_23 - Intelligent sensors for electronic devices

Faculty of Engineering

Czech University of Life Sciences Prague

Public; established in 1952; over 8,000 graduates

Agricultural engineering - precision agriculture, robotics, remote sensing, crop and soil status

Electrical engineering - PV control, PV panels, sensing systems, IoT, num. simulation, digital twins

Mechanics - constructions e.g. for PV



Production technologies - operational characteristics, production economics, circular economy

Prototype laboratory - design, construction and operation of drones and robots

46 implemented international projects at CZU in 2020

e.g. CARES - City Air Remote Emission Sensing (<https://cares-project.eu/>)

IoT integration of agricultural production processes powered by agrivoltaics



PV powered systems applicable for orchards, vineyards, horticulture that would operate as autonomously as possible through IoT sensors and controllers, AI, water management and irrigation, field robots with docking, remote sensing

Renewable energy supply with farm production maintained

Smart automation of time and labour consuming work

Integration into Community Energy



Contact details

Contact person	Assoc. Prof. Petr Šařec
Organisation	Faculty of Engineering, Czech University of Life Sciences Prague
Address	Kamýcká 129, 165 00 Praha - Suchdol
Phone	+420 224 383 147
E-mail	psarec@tf.czu.cz
B2Match profile	https://kets2022.b2match.io/participations/190299
LinkedIn/Twitter	https://cz.linkedin.com/in/petr-%C5%A1a%C5%99ec-b788b553
