

Installation of FOSAMED Project Equipment at the National School of Agriculture of Meknès (ENA Meknès)

1- Overview of the Laboratory and the FOSAMED Classroom at ENA Meknès



2- Laboratory equipment

1- A Clarus 690 GC | PerkinElmer



A cutting-edge analytical instrument designed for precise and efficient chemical analyses. It features an automatic sampler with 108 vial positions, two programmable split/splitless injectors (PSS) with advanced electronic pneumatic control (PPC), and two

flame ionization detectors (FID) for high sensitivity and reliability. The system offers temperature programming with up to 4 isothermal stages and 3 gradients, along with rapid cooling capabilities. Controlled by a microprocessor, it includes a touchscreen interface for easy operation and real-time monitoring of gas flows and pressures. This versatile instrument supports complex analytical workflows, making it ideal for a wide range of applications in olive oil purity and security control.

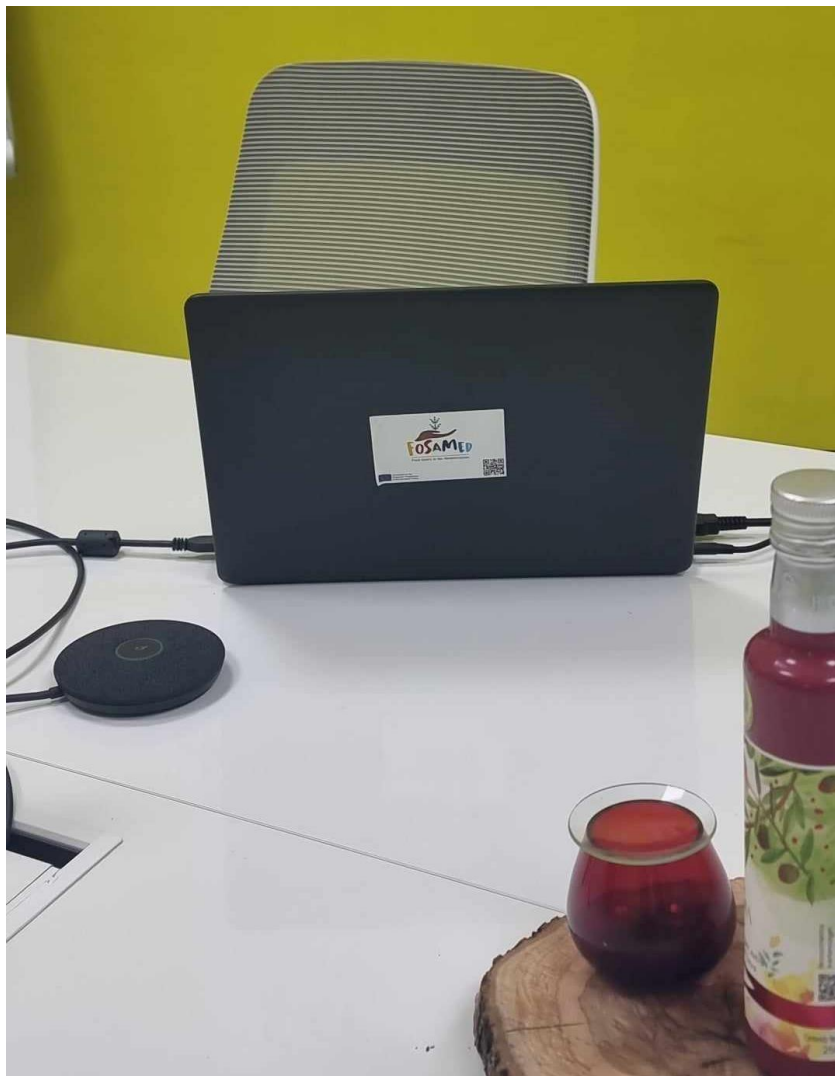
2- A RESTECK Solid-Phase Extraction System



A solid-phase extraction (SPE) system designed for simultaneous filtration and extraction across 12 positions, compatible with SPHE references and standard SPE cartridges with Luer connections. Made from transparent, corrosion-resistant glass, it tolerates vacuum pressures exceeding 96 kPa (720 mm Hg) without deformation, even during extended use. Each position is equipped with an individual valve for precise vacuum control, enhancing reproducibility. The system includes a high-performance corrosion-resistant seal, PTFE internal support, a pressure gauge, a collection rack, solvent-guiding needles, and silicone tubing. Supplied with a compatible vacuum pump, it ensures efficient operation. This robust system is ideal for the extraction of olive oil sample compounds, facilitating subsequent liquid chromatography and mass spectrometry analyses.

3- Educational Equipment

1. Laptop for the class room and conferences



5 14-inch MacBook Pro: Apple M1 Pro chip with 8-core CPU and 14 core GPU, 16 GB, 512GB SSD - Space Grey.

2. Standalone Video Conferencing Bar for Classroom - Automatic Framing, Speaker Zoom, and Noise-Canceling Microphones



An all-in-one video conferencing bar includes a camera, microphones, and speakers, designed for small classrooms. It features UHD 4K resolution (2160p/30fps) with a 113° wide-angle lens and digital zoom up to 4x. The camera automatically focuses on the speaker and offers intelligent framing for efficient presentations. Equipped with six microphones with a range of up to 4.5 meters, it cancels background noise and acoustic echoes. The sound system includes three anti-vibration speakers for clear audio. Compatible with USB, standalone mode, Microsoft Teams Rooms, and Zoom Rooms, it also integrates a front-facing speaker and a microphone. The camera provides an 8.3 MP sensor with a 120° maximum field of view and supports automatic or manual participant cropping. It can be wall-mounted, placed flat, or mounted on a screen. The package includes power supply, HDMI and USB cables, remote control, lens cover, and user documentation.