

## **Safe by Design MCNMs for food, automotive and construction sectors under EU Sunshine project**

Ana SERRANO-LOTINA - *Instituto de Catálisis y Petroleoquímica, CSIC, Spain*

SUNSHINE (<https://www.h2020sunshine.eu/>, GA 952924) is a European industry-oriented project, where leading research and technology organizations cooperate with SMEs and large industries to develop and implement simple, robust, and cost-effective Safe and Sustainable by Design (SSbD) strategies for materials and products incorporating advanced multi-component nanomaterials (MCNMs). Case study working groups, addressed in industry-academia partnerships, were created to develop and implement the SSbD strategies.

MCNMs are typically developed for a specific function or purpose. However, the properties that underlie these functions may also have an impact on the risk of the material to human health or the environment. The potential impact depends not only in what they are but also in where they go, and what they do. In this presentation we will focus on the determination of the main physicochemical intrinsic characteristics of both single and MCNMs (what they are) selected within SUNSHINE and provided by participant companies (Avanzare, CIAC, Encapsulae and Laurentia) who develop materials applied to several industry sectors (automotive, construction and food). We will also introduce how these properties can influence where they go and what they do.