

# Cultural Heritage Science Open Source

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### Training on Multispectral Imaging for Art

Thanks for requesting my Training. One year ago I started "Cultural Heritage Science Open Source" Blog. Its mission was to disseminate low-cost instrumental solutions for art diagnostics for public and private professionals in the art conservation field. This fully hands-on training will make you practice with the multispectral imaging methods and equipment that I use for Documentation and Examination of art objects, such as described in the "Cultural Heritage Science Open Source" blog. You'll have an understanding of the technical photography imaging methods (software and hardware) for art documentation and will be able to set up a workflow for professional needs.

### Freebies

- 1 RTI black spheres set (3 spheres).
- 1 Mini Pigments Checker

### Program 5 Days

#### 1<sup>st</sup> day Digital Imaging for Art Documentation

The NikonD800 modified for full-spectrum (ultraviolet, visible and infrared photography). Photographic equipment for art documentation and editing of raw images in Adobe Camera Raw.

- **Hardware** (Nikon D800, [Filters](#), reversible tripod, remote shutter, remote speedlights)
- **Software** ([camera calibration](#), ControlMyNikon, [mirror up](#), Adobe Camera Raw )

#### 2<sup>nd</sup> day MSI, Multispectral Imaging

Multispectral Imaging techniques and relative hardware and software tools.

- **VIS, visible and RAK, Raking light Photography**
- **UVF, Ultraviolet Fluorescence Photography** ([UV meter](#), [light source](#))
- **UVR, Ultraviolet Reflected Photography** ([white pigments](#))
- **IR, Infrared Photography** ([underdrawing](#))
- **IRT, Infrared Transmitted**
- **IRF, Infrared Fluorescence Photography** ([set up](#), [light source](#))
- **IRFC, Infrared False Color** ([Editing in Photoshop](#), [Photoshop Actions and registration](#))
- **IRR, Infrared Reflectography** ([InGaAs camera](#), [light source](#))
- **Identify pigments** ([gouaches](#), [madder lake](#), [stamps](#))

#### 3<sup>rd</sup> day Panoramic and High Resolution Imaging

Hardware and software tools for high resolution art documentation by Panoramic imaging.

- [Panoramic head](#), [Panoramic Multispectral Imaging](#), [Gigapan server](#), [PTGUI Stitching software](#), [Arduino](#)

#### 4<sup>th</sup> RTI, Reflectance Transformation Imaging

- [Hardware](#), [Macro Photography for RTI](#)
- RTI Builder and viewer.

#### 5<sup>th</sup> 3D Photomodeling

- [Free Software and workflow](#)

