

## Full Day Workshop

# When Chemistry meets Biology:

## (Eco)toxicity of Biodegradable Polymers and Nanomaterials

**Date:** 25 November 2024

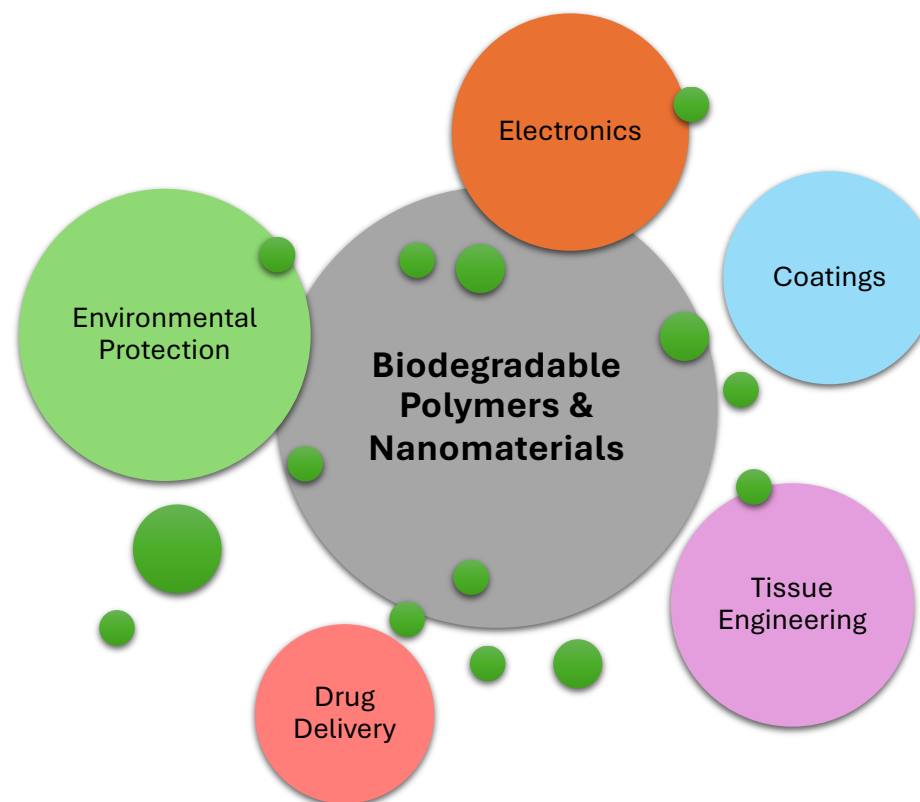
**Room:** Amphitheatre Carlos Borrego,  
DAO, University of Aveiro

### Organising committee:

Dr. Maria Pavlaki (CESAM/DBio)

Prof. Dr. Manuel Coimbra (LAQV-REQUIMTE /DQ)

Dr. Roberto Martins (CESAM/DBio)



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## When Chemistry meets Biology: (Eco)toxicity of Biodegradable Polymers and Nanomaterials

### Full Program

#### 9:00 Opening

Dr. Maria Pavlaki (CESAM, Department of Biology, UA, PT)

Prof. Manuel Coimbra (LAQV-REQUIMTE, Department of Chemistry, UA, PT)

#### 9:10-9:25 - Chemical structure – biological function relationship in the development of prebiotics and immune target delivery systems

Dr. Elisabete Coelho (LAQV-REQUIMTE, Department of Chemistry, UA, PT)

#### 9:30-9:45 – Latexes based on vegetable oil-derived monomers and their coating properties

Prof. Dr. Jana Mochotova (Department of Synthetic Polymers, Faculty of Chemical Technology, University of Pardubice, CZ)

#### 9:50-10:05 - Development of Multifunctional coatings for High-performance applications: challenges and opportunities

Prof. Dr. João Tedim (CICECO, Department of Materials and Ceramic Engineering, UA, PT)

#### 10:10-10:25 - Nanostructured materials for immobilisation of active compounds

Dr. Frederico Maia (Smallmatek - Small Materials and Technologies, Lda., Aveiro, PT)

#### 10:30-11:00 Coffee Break

#### 11:00-11:15 - Eco-friendly nanoadditives for polymeric coatings: the challenge between (high) performance and (no/low) ecotoxicity

Dr. Roberto Martins (CESAM, Department of Biology, UA, PT)

#### 11:20-11:35 - Combined effects of polyethylene nanoplastics and mercury on viability and migration capacity of human cell lines

Dr. Fernanda Rosario (CESAM, Department of Biology, UA, PT)

#### 11:40-11:55 - Interaction between polystyrene nanoplastics and intestinal cells: effects on inflammatory signalling and epithelial permeability

Prof. Dr. Vasco Branco (iMed, Faculty of Pharmacy, ULisboa, PT)

#### 12:00-12:15 - Magnetic nanomaterials for Tissue Engineering applications

Dr. Sofia Silva (CICECO, Department of Chemistry, UA, PT)

#### 12:20-14:00 – Lunch Break

#### 14:00-15:00 - The use of human cell lines in testing of biological effects of nanomaterials

Prof. Dr. Tomas Rousar (Department of Biological and Biochemical Sciences, Faculty of Chemical Technology, University of Pardubice, CZ)

#### 15:15-15:30 Coffee Break

#### 15:30-16:30 Roundtable/Discussion Session

Moderators: Prof. Manuel Coimbra (LAQV-REQUIMTE, Department of Chemistry, UA, PT)

Dr. Maria Pavlaki (CESAM, Department of Biology, UA, PT)



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