General Information

The workshop will be held in Florence at CNR - Area della Ricerca Sesto Fiorentino (FI), Aula 2, Edificio F, Piano terra.

For more information: www.area.fi.cnr.it

Hands-on session will give participants the chance to analyze their own sample (max dimension 250x240 mm)

Registration Fee

Participation is free, pre-registration is required.

Please send your participation request via email to *manganelli@icvbc.cnr.it* by indicating your name, surename and your email, before **September 25**th, **2017**

Working language

The working language of the conference will be English.

Organization

Dott. Francesco Beccari

Dott.ssa Rachele Manganelli Del Fà

Organizing Secretary

Dott.ssa Rachele Manganelli Del Fà

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CNR-ICVBC, Area di Ricerca di Firenze

Via Madonna del Piano 10 - Edificio C. 50019

Sesto Fiorentino - Florence - ITALY



Innovative solutions for hyperspectral imaging in Art Conservation

WORKSHOP







October 2nd, 2017 CNR - Area della Ricerca Sesto Fiorentino (FI) Hyperspectral sensors are now being used to examine Cultural Heritage. From texts, maps, paintings and other art to monuments, buildings, and even excavated archeological sites, the technology is easily deployed.

Imaging in the VNIR and SWIR has a number of important and interesting applications for Cultural Heritage this type imaging of because technology provides a more complete representation of the entire field of view. This is a critical distinction because true con-text is provided on what are typically heterogeneous objects; by comparison, point sensors can only sample discrete locations. Imaging in the VNIR has been used since the mid 1990s for texts and paintings. For texts, the application is typically content; for example, reading palimpsests and faded or damaged texts and

maps. For art, the application is typically color and pigment mapping. SWIR imaging offers the possibility of chemical imaging, allowing the conservator to monitor and track chemistry changes over time. Hyperspectral imagers offer scholars, curators and conservators unique advantages:

- Enhance faded or hidden features-text/ signatures;
- Detect restorations and repairs via chemical signature;
- Monitor and track changes of the object, or repairs and restorations;
- Identify local material components for proper repairs;
- Assess original coloring and pigmentation.

Since little or no preparation of the document or artifact is necessary, this non-destructive spectral technique is invaluable for a wide range of conservation research relating to changes in color, chemical and substrates.

Program

- 9.30-10.00 Registration
- 10.00-10.15 Welcome greetings

 Maria Perla Colombini, Director of ICVBC-CNR
- 10.15-10.45 AM Hyperspectral Imaging and Art Conservation

 Cristiano Riminesi, Researcher at ICVBC-CNR
- 10.45-11.00 Introduction to the
 hyperspectral solutions for the
 Italian market
 Alessio De Minicis, Sales Specialist at
 Diessechem Srl
- 11.00-11.15 Coffee Break
- 11.15-12.30 Innovative solutions for hyperspectral imaging in Art Conservation

 David Bannon, President and CEO at Headwall Photonics
- 12.30-14.00 Lunch break
- 14.00-17.00 Hands-on session on the Headwall hyperspectral equipment.