

The sustainable transition of the food system globally through collaboration and innovation.

DIGITAL THEMATIC
WORKSHOPS

globalfoodture.eu



The short-term objective of **FOODTURE** is to create relations and collaboration between European SMEs and:









To do so, we are organising a series of digital workshops as part of the international training programme.

### FIND OUT MORE •••

















They showcase **European and Asian technologies** to a digital audience, creating an environment suitable for an exchange of information between **European and Asian SMEs** and stimulate innovation collaboration, sensitising SMEs to the opportunities.

Each thematic workshop will focus on a particular theme or technology area:



Sustainable packaging





Atternative proteins

Reduce food waste





Health, functional and personalised

### 2022

### October

07.10
Insects as the future of food proteins?

### 2023 January

**19.01** The future of proteins

### <u> April</u>

20.04
Plant-based and alternative proteins

### July

**06.07**Packaged food waste reduction solutions

### November

**17.11**Are future farmers flying farmers?

### February

**16.02**Digital technologies uptake

### May

11.05 Importance of food waste reduction

### September

**21.09**Bringing urban farming to new heights

### December

**08.12**Biomass
valorisation
technologies

### March

**16.03**Personalised
Nutrition

### June

**15.06**Fermentation a cutting-edge technology?

### October

**19.10**New materials, technologies, and regulations



Click on your preferred workshop for further information





### INSECTS AS THE FUTURE OF FOOD PROTEINS?

### **ABOUT THE WORKSHOP**

**Insects** have a huge potential when it comes to the valorization of sources that are not suitable for feed/ food production, like manure and biowaste streams. Companies are collaborating to scale and extend the market for insects for food, which we will show during this session.

- Edible insect products for human consumption in Europe
- Insects and valorisation of by-products



















### ARE FUTURE FARMERS FLYING FARMERS? USE OF ROBOTS, DRONES, AND SATELLITES IN AGRICULTURE

### **ABOUT THE WORKSHOP**

Today's agriculture has transformed into a high-tech enterprise that most 20th-century farmers might barely recognize. Self-driving machinery and flying robots able to automatically survey and treat crops will become common place on farms that practice what's come to be called precision agriculture. The ultimate purpose of all this high-tech gadgetry is optimization, from both an economic and an environmental standpoint. This thematic workshop will point out and showcase different solutions that are on the market, ready to be used by farmers worldwide.

- Smart use of robots and drones
- Satellite data in support of cultivation





















### BIOMASS VALORISATION TECHNOLOGIES AND COMMERCIALISATION PATHWAYS TO CREATE VALUE FROM AGRI-FOOD SIDE STREAMS WITHIN THE CIRCULAR ECONOMY

### **ABOUT THE WORKSHOP**

In the frame of the circular economy and bio-based thinking, an increased attention is going to the valorisation of food waste, preferably producing new products/derivatives of the food waste with an added value as high as possible in the valorisation chain. During this online masterclass European SMEs will showcase how they as agri-food companies explore new economic opportunities regarding the valorisation of food waste and side streams in food, feed and non-food applications. Complementary to this, innovative SMEs and service providers from Europe providing technologies geared towards extracting functional ingredients (macro- and micronutrients) from biomass, will present how they can offer support.

- Waste valorization natural methods
- Sidestream valorization technologies





















### THE FUTURE OF PROTEINS: SCP & CULTURED MEAT

### **ABOUT THE WORKSHOP**

As global population is on the rise, the need of food and especially protein-rich meals is increasing every day. But the current way of production is taking a heavy burden on our planet. More environmental production methods are being explored that take up less land, consume less water and emit less GHG. Next to plant-based proteins, research goes further looking at cell-based proteins, produced in the lab or single cell proteins, fermenting microbial organisms.

- Single Cell-based protein revolution
- Microbial protein and cultured meat production



















### DIGITAL **TECHNOLOGIES** UPTAKE IN ORDER TO SUPPORT THE FUTURE THE FOOD SYSTEM

### ABOUT THE WORKSHOP

A range of digital technologies in the food system are already leading to better informed and engaged consumers producers, smarter farms, and improved services. These technologies range from simple off-line farmer advisory digital videos to complex systems such as distributed ledger technologies for value chain traceability and forms of precision agriculture. This masterclass will showcase how blockchain technology provides traceability, security and decentralisation when dealing with data around food, and how farm management systems help farmers optimize production activities and operations on their farms.

- Blockchain traceability system in the supply chain
- Decision support system for farm management

















16 March 2023 - 09:00-10:30





### **PERSONALISED NUTRITION:** Health, HOW TO BRING functional and PERSONALISATION personalised TO THE MASS? HOW TO BRING TO THE MASS?

### **ABOUT THE WORKSHOP**

Consumer desire for personalised nutrition is growing rapidly. Because personalised food is still costly and complex to produce, it remains niche and companies focus on 'customisation', requiring the end consumer to do the hard work of choosing rather than personalising food to individual needs. But in the next ten years, we expect personalised nutrition to become mainstream, supported by the use of smart devices that track, interpret and advise consumers what their body is telling them. The challenges to overcome to reach the mass market are technological (e.g., real time biomarkers, near-effortless 'always on' monitoring), relevance and affordability. At this masterclass we will discuss and present promising business models bringing personalised nutrition to the mass.

- Improved functionally of plant-based proteins targeted the elderly
- Personlised nutrition for the mass market















20 April 2023 - 09:00-10:30





# PLANT-BASED AND ALTERNATIVE PROTEINS, NEW INGREDIENTS: SOURCES OF INNOVATION

### **ABOUT THE WORKSHOP**

Alternative proteins represent not only an ideal answer to main global food challenges such as nutrition, health, climate change, biodiversity, sustainability, and food security but also offer a huge potential of development. During this online masterclass, European and Asian SMEs will showcase innovative solutions applied to food industry. From valorisation of food microalgae and legumes, to the potential of insects and mushrooms, how new ingredients are sources of innovation?

### **TOPICS TO BE COVERED**

 Innovative ingredients for plant based alternative proteins





















## IMPORTANCE OF FOOD WASTE REDUCTION IN THE SUPPLY CHAIN AND VALORISING SIDE STREAMS LIKE BREWER SPENT GRAIN

### **ABOUT THE WORKSHOP**

Reducing loss and waste throughout the food supply chain should be considered an effective solution to reduce the environmental impacts of agriculture, to improve the income and livelihood of the chain actors and to improve food and nutrition security for low-income consumers. At this masterclass we will discuss and present what is available on the market and how different value chains are addressing the topic of food loss and waste. Since brewer spent grain is a huge side stream and is very rich in proteins and fibers, this side stream is identified as a promising side stream. Although brewer spent grain has both opportunities and challenges, we see that there is a great willingness to share knowledge and experience, and work together on specific topics to scale up the brewer spent grain side stream.

- Brewers spent grain
- Reducing food waste in the supply chain















15 June 2023 - 09:00-10:30





### FERMENTATION A tealth, functional and personalised CUTTING-EDGE TECHNOLOGY? **CUTTING-EDGE**

### **ABOUT THE WORKSHOP**

Research into alternative proteins is definitely in the spottlight. But if we have to choose one of the trendy technologies to meet this food challenge that open up great and close opportunities in the food industry, would be fermentation technologies. The process, microbes to produce proteins and other functional ingredients used mainly in plant-based meat and dairy-free products. The new protein products are attractive to vegans, because animals are not involved in their production, Using cells instead of animals to produce protein also offers environmental advantages, since cellular fermentation produces fewer emissions, requires fewer resources and can be produced locally. Fermentation is empowering a wide number of companies to leverage new protein sources, creating products with improved consumer acceptance and enhanced production efficiency.

- Use of fermentation to produce ingredients
- Alternative proteins round















06 July 2023 - 09:00-10:30







### PACKAGED FOOD. FOOD WASTE REDUCTION SOLUTIONS IN FOOD PACKAGING FOR TAKE-AWAY AND RETAIL

### **ABOUT THE WORKSHOP**

Reduce, Reuse, Recycle. The European Union generates around 88 million tonnes of food waste every year. This means that 20% of the total food production is lost or wasted. The main origin of food waste are households. However, there is still a 26% from food service and 13% from retail that can be reduced with the efforts of all the industry players. In this workshop we will see 3R applied solutions for retail and take away.

- Circular take-away solutions
- Sustainable retail



















## BRINGING URBAN FARMING TO NEW HEIGHTS THROUGH BREAKTHROUGH TECHNOLOGIES AND INNOVATIVE BUSINESS MODELS

### **ABOUT THE WORKSHOP**

During this online thematic workshop European and Asian SMEs and flagship projects will showcase how they can bring the production of agricultural goods within urban areas to scale through cutting-edge indoor farming solutions, new research, and innovative business models. Indoor, vertical farming solutions (at scale) will play a pivotal role in the future of farming because they allow food production to be fully uncoupled from soil and external climate influences. Innovations showcased will include, among others, modulable farms with quality calibration, 3.0 recipes to optimise taste, active ingredients and resistance, indoor growing platforms with automatic digital systems, rotating towers for a unique combination of data driven automation for culture optimisation.

- Vertical farming solutions
- Hydroponic indoor vertical farming solutions















19 October 2023 - 09:00-10:30







### NEW MATERIALS, TECHNOLOGIES, AND REGULATIONS FOR THE PACKAGING OF TOMORROW

### **ABOUT THE WORKSHOP**

Packaging must serve critical functions including **protection**, **preservation**, **distribution** and **advertising**. Food packaging represents more than 66% of total packaging produced. For this reason, its sustainability cannot be measured only by its biodegradability. The resources needed for its development, such as the distance its weight must travel or the recyclable nature of its material, should be taken into account. Plant-based plastics, compostable materials, biomass, edible wrapping, etc. What are the most innovative and sustainable solutions in food packaging?

- Advanced bioplastics for food and consumer preferences towards sustainable packaging solutions
- Sustainable packaging for future
- Food packaging regulations













