ICFO

Multi Sensor Devices

ICFO participates in new project to contribute to the competitiveness of the European Food Industry.

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ICFO participates in a recently launched FP7 project called MUlti SEnsor Technology for management of food processes. IRTA (Institute of Research and Technology of Food and Agriculture), the project coordinator, launched the kick-off for this project on Oct 22nd at their facilities in Barcelona. This collaboration includes partnering research institutions as well as several technological corporations and industries in Spain, Finland, Czech Republic, Italy, United Kingdom and The Netherlands.

Over a period of 36 months, the MUSE-Tech consortium will develop three single sensor prototypes (Photoacoustic, Quasi Imaging UV-Vis and a Distributed Temperature) which will be integrated in a versatile and affordable Multi Sensor Device (MSD). These prototypes will be tested for validation in three different food elaboration processes: bread baking, brewing and potato chip frying. The Optoelectronics group led by ICREA Professor at ICFO Valerio

Pruneri will be in charge of developing temperature sensors that can be multiplexed, distributed and integrated in a multi-parameter detection head.

The Multi Sensor Device, built for real-time on/in line monitoring, will be rapid and sensitive in order to achieve targeted and consistent levels of quality and chemical safety in final products, and will support early warning, automatic decision-making protocols and PAT strategy in the food industry.

Ultimately, MUSE-tech aims to contribute to the reduction of manufacturing costs and food waste by enabling a more efficient control of overall processes and supporting the competitiveness of the European food industry.