



**SHORT  
TRAINING  
DAYS 2024**

**Mastering Microplastics and Related Chemicals:  
2-Day Training in Extraction and Analysis  
Techniques for Water, Soil and Human Samples**

**7-8 May 2024**

**Instituto Superior de Engenharia do Porto (ISEP)  
GRAQ  
REQUIMTE/LAQV – Polo ISEP**

**PORTUGAL**

## TRAINERS

### OUR TEAM



**VIRGÍNIA CRUZ  
FERNANDES**  
Coordinator

**MICROPLASTICS**  
Soils Waters  
Biological samples Analytical techniques



**SARA SOUSA**  
Trainer



**DIANA REDE**  
Trainer



**SÍLVIA MARTINHO**  
Trainer



**ADRIANA VIEIRA**  
Trainer

## DAY 1 – 7 May 2024

10:00 | **Registration and welcome session**

### SESSION 1

10:15 | **Introduction to microplastics and related chemicals: types, sources, impacts, and methods**

*Virgínia Cruz Fernandes*, REQUIMTE/LAQV, Instituto Superior de Engenharia do Porto, Instituto Politécnico do Porto

10:45 | **Microplastics in soils**

*Diana Rede*, REQUIMTE/LAQV, Instituto Superior de Engenharia do Porto, Instituto Politécnico do Porto

**Coffee break**

11:15 | **Microplastics in waters**

*Sílvia Martinho*, REQUIMTE/LAQV, Instituto Superior de Engenharia do Porto, Instituto Politécnico do Porto

11:30 | **Microplastic contact angle analysis**

*Virgínia Cruz Fernandes<sup>1</sup> / Adriana Vieira dos Santos<sup>1,2</sup>*, <sup>1</sup>REQUIMTE/LAQV, Instituto Superior de Engenharia do Porto, Instituto Politécnico do Porto e <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia da Bahia

11:45 | **Plastic additives in biological samples**

*Sara Sousa*, REQUIMTE/LAQV, Instituto Superior de Engenharia do Porto, Instituto Politécnico do Porto

12:00 | Visit to the Chemical Engineering Department of ISEP

**Lunch**

### SESSION 2

14:30 – 18:00 | **Hands-on workshop: microplastics and plastic additives extraction from water, soil, and human samples | Laboratory protocols**

1. Microplastics in soils,
2. Microplastics in waters
3. Plastic Additives in biological samples

**Coffee break**

**Networking Session**

## DAY 2 – 8 May 2024

### SESSION 3

9:30 – 13:00 | **Hands-on workshop: techniques for analyzing microplastics and plastic additives: gas chromatography, Raman microspectroscopy, and contact angle analysis**

- Microscopy and Raman microspectroscopy
- Gas Chromatography analysis

#### Lunch

- 14:30 – 15:30 | Contact Angle Analysis

### SESSION 4

15:45 – 16:30 | **Q&A session and closing remarks**

#### Coffee break