Abstract ID 501

VIIAFOOD PROJECT

Paulo Peças

Instituto Superior Técnico

ppecas@tecnico.ulisboa.pt

Keywords: Food Industry, Smart Packaging, Machine Learning, Sustainability

Summary: The ViiaFood Project is a transformative initiative aimed at revolutionizing the Portuguese food sector through sustainable packaging and advanced digital technologies. It focuses on developing renewable raw materials, smart packaging solutions, and machine learning-driven optimization for food production. Key innovations include biodegradable packaging alternatives, sensors for storage monitoring, and predictive algorithms for process improvement. By integrating lean manufacturing principles and continuous diagnostics, the project enhances efficiency and reduces food waste. This initiative strengthens the agri-food industry's competitiveness, aligning with circular economy principles and promoting eco-friendly industrial transformation. Future developments will expand smart packaging applications and optimize supply chain sustainability.