

## Partnering Opportunity

Profile status : Published

### Research Development Request

**Spanish Technological Centre is searching a company to participate as end user in a FTI-H2020 project aimed to develop a biodegradable and compostable high barrier multilayer packaging**

#### Summary

*A Spanish Technological Center is preparing a project proposal to be submitted to Fast Track to Innovation call under Horizon 2020 programme. This Center is a non-profit organization with the mission of improving the competitiveness of the regional SMEs and companies. The project will develop an active biodegradable and compostable multilayer film for snacks packaging. The company seeks a partner, which role will be end-user. This partner will validate de new technology in a real scenario.*

**Creation Date** 10 December 2019

**Last Update** 13 December 2019

**Expiration Date** 12 February 2020

**Reference** RDES20191210001

**Public Link** <https://een.ec.europa.eu/tools/services/PRO/Profile/Detail/b4985a6d-6311-407b-a784-9ca8ff310dee>

#### Details

##### Description

The Spanish Technological Center is a meeting point to carry out R&D project, acquire legal information, regional and national funding for projects, among other activities. It is actively involved in the Spanish Technology Platform for Sustainable Agriculture (agricultural plastics) and in major standardization committees on plastic items,

especially for agricultural use (film, pipe, etc.). Furthermore, it is a member of The Bio-Based Industries Joint Undertaking (BBI JU). Furthermore, it has previous experience in European projects as a partner as well as coordinator of consortiums.

Currently, multilayer films (a film with each layer is composed of different polymers) are widely used as barrier material in the food packaging industry in a cost-effective manner, ensuring to keep the food quality. The combination of several polymer layers significantly increases shelf-life by controlling the transmission rate of oxygen, carbon dioxide and moisture as well as the concentration of oxygen inside the package which is a key in preserving the food. Besides, these films include other important properties as mechanical, sealing and adhesion properties. However, these multilayer packaging are not recyclable due to the combination of different polymers that they are made. As consequence the end of life of this packaging is either landfill or incineration, counteracting the efforts towards a circular economy and crude oil independency. The food sector demands the highest quality in packaging solutions, requiring excellent presentation with focus on product shelf-life extension.

The project aim is the development of an active biodegradable and compostable multilayer film for snacks packaging. It will be based on compounding techniques and selection of natural additives. Natural antimicrobial and antioxidants additives will be selected and incorporated to one of the layers aimed to extend the shelf life of food and increasing the period of time that the food is high quality (Active packaging).

The Coordinator and three companies are already included in the consortium. Their roles will be: technical support and plastic validation tests during the project; pilot manufacturing of the biodegradable compounds to obtain layers of biodegradable barrier film packaging; pilot manufacturing of the biodegradable barrier multilayer packaging; development of the biodegradable adhesives and biodegradable inks.

The coordinator is looking for a company to participate in the project as an end-user partner to validate the new technology in a real scenario. Preferentially, the end-user partner should be manufacturer and distributor of snacks, such as dried fruits, branded nuts, peanuts, chips/crisps, candies, crackers or similar products.

The project will be submitted to Fast Track to Innovation call under Horizon 2020 programme. The deadline of the call is 19th of February 2020. The project will last 30 months.

Deadline for the Expressions of Interest is 12th of February.

## Advantages and innovations

Plastic packaging waste in Europe is recycled in a 35%. This figure must be increased in a near future. In fact, the European Commission aims that all plastic packaging is recyclable by 2030. The developed packaging will be a sustainable alternative to current commercial multilayer films having the same technical properties: high barrier properties, as well as mechanical, sealing and adhesion properties. The packaging will be designed to be compostable at industrial composting facilities and at home composters. Therefore, this development will avoid the incineration and the landfill routes at their end of life phase.

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## Keywords

### Technology

02007014	Plastics, Polymers
06006002	Bioplastics
06006004	Biopolymers
06006005	Biobased high-performance materials

08001003

Food Packaging / Handling

**Market**

07003002

Health food

08001001

Plastic fabricators

08001006

Processes for working with plastics

09004006

Packing products and systems

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**Network Contact**

**Issuing Partner**

ZACHODNIOPOMORSKI UNIWERSYTET TECHNOLOGICZNY W SZCZECINIE

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**Open for EOI:** **Yes**

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**Client**

**Type and Size of Organisation Behind the Profile**

R&D Institution

**Year Established**

0

**Already Engaged in Trans-National Cooperation**

No

**Client Country**

Spain

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**Partner Sought**

**Type and Role of Partner Sought**

Company as end-user partner to validate the new technology in a real scenario. Preferentially, the end-user partner should be manufacturer and distributor of snacks, such as dried fruits, branded nuts, peanuts, chips/crisps, candies, crackers and similar products.

**Type and Size of Partner Sought**

SME 11-50,SME <10,>500 MNE,251-500,SME 51-250,>500

**Type of Partnership Considered**

Research cooperation agreement

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**Program - Call**

**Framework Program**

H2020

**Call title and identifier**

EIC-FTI-2018-2020

**Coordinator required**

No

**Deadline for EOI**

12 Feb 2020

**Deadline of the Call**

19 Feb 2020

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**Attachments**