

Introduction to Scanning Electron Microscopy for Material and Life Science

This course gives an introduction to Scanning Electron Microscopy (SEM). It covers electron microscopy principles and theory, as well as different fields of application, operation modes and image interpretation.

It is **aimed** at beginners and intermediate users of electron microscopes in material and life sciences. The course has a limited number of 8 participants to allow **small groups** during practical sessions.

After this course, the participants should be able to align the microscopes, identify the most common aberrations and understand the principles of image generation in scanning electron microscopy.

For the practical sessions, all the participants will use the SEM EVO from Zeiss and the HRSEM Merlin from Zeiss.

The language of the course will be Catalan, Spanish or English, depending on the level of knowledge of the participants.

Date: October 22th, 24th and 25th, 2019.

Fees: 144€ (internal), 201€ (mixta 1a), 267€ (mixta 1b), 369€ (mixta 2) and 741€ (external).

Program

	Tuesday 22	Thursday 24		Friday 25	
	Theory	Practical session			
9:00 - 10:30	Introduction to Electron Microscopy. Fundamentals of the SEM.	Group A: EVO	Group B: Merlin	Group A: Merlin	Group B: EVO
10:30- 11:00	<i>Coffee break</i>				
	Theory	Practical session			
11:00- 13:00	EDS, environmental SEM, low voltage, HRSEM. Sample preparation.	Group A: EVO	Group B: Merlin	Group A: Merlin	Group B: EVO