

## The EC starred biopolymer follows on with WHEYLAYER2 to up-scale successful R&D results

A new sustainable packaging solution for food, cosmetics and pharmaceutical industries

**17th September 2012.**– The development of the new biopolymer based on whey protein, called WHEYLAYER<sup>®</sup>, keeps going. Under the **WHEYLAYER 2** project, funded by the European Commission (Grant Agreement no. 315743) within its Demonstration Activity scheme, 10 partners from five EU countries are back to work for the follow-on phase of the very successful Wheylayer project that ended in October 2011.

Since the Wheylayer project very convincingly researched and developed a biopolymer-coating based on whey protein for plastic films able to replace currently used expensive synthetic oxygen barrier, the European Commission decided to bet further on the biopolymer solution to allow its introduction in packaging value chain. The 2-year **WHEYLAYER 2 project**, which officially started on **August 1<sup>st</sup>, 2012**, will focus on up-scaling the results obtained in the Wheylayer project, to prove their industrialization potential. It will focus on final packaging items such as films but also trays, blisters, tubes and cans, and additional packaging functionalities such as convertibility, printability, UV barrier. WHEYLAYER<sup>®</sup> will be evaluated as packaging solution for food, cosmetics and pharmaceutical.

The project consortium will get together on the **19<sup>th</sup> of September, 2012**, for the **WHEYLAYER 2** kick-off meeting at its project coordinator facilities, Lajovic Tuba Embalaza DOO (TUBA), Slovenia. TUBA will be supported technically by IRIS Research&Development which originated the project idea, and by the Slovenian Plast-technics Cluster (Slovenia) to ensure that the project results get widely disseminated. Other partners working in the project are Fraunhofer-Institut für Verfahrenstechnik und Verpackung (Germany), ILIRIJA (Slovenia), the University of Pisa (Italy), Meierei-Genossens eG (Germany), Dunreidy Engineering (Ireland), NUTRARESEARCH SL (Spain), Manufacturas Serviplast SA (Spain).

The WHEYLAYER<sup>®</sup>-based multilayer films materials are easily recyclable as opposed to their conventional counterparts. The LCA showed significant reduction of the environmental impact of the resulting packaging and preliminary evaluation showed that it fulfilled food safety regulations. A patent application was filled regarding the coating process (IB2011/053271) and a WHEYLAYER<sup>®</sup> prototype application machine was built to reach semi-industrial production speed while keeping satisfactory barrier properties.

**WHEYLAYER 2** project coordinator Urška Sušnik-Pivk, from Lajovic Tuba Embalaza D.O.O, highlights that “TUBA is very keen on commercializing soon Wheylayer-derived tubes and believes that Wheylayer can add value also to the packaging used in the cosmetics industry, where Tuba is already very much present. Overall, for us, European projects are a great opportunity to investing into research and help us to grow our competitiveness by being able to offer new solutions on the market.” Its technical manager, Dr. Elodie Bugnicourt, further stresses that “the new WHEYLAYER<sup>®</sup> trademarked biopolymer will have revolutionary impact on packaging sector and on the environment as it solves multiple challenges: new commercial use of currently discarded cheese by-product, petroleum-based plastics replacement with natural bioplastic while enhancing the recyclability of multilayer film”. To learn more about the WHEYLAYER2 project, please visit [www.wheylayer.eu](http://www.wheylayer.eu). Further information on the WHEYLAYER<sup>®</sup> product and its R&D project (FP7 grant agreement n°218340-2) can be found in the web’s Heritage section.