



SCHWEIZERISCHES NATIONALMUSEUM. MUSÉE NATIONAL SUISSE. MUSEO NAZIONALE SVIZZERO. MUSEUM NAZIUNAL SVIZZER.

Scuola universitaria professionale della Svizzera italiana
Dipartimento ambiente costruzioni e design

SUPSI

Laser operator for cultural heritage cleaning

Dates

Mon 17 – Wed 19 April 2023 Online lectures (3x2 hours)

Thu 20 – Sat 22 April 2023 On-site activities (3 days)

Presentation

The content of the course is to present - with theoretical lectures and practical activities - the operating principles and characteristics of the most important laser equipment currently used in cultural heritage, in order that a conservator-restorer could gain a basic understanding on how to use the appropriate equipment for different situations. The variety and complexity of topics related to the use of lasers for cleaning cultural heritage will not allow for an in-depth presentation of all topics but during the course, the tools will be provided to introduce an informed use of laser instruments according to the needs of the different types of intervention, with particular attention to cleaning operations.

Through the presentation of significant case studies and the practical exercises on replicas, it will be possible to observe the characteristics and advantages of this operational methodology and to recognise the potential risks for both the works of art and the user.

The course will be taught by an interdisciplinary team of lecturers and scientific experts with proven experience in this field.

Aim

At the end of the course, participants will be able to:

- know the operating principles and characteristics of the main laser instruments;
- understand the criteria for choosing different instruments;
- know the diagnostic procedures for assessing the interaction with the support;
- set application parameters;
- know the correct maintenance of the equipment;
- become aware of the risks when using a laser;
- adopt appropriate personal protection measures.

Participants

The course is open to professionals working in conservation and restoration.

Prerequisites

Practical and theoretical knowledge of cultural heritage cleaning techniques.

Organisers

SKR / SCR

SUPSI-DACD Conservation-restoration study program

Partner

Swiss National Museum SNM, Collections Centre

Language

English

Instructors

Laura Bartoli - physicist - El.En. S.p.A. – l.bartoli@elen.it

Alberto Felici - conservator-restorer - alberto.felici@supsi.ch
Francesca Reichlin- conservator-restorer SKR® - francesca.reichlin@supsi.ch
Amelia Suzuki – conservator-restorer-scientist - amelia.suzuki@ispc.cnr.it
Guy Devereux - conservator-restorer - guy.devereux@scv.va

Programme

Three preliminary online meetings Six hours online

Monday 17 April

15:00 – 17:00

Alberto Felici: Brief introduction for the course

Laura Bartoli: Principles of Laser operation

Tuesday 18 April

15:00 – 17:00

Laura Bartoli: Laser safety

Wednesday 19 April

15:00 – 17:00

Laura Bartoli: Applications and case studies (other than wall paintings and stone materials)

Three theoretical and practical days – Collections Centre Affoltern am Albis

Thursday 20 April

Alberto Felici - Francesca Reichlin

09:00 – 10:15 Classroom lecture: Presentation of the course (goals and methods); Summary of topics covered by Laura Bartoli

10:15 – 10:30 Coffee break

10:30 – 12:30 Practical lesson in the atelier: Assembly and disassembly of Laser equipment, first trials on mock-ups

12:30 – 13:30 Lunch break

13:30 – 14:30 Classroom lecture: Presentation of case studies about wall paintings

14:30 – 15:30 Practical lesson in the atelier: Laser treatments in conservation-restoration; selection of operating parameters; trials on mock-ups

15:30 – 15:45 Coffee break

15:45 – 17:30 Practical lesson in the atelier: Trials on mock-ups; assessment of the trials

Friday 21 April

Guy Devereaux - Alberto Felici - Francesca Reichlin

09:00 – 10:15 Classroom lecture: Presentation of stone materials case studies

10:15 – 10:30 Coffee break

10:30 – 12:30 Practical lesson in the atelier: Trials on mock-ups

12:30 – 13:30 Lunch break

13:30 – 14:30 Classroom lecture Guy Devereaux: Presentation of stone materials case studies

14:30 – 15:30 Practical lesson in the atelier: Trials on mock-ups

15:30 – 15:45 Coffee break

15:45 – 17:30 Practical lesson in the atelier: Trials on mock-ups; assessment of the trials

Saturday 22 April

Guy Devereaux -Alberto Felici -Francesca Reichlin

09:00 – 11:00 Classroom lecture Amelia Suzuki: Scientific/diagnostic evaluations of Laser cleaning

11:00 – 11:15 Coffee break

- 11:15 – 12:30 Practical lesson in the atelier: Laser cleaning trials on different materials (stone surfaces, wall paintings or stucco) Practical trials on mock-ups / Participants could bring their own objects to work on
- 12:30 – 13:30 Lunch break
- 13:30 – 15:30 Continuation of the practical exercises
- 15:30 – 15:45 Coffee break
- 15:45 – 17:00 Assessment of the trials. Questions and final discussion

Venues

Online / Swiss National Museum Collections Centre, Lindenmoosstrasse 1, 8910 Affoltern a. Albis

Costs

CHF 770.- SKR members*

CHF 1'100.- non SKR members

The costs include lectures, handouts, the use of lasers and coffee breaks.

Accommodation and lunch has to be organised and covered by each participant individually. A fully equipped kitchen is available for use.

Registration

Please use the following link: www.restaurierung.swiss/de/veranstaltungen/weiterbildungsangebote

Registration and payment must be completed before 27.03.2023.

The number of participants is limited to 10 and the minimum number of participants is 7

Organisation and general information

Giacinta Jean

giacinta.jean@supsi.ch

Natalie Ellwanger

natalie.ellwanger@nationalmuseum.ch

SKR Geschäftsstelle

info@skr.ch

*Members of E.C.C.O. Member Associations participate at SKR price