

### **Formation continue**



# ENZYMES IN CONSERVATION : APPLICATION TO OBJECTS OF DIFFERENT MATERIALS

Paolo Cremonesi, conservation scientist, Lodi (Italy)

## 25 - 26 October 2018









#### **DESCRIPTION**

Removal of film-forming materials of coatings, paint layers and adhesives/consolidants on works of art of different nature is often a difficult task, due to the similar properties shared by original materials and materials to be removed.

The use of organic solvents is probably the most common approach; although effective, in many instances solvents may pose a risk to the health of the conservator and to the structural integrity of the artworks, due to their limited selectivity. Often hydrolytic enzymes may represent a valid alternative approach to organic solvents. They operate in an aqueous medium, intrinsically devoid of toxicity, and with a high degree of selectivity.

The workshop will provide the necessary theoretical background to the practical use of hydrolytic enzymes, and will demonstrate the usefulness and limitations of these powerful reagents through the application to artworks of different composition.

#### **TARGET AUDIENCE**

- Free-lance professional conservators
- Heritage institution employees

#### TRAINER

Paolo Cremonesi, conservation scientist, Lodi (Italy).

Since 1991, he has worked in the field of conservation of paintings, polychrome wooden sculpture and paper/library materials, collaborating with various public institutions, universities and conservation-restoration schools, museums and private conservation.

His main area of interest is in studying/developing materials and methods for cleaning, and since 1995, he has been teaching a cleaning workshop in more than 80 italian cities, and in european countries.

#### DATES AND PLACE

#### 25 - 26 October 2018

Haute Ecole Arc Conservation-restauration, Espace de l'Europe 11, 2000 Neuchâtel (schedule and room will be communicated about 10 days before the start of the course)

#### CONTENT

#### First day : theoretical and practical training

- Overview of the composition and properties of the main classes or organic film-forming materials
- Usefulness and limitations for each of the different approaches to the removal of filmforming materials : aqueous medium, organic solvents, hydrolytic enzymes
- Focus on hydrolytic enzymes : structure, classification and activity
- Issues of affinity and selectivity. Practical application of enzymes. Parameters influencing the activity. Monitoring enzyme activity
- Simple characterization of the materials. Preparing aqueous buffered solutions in free and gelled form and solvent mixtures

#### Second day

- Preparation of enzyme solutions in free- and gelled form
- Application to selected case studies for the removal of film-forming materials : varnishes, coatings, paint layers, adhesives
- · Comparison with solvent treatments. Evaluation of the results

#### FEES AND REGISTRATION (invoice in CHF)

Regular fee : CHF 750.-Reduced fee\* : CHF 600.-

\*Please join a copy of your ICOM/SKR-SCR member card or a professional organisation related to ECCO (see list http://www.ecco-eu.org/members/members.html). For Swiss museums, please join an AMS/VMS affiliation attestation.

Registration form should be sent at latest 10 days before the start of the course. Registration fees will be invoiced after the course and the certificates will be sent upon receipt of payment. Cancellation made 10 days before the start of the course date cannot be refunded.

Meal, lodging and travel expenses are not included and remain under the responsibility of the participants.

The cost for a meal at the HE-Arc cafeteria varies between CHF 10 and 15.-. The best rate for a room in Neuchâtel is around CHF 90.- per night.

http://www.neuchateltourisme.ch/fr/hebergement/hotels/reservation http://www.booking.com



#### www.he-arc.ch





#### CERTIFICATE

A certificate will be delivered to the participants.

#### **COORDINATION**

Coordination is provided by Nathalie Ducatel, conservator-restorer specialized in archaeological and ethnographic objects in preventive conservation.

#### **INFORMATION**

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