

## **Program**

## 1st Day. Technical Photography (6h)

Technical Photography represents a collection of broadband spectral images realized with a modified full spectrum digital camera and different lighting sources and filters. We will practice hands-on shooting and editing for these technical photos:

- VIS, Visible
- RAK, Raking light Photography
- UVF, Ultraviolet Fluorescence Photography
- UVR, Ultraviolet Reflected Photography
- IR, Infrared Photography
- IRT, Infrared Transmitted Photography
- IRF, Infrared Fluorescence Photography
- IRFC, Infrared False Color Photography



## 2nd Day. Panoramic Infrared Reflectography, Reflectance Spectroscopy, RTI (6h)

Infrared Reflectography allows to identify underdrawing and *pentimenti*. We coupled it with the panoramic method in order to acquire infrared reflectograms with a fast and lightwiegth set up.

Reflectance Spectroscopy (RS) shows, for each wavelength, the ratio between the intensity of the reflected light and the incident light, measured with respect to a standard white reference (reflectance). Reflectance spectra provide information useful for the identification of pigments.

Reflectance Transformation Imaging (RTI) is a computational photographic technique and it is used in a number of fields related to art examination and documentation because it provides a virtual and enhanced visualization of an object's surface.

## 3rd Day. Multispectral Imaging (6h)

Multispectral Imaging (MSI) is used to map and tentatively identify pigments and in paints on works of art. It is also useful to visually enhance old and faded documents. Thanks to the first crowdfunded research in art conservation science, CHSOS has developed an MSI system using 18 bandpass filter and a full spectrum digital camera that covers the 400-920 nm spectral range.

- Shooting spectral images.
- Splitting spectral images into RGB channels.
- Registering spectral images.
- Calibrating spectral images.
- Spectra reconstruction and mapping.



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