

# WORKSHOP PROGRAMME

## DAY 1 • 26 SEPT

Vimioso Palace, Room 205

**09h15** Welcome Session - António Candeias  
09h30

**09h30** Chemistry of selected organic materials used in cultural heritage artefacts: Cristina Barrocas Dias  
10h30

*Overview of the history and chemistry of selected natural organic materials analysed during the practical sessions of the workshop*

**10h30** Coffee Break

**11h00** Chemistry of selected synthetic polymers: Ester Ferreira  
12h00

*Overview of the history and chemistry of the synthetic polymers analysed during the practical session of the workshop*

**12h00** Mass spectrometry: Helena Florêncio  
13h00

**13h00** Lunch in Vimioso Palace

**14h30** Py-GC-MS for the analysis of cultural heritage materials: Klaas Jan van den Berg and Henk van Keulen  
15h30

**15h30** SPME-GC-MS for the analysis of cultural heritage materials: Christopher Maines  
16h30

*In addition to an overview of SPME, the lecture will concentrate on the analysis of exhibition and storage materials intended for use in close proximity to or in contact with cultural heritage materials.*

**16h30** Coffee Break

**17h00** Visit to HERCULES Laboratory  
18h00

## DAY 2 • 27 SEPT

HERCULES Laboratory / Mitra Campus

(Participants divided into two groups)

*Hands-on session on the analysis by Py-GC-MS of natural and synthetic materials with/without derivatization by TMAH.*

*Hands-on session of SPME-GC-MS analysis of exhibition and storage materials used with cultural heritage artefacts.*

### Main Instructors

**HERCULES Laboratory**  
Ana Manhita, Dora Teixeira, Henk van Keulen and Michael Schilling

**Mitra Campus**  
Maria João Cabrita, Marco Gomes da Silva and Christopher Maines

**09h00** Group 1: Practical session Py-GC-MS (HERCULES Laboratory)  
Group 2: Practical session SPME-GC-MS (Mitra Campus)  
12h30

Coffee Break: mid morning

**12h30** Lunch in Mitra Campus

**14h00** Group 2: Practical session (HERCULES Laboratory) Py-GC-MS  
Group 1: Practical session SPME-GC-MS (Mitra Campus)  
17h30

Coffee Break: mid afternoon

## DAY 3 • 30 SEPT

Colégio do Espírito Santo

(Participants divided into two groups)

*Data treatment of the Py-GC-MS and SPME-GC-MS analysis done during the hands-on session of the workshop.*

**14h30** Group 1: ESCAPE for natural paint media and coatings: Henk van Keulen  
Group 2: ESCAPE for synthetic paint media: Michael Schilling  
16h00

Coffee Break

**16h30** Group 2: ESCAPE for natural paint media and coatings: Henk van Keulen  
Group 1: ESCAPE for synthetic paint media: Michael Schilling  
18h00

**Fórum Eugénio de Almeida, Auditorium**

(the same of the Meeting)

(This session is included in the workshop and open to some additional participants that have already pre-registered)

**09h00** General use of AMDIS and Excel for data treatment: Michael Schilling and Henk van Keulen  
11h00

**11h00** Coffee Break

**11h30** General use of AMDIS and Excel for data treatment: Michael Schilling and Henk van Keulen  
13h00

**13h00** Lunch in Colégio do Espírito Santo