Fieldfood: An H2020 project spinning off from COST Action TD1104

European Union’s Horizon 2020 research and innovation program has approved the Fieldfood project (http://fieldfood.eu) within the topic “Innovative solutions for sustainable novel food processing” (SFS-17-2014) of the work programme “Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy”.

Fieldfood brings together 12 entities of 8 European countries. Five of the partners involved in the project are participants of our COST Action TD1104 (University of Zaragoza, ProdAl S.c.a.r.l., Technical University of Berlin, University College Dublin, and Energy Pulse System).

Currently, in spite of the many advantages deriving from the introduction of the Pulsed Electric Field (PEF) technology in the food industry and the existence of different PEF manufactures at industrial-scale, applications of PEF in the food industry are still limited. The approach of Fieldfood is based on a preliminary analysis aimed at identifying the bottlenecks that are causing such limited application. The overall objective of Fieldfood is to address successful, real-scale demonstrations of the viability of the introduction of PEF technology as a strategy to improve the competitiveness of the European food industry by improving food quality (safety, nutritional, and sensorial properties), optimizing process efficiency, reducing energy costs, and introducing new foods to the market.
Continued from previous page

This broad objective will be achieved by (a) conducting a systematic process analysis of different specific applications (fruit juice processing, tomato product processing, winemaking, olive oil extraction and cider-making) for a successful integration of the PEF technology in order to replace or complement existing traditional food processing technologies; and (b) design modular, portable, low-cost pulse generators.

The project represents an integrated interdisciplinary approach to the implementation of PEF technology in the food industry, involving research institutions with well-established expertise in fundamental and applied aspects of PEF technology and SMEs, including a company with knowledge and expertise in the design and development of pulse power modulators, as well as five food companies representing different production sectors in which exist clear benefits of the implementation of the PEF technology. The project will also address economical feasibility and opportunities to improve the process sustainability in the SMEs derived from the introduction of the PEF technology.

The project is 36 months in duration and includes pilot plant scale studies aimed at defining PEF processing conditions and optimal treatment conditions of the related processing steps during the first year of the project, and on-site studies in the plants of the SME companies in the following 2 years.

Fieldfood is coordinated by the University of Zaragoza and has a total eligible cost budget of 2,281,000 €, and will receive funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement N° 635632 of about 1,994,000 €.

Forthcoming activities

**European Nanomedicine Meeting**
Grenoble, December 7 – 9, 2015

**School on PEF for Food Processing**
Dublin, March 21 – 24, 2016
[http://www.electroporation.net/Events/School-on-PEF-for-Food-Processing](http://www.electroporation.net/Events/School-on-PEF-for-Food-Processing)