

SMART4ENV

UVIC SUMMER SCHOOL

SUMMER SCHOOL on Strategies for Adapting to and Mitigating the Effects of Climate Change in the Agricultural Sector

BETA TECHNOLOGICAL CENTER

Learning outcomes:

The UVIC Summer school is expected to host up to 15 participants, especially undergraduate, master and PhD students that are eager to explore Strategies for adapting to and mitigating the effects of climate change in the agricultural sector, through the sustainable management of nutrients, fertilisers, and water.

This event will be hybrid (in person and online) in order to facilitate participation of those unable to attend in person.

Participants will have an opportunity to deepen their knowledge on:

- Nutrient recovery for soil degradation and quality losses, regenerative agriculture, management of carbon stocks, and improving nutrient management through capitalisation.
- Biofertilisers and organic farming, soil sampling and fertiliser management through digital technologies, smart monitoring and management systems for sustainable fertilisation: Decision Support Systems (DSS), and waste revalorisation techniques for soil health: anaerobic digestion, composting and solid-state fermentation and pyrolysis.
- Digital twins for irrigation supervision and control, water reuse and ferti-irrigation, treating and reclaiming water with nature-based solutions (NBS) and digitalisation of water.

Nutriday 24th April 2024

10:00-10:30	Registration & Welcome
10:30-11:00	Welcome & BETA Presentation.
11:00-11:30	Icebreaker activity & Introduction of the SMART4ENV project.
11:30-12:15	Session 1: Addressing soil degradation and quality losses through nutrient recovery.
12:15-12:30	Networking session between Turkish and Spanish researchers.
12:30-13:15	Session 2: Regenerative Agriculture: Management of carbon stocks.
13:15-15:00	lunch
15:00 -15:30	Visit to the Beta Technological Centre.
15:30-16:15	Session 3: Improving nutrient management through capitalisation.

Fertiday 25th April 2024

10:00-10:30	Registration & Welcome
10:30-11:15	Session 1: Biofertilizers and organic farming: Reducing environmental impacts with alternative sustainable fertilisers.
11:15-12:00	Session 2: Smart monitoring systems for precision fertilisation: Soil sampling and fertiliser management through digital technologies.
12:00-12:30	Networking session between Turkish and Spanish researchers.
12:15-12:30	Session 3: Smart monitoring and management systems for sustainable fertilisation: Decision Support Systems.
13:15-15:00	lunch
15:00 -15:30	Session 4: Waste revalorisation techniques for soil health: Anaerobic digestion, Composting and Solid-state fermentation and Pyrolysis.

Waterday 26th April 2024

10:00-10:30	Registration & Welcome
10:30-11:15	Session 1: Digital twins for irrigation supervision and control. The Spanish context, introduction the irrigation water control, irrigation support technologies and regional surveillance.
11:15-12:00	Session 2: Experiences, projects and achievements on water reuse and ferti-irrigation.
12:00-12:30	Networking session between Turkish and Spanish researchers.
12:30-13:15	Session 3: Treating and reclaiming water with Nature Based Solutions.
13:15-15:00	lunch
15:00-15:45	Session 4: Digitalisation of water.