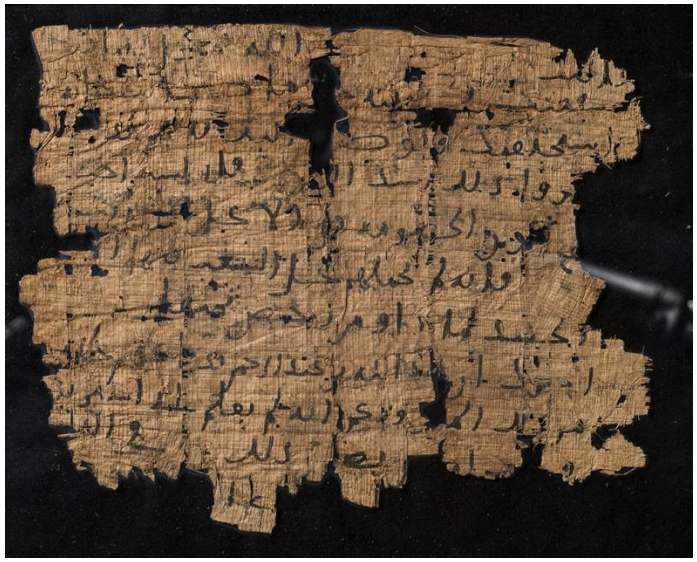
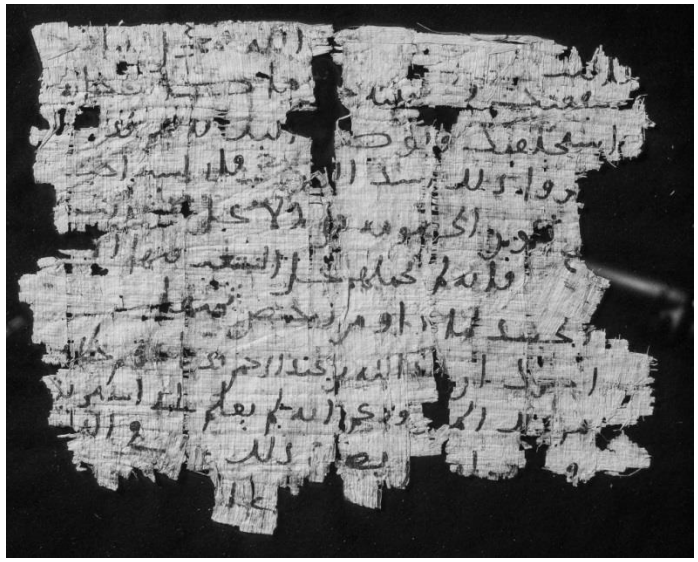
Technical Examination

for

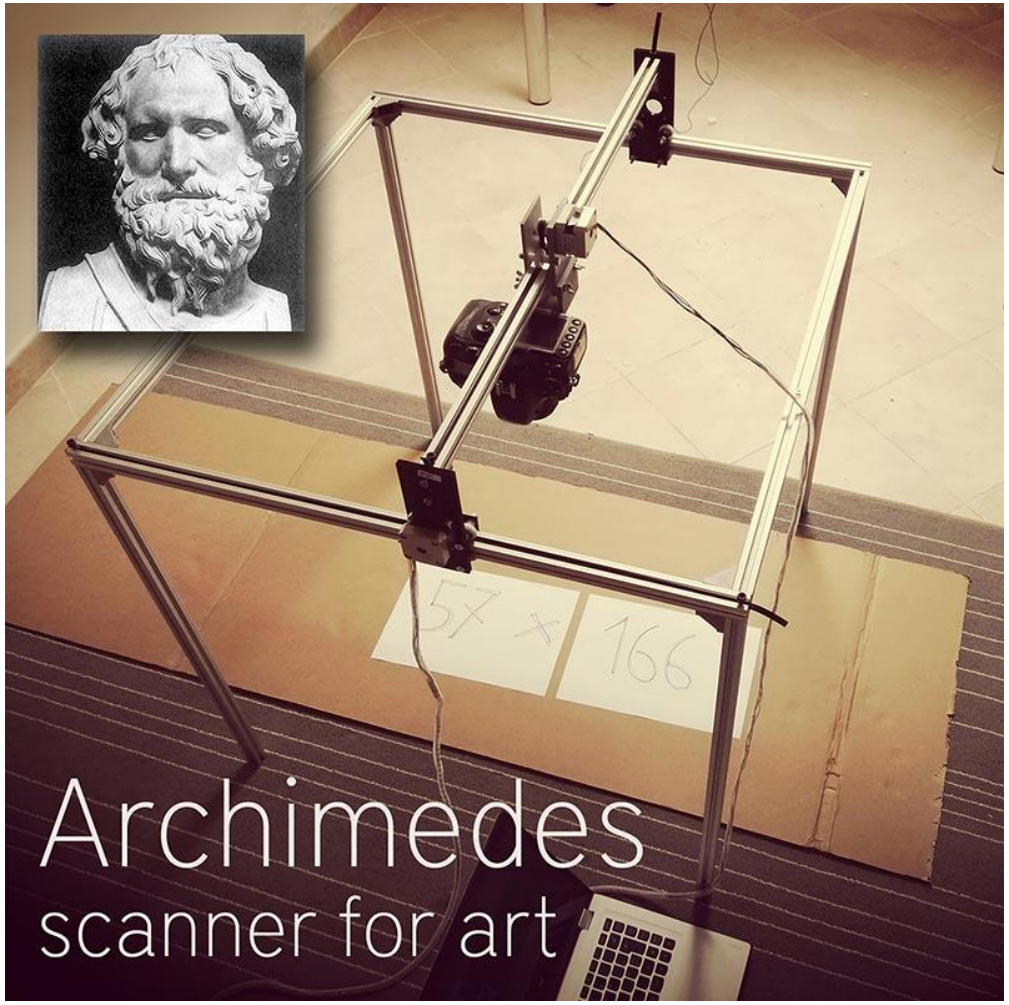
Paper Conservation

Manuscripts, Prints, Drawings, Stamps





Archimedes, scanner for Paper Conservation



CHSOS has developed ***Archimedes***, the multipurpose scanner for Art Diagnostics. It is a modular low-cost, mobile and lightweight scanner that can accommodate a number of diagnostic imaging methods such as Technical photography, Infrared Reflectography, Multispectral Imaging, and X-Radiography.

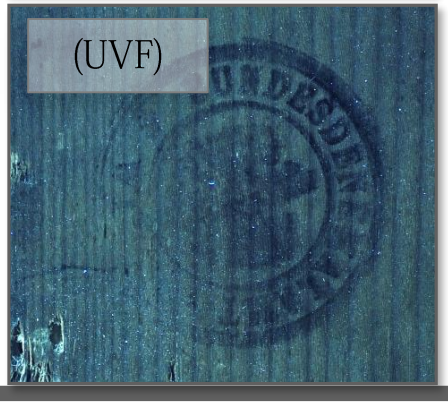
Archimedes! One Scanner for all imaging methods

Archimedes for Paper Conservation
This scanner is particularly useful for library assets such as manuscripts, prints and drawings that need to be kept flat. The imaging cameras can be scanned over the paper object which can safely rest on the table. Archimedes can fits even a large infrared reflectography camera and it helps to acquire high-resolution imaging of the items.

Technical Photography

"Practical notes on ultraviolet technical photography for art examination"

Click to download



Technical Photography (TP) - a collection of spectral images realized with a modified digital camera and different lighting sources and filters - enhances reading of faded prints, inks, and paints.

CHSOS

chsopensource.org

Follow us

Learn more

Newsletter

Cultural Heritage Science Open Source

CHSOS Technical Photography kit

We designed a Technical Photography kit specifically for art professionals and educational institutions.

It's the best compromise among Quality, Adaptability and Costs and it allows to realize a complete set of 7 technical photo documentation methods: VIS (visible photography), UVF (Ultraviolet Fluorescence), UVR (Reflected Ultraviolet), IR (Infrared), IRF (Infrared Fluorescence), IRFC (Infrared False Color), IRT (Infrared Transmitted)
This is a kit for art professionals: conservators, art appraisers, archaeologists, art historians.
Use it for fast and informative examination of easel paintings, wall paintings, manuscripts and historical documents.

Click to read more

CHSOS

chsopensource.org

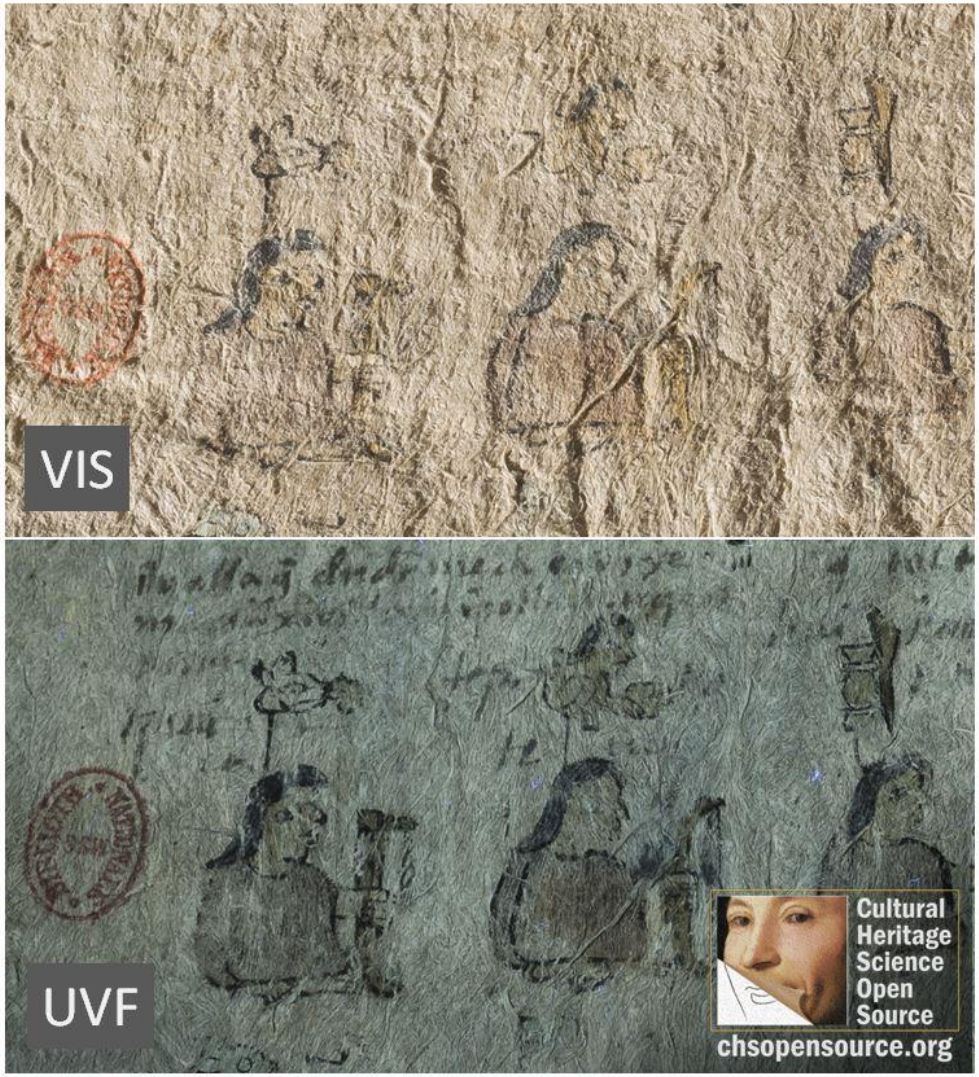
Follow us

Learn more

Newsletter

Cultural Heritage Science Open Source

Ultraviolet Fluorescence (UVF)



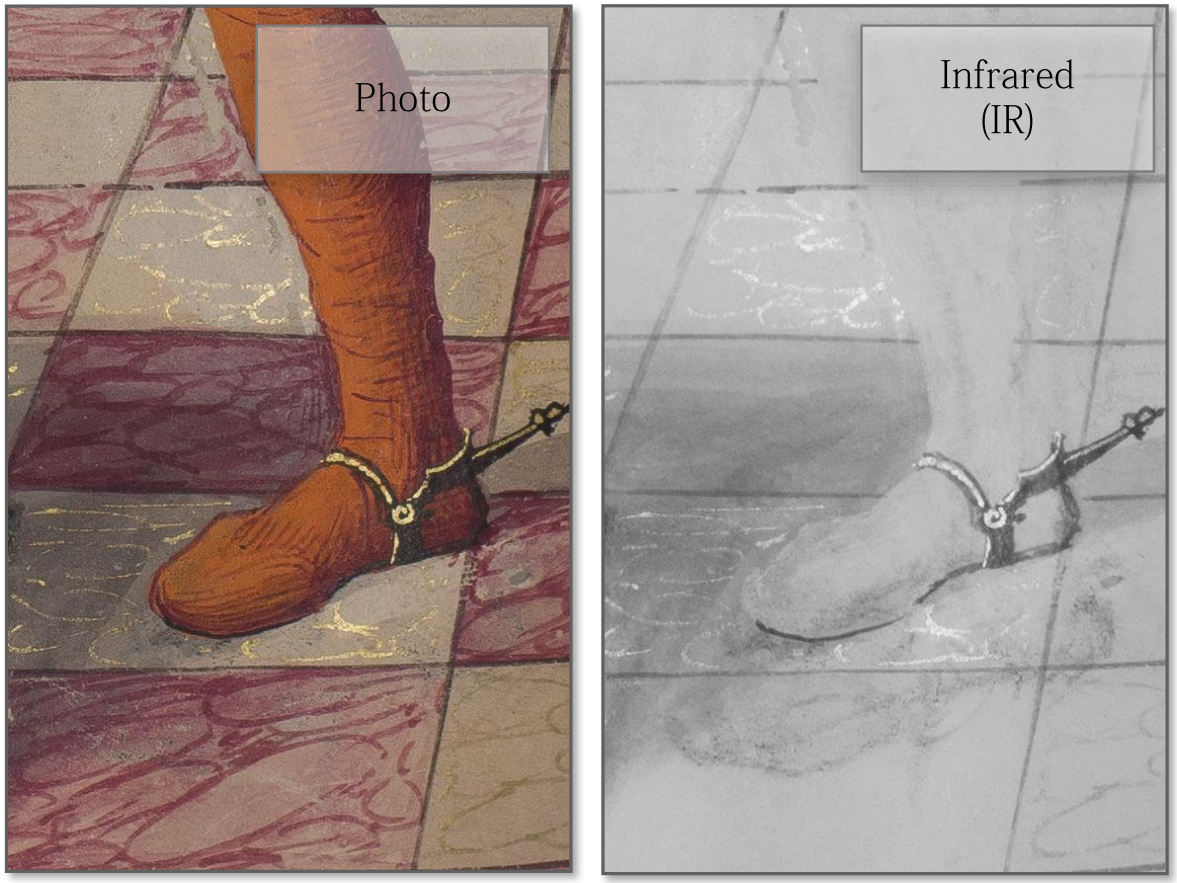
CLICK HERE

Infrared False Color (IRFC)

Click to download

Often paintings and documents have been modified over their history: a conservation intervention or a change made on purpose. Distinguish inpaints and alterations using Technical Photography (TP).

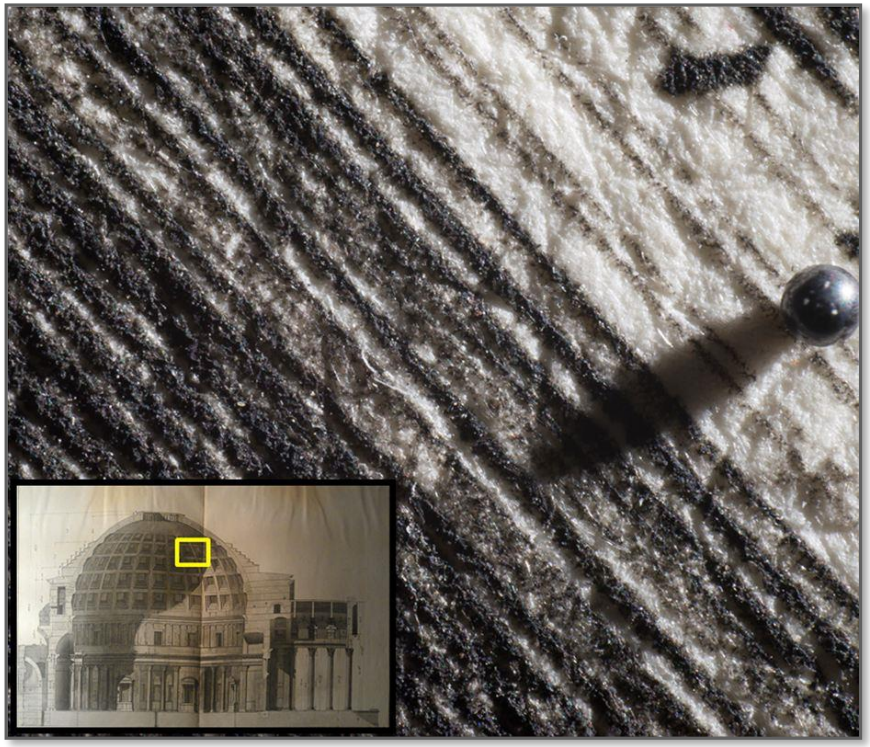
Infrared photography (IR)

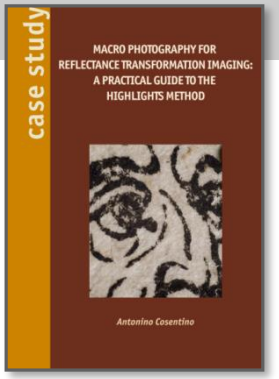


Click to download

Artists can change from the original sketch making *pentimenti which are* revealed by an infrared reflectography examination.

Reflectance Transformation Imaging (RTI)





Click to download

Tiny incisions can be documented and they can provide information on the artistic tools and methods used. RTI (Reflectance Transformation Imaging) is a computational photography method used to study incisions in drawings, prints , and paintings.

Reflectance Transformation Imaging (RTI)

Nuremberg Chronicle, dated 1493.
Woodcut Macro RTI
1. fibrous appearance of the rags paper.
2. lines show no regularity of width or direction.

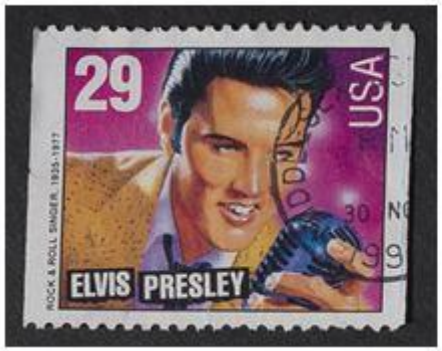
Book of Hours, dated 1498.
Woodcut Macro RTI
1. edge rims.
2. lack of textile fibers in the parchment.

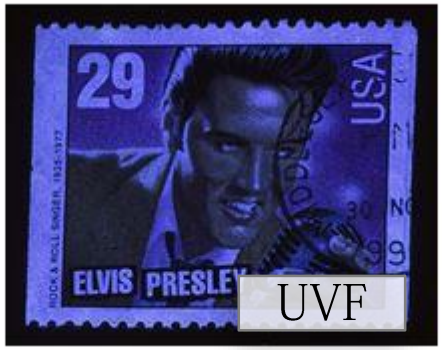
Pantheon in Rome, 1786.
Etching
1. raised ink
2. varying intensity of the lines.

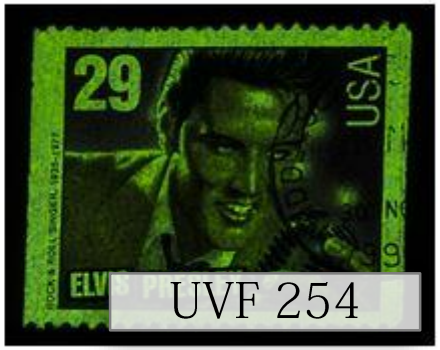
Portrait of C. G. Liljevalch, 1909.
Engraving. Macro RTI.
1. raised ink,
2. tapering and swelling lines.

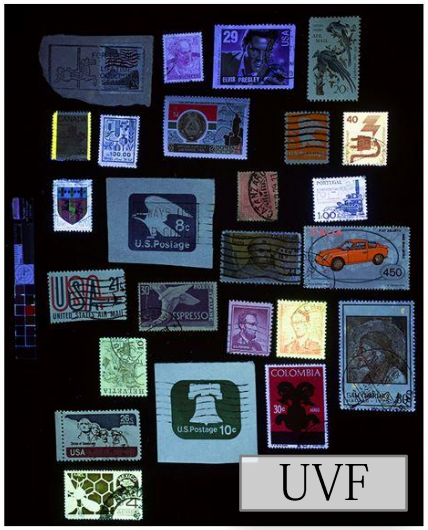
Macro photography and RTI (Reflectance Transformation Imaging) allow to document the printing method.

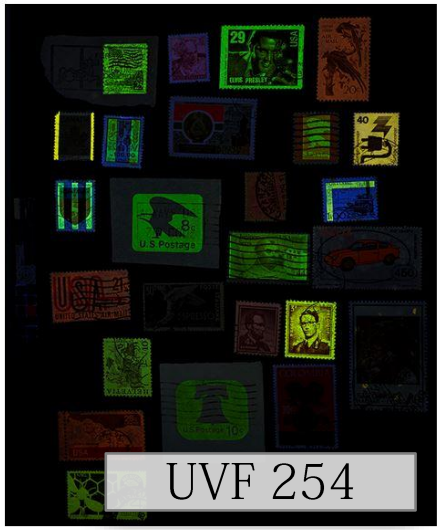
Ultraviolet 254 nm







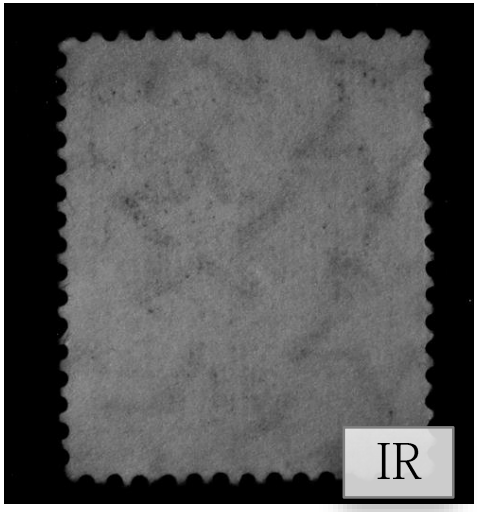




Phosphors coating is best viewed in shortwave ultraviolet light (254 nm).

Watermarks

Ultraviolet Fluorescence photography (UVF), RTI and infrared photography (IR) are non-invasive methods that can enhance reading of watermarks.



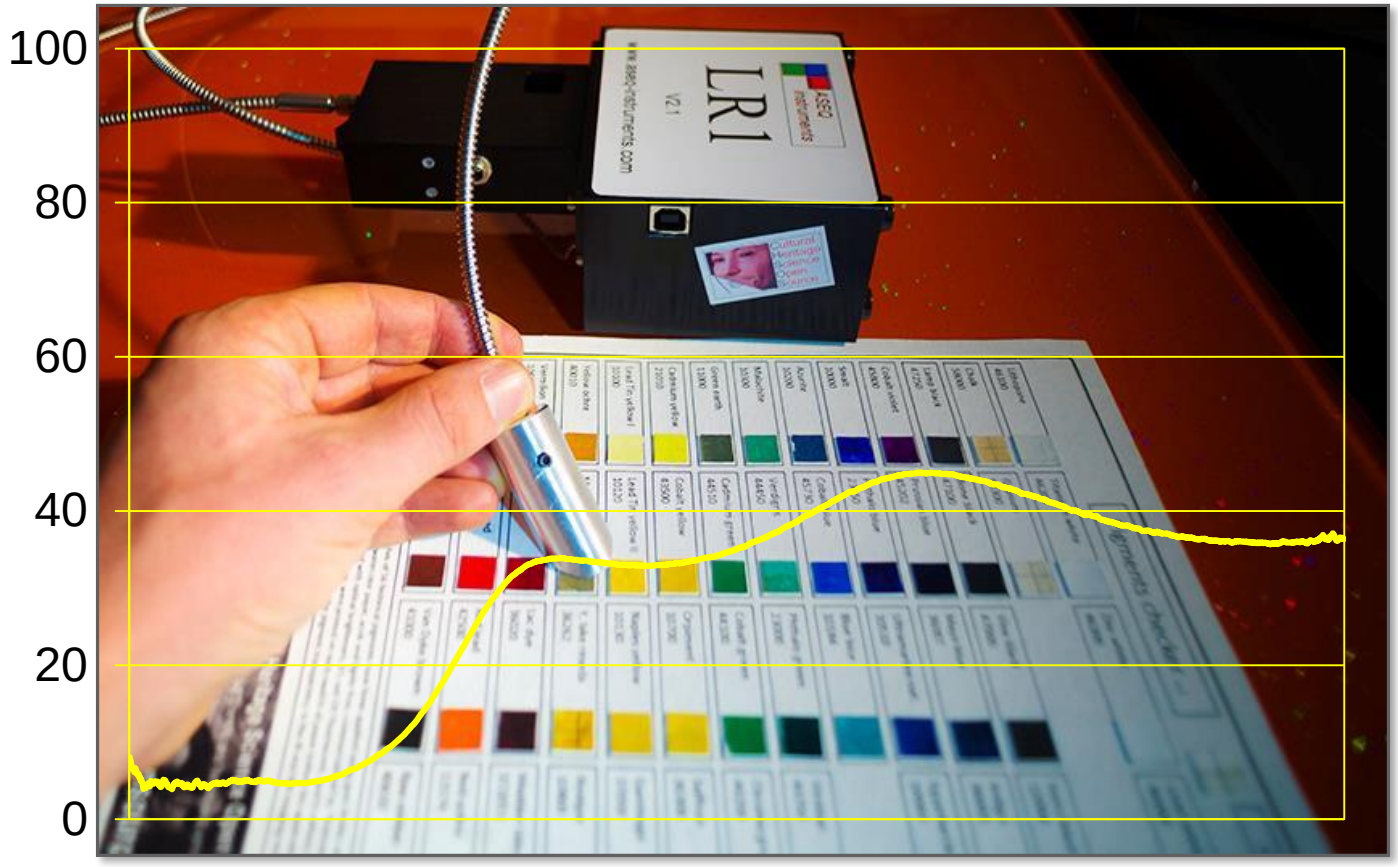
Excite phosphors in paper

Some Countries, such as Republic of San Marino, use a paper supplemented with phosphors.

Stamps

Examination of stamps with technical photography provides a number of hints for their authentication.

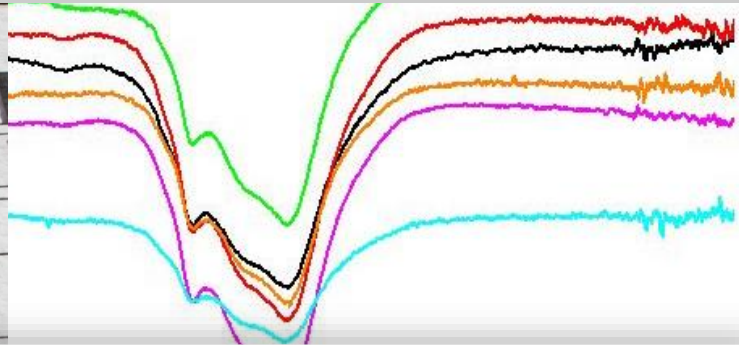
Reflectance Spectroscopy



Click to download

Pigments identification with onsite, non-invasive and non-destructive Reflectance Spectroscopy (RS).

Gorgias – Reflectance Spectrometer for Art



CHSOS

chsopensource.org

Follow us

Learn more

Newsletter

Cultural Heritage Science Open Source

Any questions?

Contact CHSOS:

Dr. Antonino Cosentino

Email: antoninocose@gmail.com

Phone: +39 3283211186

Web: chsopensource.org

Address: via matrice 4. Viagrande, Italy