haute école neuchâtel berne jura arc conservation restauration neuchâtel

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ORGANIC SOLVENT GELS AND EMULSIONS

for removal of film-forming materials (varnishes, coatings, overpaints and retouchings)

7-8-9 November 2022 (2,5 days)
(Monday-Tuesday : 8h30-17h - Wednesday : 8h30-12h30)
HE-Arc Conservation-restauration, Neuchâtel

DESCRIPTION

Far from being inaccessible, cleaning systems based on gels and emulsions can be quickly comprehended and constitute efficient tools for the conservator.

Among other things, they make it possible to minimize the use of solvents by favoring more efficient application methods or more versatile aqueous methods. They also provide a more selective action, by developing reactive solutions under well-defined conditions.

The training offered here will be adapted to all types of media and specializations, its theme being the removal of undesirable film-forming materials. It will be provided by Paolo Cremonesi, who for years has been giving a rich and intelligible teaching dedicated to the development of aqueous methods in conservation-restoration.

OBJECTIVE

With the benefit of theoretical elements acquired on the first day, participants will discover an exciting, effective and essential methodology for solving complex problems of selectivity or solubility. A large part of the course will be devoted to practical work, so that everyone can prepare and test the new cleaning systems that will now be available to them.

TARGET AUDIENCE

Conservators, conservation scientists

Hes·so

CONTENT

Lecture

1. Organic solvents and gels :
- Classification, properties and mode of action of organic solvents
- Model systems describing the polarity of the solvents
- Solubility test
- Gelling organic solvents

2. Combining organic solvents and the aqueous medium into macro-emulsions or particle-emulsions :
- Aqueous phase : the choice of pH and additives.
- Gelling aqueous solutions
- Solvent phase : the choice of hydrocarbon and silicone solvents
- Surfactants

Practical content
- Materials characterization tests (hydrophilicity, pH, conductivity)
- Preparation of solvent gels
- Preparation of gelled free form buffer solutions
- Preparation of macro-emulsions and particle emulsions
- Application on different substrates for the removal of film-forming materials
- Comparison with the use of free solvents, evaluation of results

The training is given in easily accessible international English. Occasional translation assistance may be provided.

TRAINER

Paolo Cremonesi, conservation scientist and conservator-restorer specialized in the field of polychromy.

Doctor in chemistry (university of Milan) and in biomedical chemistry (university of Nebraska Medical Center), with a Master's degree in painting restoration (Palazzo Spinelli, Florence), he collaborates with numerous institutions, museums, universities, training centres. A great teacher, he has been giving training courses on selective cleaning throughout Europe for 25 years.

COORDINATION

Hortense de Corneillan, conservator and teacher at HE-Arc

FEE

CHF 550.-

Meals and travel expenses are not included.

SWISS CONSERVATION-RESTORATION CAMPUS

Textes and illustrations : © Haute Ecole Arc - 9.3.2022