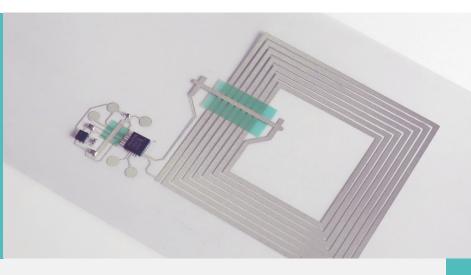
# OPEN SESSION

June 20, 2022 12:00 h. - 13:30 h.



# Safety Services Open Session: LEE BED project



LEE BED



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 814485.

In the **printed electronics industry**, there is a strong push towards the use of nanomaterials instead of micromaterial-based pigments, due to their superior electrical performance, lower processing temperatures and reduced material consumption. This transition will **lead to cheaper, more versatile, and sustainable integration of electronics into products**.

In addition, the digitisation of the European industry (Industry 4.0) through digital production systems, such as electronic inkjet printing, additive manufacturing, robot-assisted electronic labelling, laser processing, stereolithography and others, requires the development of multifunctional nanomaterials. This is a bottleneck in the progress towards the modernisation of the European industry that LEE-BED, funded by the Horizon 2020 programme, will help to address.

The main objective of LEE-BED, in which ITENE participates, is to bring together the best technology and research centres and leading companies in Europe in order to establish an open innovation platform to accelerate the development and production of integrated electronic systems.

Safety is one of the key aspects to be considered when incorporating these nanomaterials. In this sense, ITENE offers safety services in the framework of the LEE BED project that aim to support companies in the printed electronics sector using nanomaterials in the identification of key points regarding standardization, regulatory compliance, and safety-related issues (risk assessment -involving occupational exposure and toxicological profiling services- and risk mitigation).

#### Objectives:

Show the safety services offered within the LEE-BED project for printed electronics companies that are using nanomaterials, both in terms of materials and processes:

- Screening studies to determine the toxicological profile of the products.
- Studies to assess occupational exposure to nano-objects, their aggregates, and agglomerates in the workplace.
- Experimental analysis of the effectiveness of personal protective equipment and technical risk management measures (e.g., ventilation).
- Definition of safe design methods for the reduction of toxicity and exposure.
- Advice on legislative compliance.

#### Addressed to:

In the course of Phase III, ITENE is organising an Open Session focused on Safety Services, addressed to:

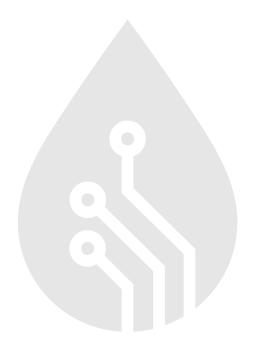
Companies of

- The printed electronics sector.
- Nanoparticle manufacturers.
- Formulators of inks, adhesives and composites based on nanoparticles.
- Electronic circuit printers with products containing nanoparticles.



### **PROGRAMME**

12:00 - 12:10	Welcome - Introduction to ITENE   Carlos Monerris - ITENE
12:10 - 12:20	Introduction to the LEE BED Project   Inmaculada Lorente - ITENE
12:20 - 12:30	Pre-Safety Assessment: Phase I   Helena Prima - ITENE
12:30 - 12:40	Standardisation and Safety Services: Phase III Regulatory Compliance Analysis Arantxa Ballesteros - ITENE
12:40 - 13:00	Standardisation and Safety Services: Phase III  Risk Assessment: occupational exposure services Helena Prima - ITENE
13:00 - 13:15	Standardisation and Safety Services: Phase III  Risk Assessment: (eco)toxicological profiling services: in silico e in vitro Arantxa Ballesteros - ITENE
13:15 - 13:30	Remarks Questions Closure   All



## Organised by:









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