

# Workshop: High-viscosity PVA-Borax and Polysaccharide Gels Versatile Tools for Cleaning Sensitive Surfaces

Aus Bologna zu Gast:  
Andrea Del Bianco und Ilaria Saccani

17.09.-18.09.2026



Deepen your expertise in modern conservation cleaning techniques in this hands-on technical workshop focused on high-viscosity gelling systems.

The introductory part of the technical meeting will present the main classes of gelling agents used in conservation. The chemical-physical properties of different gels will be shown, and their mediation mechanisms analyzed, which allow the resolution of certain intervention challenges.

The preparation techniques for PVA-Borax and polysaccharide gels will be demonstrated, including their variants and combinations. Methods to modify the gels' physical characteristics and performance through changes in reagent concentration, additions of rigid gels, chelating agents, water-miscible organic solvents, and water-immiscible solvents using emulsifiers will be illustrated.



Following that, a wide range of case studies conducted on plasters and marbles will be presented to compare the various cleaning levels achieved by Agar and PVA-Borax gels on porous surfaces, as well as their combination for solving problematic cases. Cases of applying PVA-Borax gel loaded with organic solvents to selectively remove certain film-forming agents from painted surfaces will also be shown, alongside the cleaning of coherent deposits on unvarnished and delicate surfaces such as impasto paints, lean oils, tempera, acrylics, plastics, contemporary woods, paper, parchment, and photographs.

Participants will be directly involved in preparing various PVA-Borax and polysaccharide gels, testing how to modulate gel viscoelasticity by varying reagent concentration, and how to load the gels with organic solvents.

Finally, participants will be able to bring real cases to discuss together the type of treatment to propose and conduct cleaning tests.



**Andrea Del Bianco** graduated in Industrial Chemistry in 1999 and obtained a degree in Conservation and Restoration of Cultural Heritage in 2005 from the Academy of Fine Arts in Bologna, specialising in Methods for the Conservation and Restoration of Paper Materials.

In 2012, he obtained a master's degree in Conservation and Restoration of Contemporary Materials at the Opificio delle Pietre Dure in Florence. Since 2006, he has been working at the Laboratorio degli Angeli, a historic conservation studio in Bologna, where he carries out conservation treatments on works made with natural and synthetic organic materials. In 2012, he began teaching restoration courses at the Academies of Fine Arts. Since 2022, he has been a tenured professor at the Academy of Fine Arts in Bologna, where he teaches technical-scientific and restoration subjects and serves as coordinator of the restoration programme for wooden artefacts and paintings. Since 2023, he has been a member of the scientific committee of the new journal CoRes – Conservation and Restoration.



**Ilaria Saccani** is a conservation scientist with a diploma as a Technician for the Restoration of Paintings on Canvas and Panel. Since 2006, she has been a project manager for CESMAR7, overseeing courses on the cleaning of polychrome surfaces (2006–2016);

since 2016, she has been the President of the Association, focusing on research into materials for conservation, particularly those used for contemporary surfaces. She served as the CESMAR7 coordinator for the project CAPuS – Conservation of Art in Public Spaces (ERASMUS+, Knowledge Alliances 2018–2021) and for the project STORIE DI PLASTICA (PANN2\_007380, MIUR 2021–2023). She is an adjunct lecturer in Applied Chemistry for Conservation at the School of Restoration of the Accademia di Belle Arti di Brera, in Elements of Chemistry for Conservation at the Accademia di Belle Arti di Bologna, in Elements of Chemistry and Industrial Chemistry at the Accademia di Belle Arti di Verona, and in Industrial Chemistry at the Accademia Aldo Galli in Como.

## 17.09.2026

10:00-13:00

Theoretical session on gels in general: in-depth study of PVA-Borax and polysaccharide gels and their preparation methods.

### Lunch break

14:00-17:00

Preparation of PVA-Borax gels and their modifications with the addition of rigid gels, organic solvents, chelating agents, and reducing agents.

## 18.09.2026

10:00-12:00

Presentation of numerous case studies on the application of the discussed gels. Various materials will be covered, including plaster, marble, mural paintings, wood, gildings, paintings on canvas and panel, contemporary techniques, synthetic materials, paper, parchment, and photography.

12:00-13:00

Preparation of polysaccharide-based gels and their combinations

### Lunch break

14:00-17:00

Applications of gels on different types of mock-ups. Planning of interventions on real cases brought by participants and gel application tests to solve specific cleaning problems.

## VERANSTALTUNGSORT

Technisches Museum Wien  
Mariahilfer Str. 212, 1140 Wien

### KOSTEN (exkl. Lunch):

ÖRV-Mitglieder:	€ 300,00
ÖRV-Mitglieder in Ausbildung:	€ 100,00
Nichtmitglieder:	€ 500,00



## ANMELDUNG:

Anmeldung und Zahlung der Beiträge bis **01.09.2026** online unter: [ÖRV-Workshop High-viscosity PVA-Borax and Polysaccharide Gels Versatile Tools for Cleaning Sensitive Surfaces-ÖRV Veranstaltungen](#)

Anmeldung für ÖRV-Mitglieder in Ausbildung: unter [office@orv.at](mailto:office@orv.at)

Teilnahme nur gültig mit fristgerechter Überweisung der Teilnahmegebühr:

AT83 2011 1000 0283 3883

Verwendungszweck: PVA + NAME

Bei Stornierung bis zum 01.09.2026 wird der eingezahlte Betrag abzüglich einer Bearbeitungsgebühr von 20,-€ zurückerstattet. Bei späterer Stornierung besteht kein Anspruch auf Rückerstattung.

### Wichtiger Hinweis zu unseren ÖRV-Veranstaltungen:

Bitte beachten Sie, dass während des Workshops Fotos und Videos gemacht werden. Diese dienen der Dokumentation und können in unserem Journal, Newsletter oder auf unserer Website veröffentlicht werden. Nähere Informationen finden Sie in unserer Datenschutzerklärung unter [www.orv.at](http://www.orv.at).