



BIOFILUX

Self-supporting custom-coloured biodegradable thin films and coatings for the luxury goods industry

Researchers from LMI and IMP are deploying their expertise in the design and synthesis of biodegradable films and packaging for the fashion and luxury goods sector.

Carnot Ingénierie@Lyon

Scientific / technological breakthrough

Laboratories Multimatériaux et Interface (LMI - lab focused on multi-material solutions and interfaces) and Ingénierie des Matériaux Polymères (IMP - engineering lab specialised in polymer-type materials), both part of Institut Carnot Ingénierie@ Lyon, have developed packaging film for the luxury goods industry. These transparent films are 100% water soluble and biodegradable and may also be coloured using nanoparticles of precious metals developed by the Laboratory. Polymer films (PVA) incorporating gold and silver nanoparticles that combine elegance with mechanical strength have been produced using energy-efficient processes.



Competitive advantage for the economic stakeholders

BIOFILUX aims to offer companies noble metals as a key component in their packaging at a reasonable cost while actually being kinder to the environment. As the source of the packaging colour, these materials offer real functional properties and users may also argue that the precious metals enhance the perceived quality of the product by the end consumer.

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