

Projet H2020 – BIOSMART

Nom du projet	Bio-based smart packaging for enhanced preservation of food quality.
Call	H2020-BBI-JTI-2016 (BBI-2016-R05)
Référence UE	745762
Type de projet	Bio Based Industries - Research and Innovation Action (BBI-RIA)
Rôle de la HES-SO	Participant
Chercheur impliqué	Rudolf Koopmans (HEIA-FR)
Participants	Fundacion Tekniker (ES) – Coordinator ; The University of Reading (UK); Lipofabrik (FR); Université des sciences et Technologies de Lille (FR) ; Haute Ecole Spécialisée de Suisse occidentale (CH); Instituto Tecnológico del Embalaje, transporte y Logística (ES) ; Innventia AB (SE); Propagroup SPA (IT) ; 9 Tecsense GmbH (AT) ; Wipak Walsrode GmbH & Co. KG (DE); Gea Westfalia Separator Group GmbH (DE)
Budget global	4'950'560 € / financement UE : 3'610'866 €
Durée	48 mois, début le 01.05.2017
Résumé	<p>The BIOSMART project proposal has the ambition to develop active and smart bio-based and compostable packages addressing the needs of fresh and pretreated food applications. Moreover, the novel packaging system will form the basis for tailoring performance and functionality to specific flexible and rigid food packages in diverse market segments. A holistic ecosystem approach is pursued by offering solutions that bring enhanced performance and acceptable economics to the value chain and facilitate implementation and large-scale commercialization. Critical issues that differentiate the present packages from the future all-bio-based and compostable ones are enhanced active and smart functionalities that make possible: light weighting, reduced food residues, shelf life monitoring and longer shelf life, easier consumer waste handling, and all this at a competitive cost to the incumbent. The BIOSMART project proposal develops thus encompasses an approach for selectively integrating superhydrophobic surfaces, microencapsulated phase change materials, barrier coatings, sensing devices, and new bio-active antimicrobial and antioxidants, into all-bio-based multilayer flexible plastic packages. Three generic packaging systems are selected with specific performance needs as defined by current multi-material (eg. pouches, terrines and cardboard/thin film tray). The associate life cycle assessments for the different possible scenarios include the economic feasibility. Ultimately, this consolidated knowledge is captured in a material selection and packaging performance simulation App. through optimization of all possible variables to meet selected key performance indicators (KPI).</p>

Lien <http://biosmart-project.eu>, <http://www.biosmart-project.eu>

