



**CERENA**

Centro de Recursos  
Naturais e Ambiente

2024-2025



**CERENA**

# WORKSHOPS

**Equipment in Research:  
Learn, Apply, Innovate**

# Workshop Series on Scientific Lab Equipment

We invite you to join the series of practical workshops aimed at enhancing the skills of materials, chemicals, and mining engineers, focusing on key scientific lab techniques used in the field.

## Format

The workshops will start with a 30-minute presentation covering:

- An overview of the technique
- The type of data it generates
- Sample preparation and sample types
- Sample quantities required
- Strengths and limitations of each technique
- A brief analysis of the results

Following the presentations, participants will have the opportunity to **visit the equipment** for a 15-minute hands-on demonstration.



# Computed X-ray Tomography



[REGISTER HERE](#)



Introduction to the technique and practical applications.

After the presentation, we will move to the **Multi-Scale Imaging Laboratory (MIL)**, in the Minas Building (Room 2.09) for a hands-on demonstration.

**Silvia Carvalho**  
CERENA



Scan to know more about the Multi-Scale Imaging Lab!

April 10th 2025 – 16:00

meeting point: Room 3.23 (Minas Building)



# X-ray Diffraction

# X-ray Fluorescence



[REGISTER HERE](#)

The aim of this workshop is to explore the techniques of X-ray Fluorescence (XRF) and X-ray Diffraction (XRD), highlighting their applications through practical examples.

After the presentation, we will move to the **Laboratory 3.15**, in the Minas Building



**Silvia Carvalho**  
CERENA



Know more about CERENA's facilities for X-ray techniques!

May 15th 2025 – 16:00

meeting point: Room 3.23 (Minas Building)

# Gas adsorption



[REGISTER HERE](#)

The aim of this workshop is to explore the techniques of gas adsorption, focusing on their implementation and key applications through practical example.

After the presentation we will move to the Chemistry Tower **Laboratory 0-6.2**.



**Silvia Carvalho**  
CERENA



Scan to know more about  
gas adsorption techniques!

June 19th 2025 – 16:00

meeting point: Room 3.23 (Minas Building)



**CERENA**

Centro de Recursos  
Naturais e Ambiente

**fct**

Fundação  
para a Ciência  
e a Tecnologia