

**SMART AND SUSTAINABLE FOOD PACKAGING UTILIZING  
FLEXIBLE PRINTED INTELLIGENCE AND MATERIALS  
TECHNOLOGIES–SUSFOFLEX PROJECT**

S. Saner<sup>1\*</sup>, N. Eryilmaz<sup>1</sup>, G. Durmaz<sup>1</sup>, M. Dogan<sup>1</sup>, H. Tekeli<sup>1</sup>, G. Toth<sup>2</sup>,  
A. Kukovecz<sup>3</sup>, E. Jubete<sup>4</sup>, G. Morales-Cid<sup>5</sup>, G. Spigno<sup>6</sup>, Z. Kónya<sup>3</sup>,  
F. Javier Navas<sup>5</sup>, S. Montes<sup>4</sup>

<sup>1)</sup> Kalite Sistem Laboratory Group, Istanbul, Turkey

<sup>2)</sup> University of Oulu, Oulu, Finland

<sup>3)</sup> University of Szeged, Szeged, Hungary

<sup>4)</sup> Cidetec, San Sebastián, Spain

<sup>5)</sup> Andaltec, Cordoba, Spain

<sup>6)</sup> Università Cattolica Sacro Cuore, Pordenone, Italy

SusFoFlex project focuses on some specific food categories well-known for problems of short shelf-life, safety and food losses, such as fresh-cut fruits and salads and other vegetables and fish, even though a methodology approach is followed and developed which could be flexible applied also to other food categories characterized by high and increasing market volumes. SUSFOFLEX will identify the key areas where improvement in terms of barriers and smart functions can be made by using natural additives, filler and nanomaterials, by PLA films, and by developing sensor materials that can gain information on the condition of the product. An intelligent sensor that can gain information on the condition of the product will be developed and the sensor will be an integrated part of a smart label/sticker. On the other hand the sensor will monitor the packaged food, and communicate the information to the user and Hybrid, RFID based near field communication will be used for communication. 7 industrial companies and 8 European RTD units participated in the project to share their knowledge and experiences. To reward their endeavor the EU decided to fund the project through the Seventh Framework Programme. In the scope of the project, up to now plant extracts for potential application in food packaging were prepared from different agro-food by-products and antimicrobial effects of these compounds have been tested.

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\* Corresponding author: saners@kalitesistem.com