

**Programme modulaire pour le nettoyage des polychromies / Modular Cleaning Program MCP :
les gels de solvants**

Session de formation permanente organisée par le département des restaurateurs

21, 22, 23 novembre 2018

Orientations bibliographiques réalisées par la bibliothèque de l'Inp et les intervenants

Tous les documents ci-dessous peuvent être consultés à la Bibliothèque de l'INP, à l'exception de ceux précédés d'un astérisque.

Les mémoires de fin d'études de l'Inp sont accessibles en ligne. Pour pouvoir les consulter, vous devez préalablement demander l'autorisation au service de la documentation des oeuvres par courrier électronique à documentation.oeuvres@inp.fr. Un identifiant et un mot de passe personnels vous seront attribués.

Méthodes aqueuses et Programme modulaire de nettoyage / Modular Cleaning Program

BARTON, A.F.M. *CRC Handbook of Solubility Parameters and other Cohesion Parameters*, Boca Raton (Floride) : C. R. C. Press, 1983, 594 p.

BURKE John, « Solubility Parameters: Theory and Application » [en ligne], in *The AIC Book and paper group annual* – 3, Washington, DC : AIC, Book and Paper Group, 1984, p. 13-18
<http://cool.conservation-us.org/coolaic/sg/bpg/annual/v03/bp03-04.html> (consulté le 21 novembre 2017)

DESVOIS Laetitia, *Le Programme de Nettoyage Modulaire, une approche systématique de décroissage des couches picturales : étude, analyse et application de la méthode*, Paris, Université Paris I Panthéon Sorbonne, 2009, 107 p.

DESVOIS Laetitia, CRIOLLO Andrea, « The modular cleaning program: An approach for treating oil stains on paper? », *Journal of Paper Conservation*, Vol. 14 (2013), n° 1, p. 16-20

DORMAN Nicholas, « Conference Review: The Cleaning of Acrylic Paint Surfaces 3 London Workshop – A space-time continuum of pH and conductivity » [en ligne], *WAAC Newsletter*, 2012, vol. 34, n° 3, p. 18-23
<http://cool.conservation-us.org/waac/wn/wn34/wn34-3/wn34-305.pdf> (consulté le 23 novembre 2017)

FELLER R. L. « Solubility Parameters », *The International Institute for Conservation of Historic and Artistic Works - Bulletin of the American Group*, 1968, Volume 8, Number 2, p. 20-24

FUSTER LOPEZ L., CHAROLA A.E., MECKLENBURG Marion F., DOMÉNECH CARBO Maria Teresa, *Cleaning 2010 : New insights into the cleaning of paintings* : [conference preprints (abstracts), Universitat politècnica de Valencia, May 26th-28th 2010], Valencia, Universidad politècnica de Valencia, 2010, 108 p.

HACKNEY S., TOWNSEND Joyce H., EASTAUGH N., *Dirt and Pictures Separated*. London: United Kingdom Institute for Conservation (UKIC), 1990, 56 p.

HANSEN Charles M., *Hansen Solubility Parameters: A User's Handbook*. Boca Raton: CRC Press, 2nd rev. ed. (Reimp. de 2007), [25]-519 p.

HEDLEY Gerry, « Solubility Parameters and Varnish Removal: A Survey », in *Measured opinions : Collected papers on the conservation of paintings*, Gerry HEDLEY, Caroline VILLERS (eds), Gainsborough : United Kingdom Institute for Conservation (UKIC), 1993, p. 128ss.

*KANEGBERG B., and KANEGBERG E., *Handbook for Critical Cleaning*, Boca Raton: CRC Press, LLC, 2001

LEANER Thomas J.S., *Analysis of modern paints*, Los Angeles, Cal.: The Getty conservation institute, 2004, VI-210 p.

*LEANER Thomas J.S., ORMSBY B., « Cleaning Concerns for Acrylic Emulsion Paints », in *The Conservation of Easel Paintings*, STONER J.H., RUSHFIELD R. (eds), London New York, N.Y. : Routledge, 2012, p. 564-570

LEANER Thomas J.S., SMITHEN, Patricia, KRUEGER, Jay W., SCHILLING, Michael R. (eds), *Modern Paints Uncovered: Proceedings from the Modern Paints Uncovered Symposium, May 16-19, 2006, Tate Modern, London*. Los Angeles: Getty Publications, 2007

MCGLINCHY Christopher, « Boundaries of the Teas Solubility Concept » [en ligne], *WAAC Newsletter*, 2002, vol. 24, n° 2, p. 17-19
<http://cool.conservation-us.org/waac/wn/wn24/wn24-2/wn24-205.html> (consulté le 23 novembre 2017)

MICHALSKI S., « A physical model of varnish removal from oil paint », in *Cleaning, Retouching, and Coatings. Technology and Practice for easel paintings and polychrome sculpture. Preprints of the Contributions to the Brussel Congress, 3-7 September*, London, International Institute for Conservation of Historic and Artistic Works, 1990, p. 85-93

PHENIX Alan, « Solubility Parameters and the Cleaning of Paintings: an update and review », *Kunsttechnologie Konservierung*, Heft 2, Jahrgang 12, 1998, p. 387-409

SLOTTVED KIMBRIEL C., ROSE J., « The Modular Cleaning Program: First Impressions from a Four-day Course and Subsequent Implementations », *The Picture Restorer*, Issue 50, p.18-26
(version condensée dans *WAAC Newsletter* 2017, vol. 39, n° 2, p. 22-28)

STAVOUDRIS Chris, « Azeotropes from A to Z » [en ligne], *WAAC Newsletter*, 2006, vol. 28, n° 3, p. 14-17
<http://cool.conservation-us.org/waac/wn/wn28/wn28-3/wn28-304.pdf> (consulté le 23 novembre 2017)

STAVROUDIS Chris, DOHERTY Tiarna, « The Modular Cleaning Program in Practice: Applications to Acrylic Paintings », in *New insights into the cleaning of paintings [conference preprints (abstracts), Universidad politécnica de Valencia, may, 26th-28th 2010]*. Marion F. MECKLENBURG et al. (eds), Valencia : Universidad politécnica de Valencia = Universitat politécnica de Valencia, 2010, p. 139-145

STAVROUDIS Chris, DOHERTY Tiarna, WOLBERS Richard C., « A new approach to cleaning I: using mixtures of concentrated stock solutions and a database to arrive at an optimal aqueous cleaning system » [en ligne], *WAAC Newsletter*, 2005, vol. 27, n° 2, p. 17- 28
<http://cool.conservation-us.org/waac/wn/wn27/wn27-2/wn27-205.pdf> (consulté le 23 novembre 2017)

STAVROUDIS Chris, DOHERTY Tiarna, WOLBERS Richard C., « A Novel Approach to Surface Cleaning: Using Mixtures of Concentrated Stock Solutions and a Database to Arrive at an Optimal Cleaning System », in *Oberflächenreinigung - Material und Methoden = Surface Cleaning - Material and Methods : Beiträge der Tagung "Oberflächenreinigung - Material und Methoden"*, Düsseldorf, 29. September bis 4. Oktober 2003. Cornelia Weyer et al. (eds), Bonn : Verband der Restauratoren (VDR) Stuttgart : Konrad Theiss Verlag, 2006, p. 68-81

WOLBERS Richard C., *Cleaning painted surfaces, Aqueous methods*, London, Archetype Publications, 2000, 198 p. Trad. it. [*La Pullitura di superfici dipinte : metodi acquosi*], Saonara, Il Prato,

2005. Trad. fr. [*Le nettoyage des surfaces peintes : méthodes aqueuses*] MIRABAUD Sigrid, DESVOIS Laetitia sous la direction de PALMADE-LE DANTEC Nathalie, Paris, Eyrolles / Institut national du patrimoine (Inp), 2013

WOLBERS Richard C., STAVROUDIS Chris, « Aqueous Methods for the Cleaning of Paintings », in *The Conservation of Easel Paintings*, STONER Joyce Hill, RUSHFIELD Rebecca (eds), London New York, N.Y. : Routledge, 2012 (Routledge Series in Conservation and Museology), p. 500-523

WOLBERS Richard C., STAVROUDIS Chris, « The Cleaning of Paintings », in KANEGSBURG Barbara, KANEGSBURG Edward, *Handbook for Critical Cleaning 2nd Edition Volume 2: Applications, Processes and Controls*, Boca Raton: CRC Press, 2011

Solvants et émulsions

BLANK Sharon, STAVROUDIS Chris, « Solvents and Sensibility » [en ligne], *WAAC Newsletter*, vol.11, n° 2, 1989, p. 2-10
<http://cool.conservation-us.org/waac/wn/wn11/wn11-2/wn11-202.html> (consulté le 21 novembre 2017)

BURNSTOCK Aviva, KIESLICH Tanya, « A study of the clearance of solvent gels used for varnish removal from paintings », in *ICOM Committee for Conservation, 11th Triennial Meeting, Edinburgh, Scotland, 1-6 September 1996*, Londres, James and James, 1996, p. 253-262

DORGE Valerie (ed), *Solvent gels for the cleaning of works of art, the Residue Question*, Los Angeles, The Getty Conservation Institute, 2004, XI-160 p.

FELLER Robert L., STOLLOW Nathan, JONES Elizabeth H., *On Picture Varnishes and Their Solvents*. Washington D.C.: National Gallery of Art, 1985, XXIV-260 p.

FORD Bruce, BYRNE Allan, « The lipid stripping potential of resin soap gels used for cleaning oil paintings » [en ligne], *AICCM Bulletin*, 1991, vol. 17, n° 1 et 2, p. 51-60
<http://www.tandfonline.com/doi/abs/10.1179/bac.1991.17.1-2.004> (consulté le 23 novembre 2017)

HEDLEY Gerry, ODLYHA M., BURNSTOCK Aviva, TILLINGHAST JHUSBAND C., « A study of the mechanical and surface properties of oil paint films treated with organic solvents and water », in *Measured opinions : Collected papers on the conservation of paintings*, Gerry HEDLEY, Caroline VILLERS (eds), Gainsborough : United Kingdom Institute for Conservation (UKIC), 1993, p. 103-111

KHANDEKAR Narayan, « A survey of the conservation literature relating to the development of aqueous gel cleaning on painted and varnished surfaces », *Reviews in Conservation*, 2000, n°1, p. 10-20

*ODEGARD N., CAROLL S., ZIMMT W., « Chemical Safety », in *Material Characterization Tests for Objects of Art and Archeology*, London: Archetype Publications, 2000, p. 7-17

PHENIX Alan, WOLBERS Richard, « Removal of Varnish: Organic Solvents as Cleaning Agents », in *The Conservation of Easel Paintings*, STONER Joyce Hill, RUSHFIELD Rebecca (eds), London New York, N.Y. : Routledge, 2012 (Routledge Series in Conservation and Museology), p. 524-554

PHENIX Alan, « The Swelling of Artists' Paints in Organic Solvents. Part 1, A Simple method for measuring the in-plane swelling of unsupported paint films » [en ligne], *Journal of the American Institute for Conservation*, 2002, vol. 41, n° 1, p. 43-60
<http://www.tandfonline.com/doi/abs/10.1179/019713602806082610> (consulté le 23 novembre 2017)

PHENIX Alan, « The Swelling of Artists' Paints in Organic Solvents. Part 2, Comparative swelling powers of selected organic solvents and solvent mixtures » [en ligne], *Journal of the American Institute for Conservation*, 2002, vol. 41, n° 1, p. 61-90
<http://www.tandfonline.com/doi/abs/10.1179/019713602806082647> (consulté le 23 novembre 2017)

STAVROUDIS Chris, « Gels: Evolution in Practice », in ANGELOVA Lora (ed), *Gels in the Conservation of Art*, London: Archetype Publications, 2017, p. 209-217

STAVROUDIS Chris, « More from CAPS 3: surfactants, silicone-based solvents, and microemulsions », *WAAC Newsletter*, 2012, vol. 34, n° 3, p. 24-27
<http://cool.conservation-us.org/waac/wn/wn34/wn34-3/wn34-306.pdf> (consulté le 23 novembre 2017)

STAVROUDIS Chris, « Pemulen Revised: pHuck the pH Meter », *WAAC Newsletter*, 2012, vol. 34, n° 2, p. 19
<http://cool.conservation-us.org/waac/wn/wn34/wn34-2/wn34-206.pdf> (consulté le 23 novembre 2017)

STAVROUDIS Chris, « Silicone-Based Solvents in Conservation. As free solvents and components of gel systems and microemulsions », in *Dall'olio all'acrilico, dall'impressionismo all'arte contemporanea - Monographie : studi, ricerche, indagini scientifiche ed interventi conservative. Atti del VII Congresso Internazionale Colore e Conservazione, Politecnico di Milano, 13-14 November 2015*. A cura di Valentina Emanuela SELVA BONINO, CESMAR7 (Centro per lo Studio dei Materiali per il Restauro), Saonara, Il Prato, 2016, p. 176-184

STAVROUDIS Chris, « Sorting Out Surfactants », *WAAC Newsletter*, 2009, vol. 31, n° 1, p. 18-21
<http://cool.conservation-us.org/waac/wn/wn31/wn31-1/wn31-105.pdf> (consulté le 24 novembre 2017)

STAVROUDIS Chris, DOHERTY Tiarna, « A Novel Approach to Cleaning II: Extending the modular cleaning program to solvent gels and free solvents, part 1 », *WAAC Newsletter*, 2007, vol. 29, n° 3, p. 9-15
<http://cool.conservation-us.org/waac/wn/wn29/wn29-3/wn29-304.pdf> (consulté le 24 novembre 2017)

STULIK Dusan C., KHANJIAN Herant, DORGE Valerie, DE TAGLE Alberto, « Scientific investigation of surface cleaning processes : quantitative study of gel residue on porous and topographically complex surfaces », in *ICOM, 13Th triennial meeting Rio de Janeiro, 22-27 September 2002*, London : James & James, 2002, p. 245-251

TSANG Jia-Sun, ERHARDT David, « Current Research on the Effects of Solvents and Gelled and Aqueous Cleaning Systems on Oil Paint Films » [en ligne], *Journal of the American Institute for Conservation*, 1992, vol. 31, n° 1, p. 87-94
<http://www.tandfonline.com/doi/abs/10.1179/019713692806156457> (consulté le 24 novembre 2017)

WOLBERS Richard C., *Notes for workshop on new methods in the cleaning of painting prepared by Richard C. Wolbers with Nanette T. Sherman and C. Stavroudis = Stage animé par Monsieur Richard Wolbers assisté de Madame Géraldine Guillaume-Chavannes, 17-29 juin 1991*, Paris, ARAAFU, 1991

WOLBERS Richard C., « Recent developments in the use of gel formulations for the cleaning of paintings », in *Restoration'92 - Preprints to the conference held at the RAI international exhibition and congress centre, Amsterdam, 20-22 October 1992*. Ed. TODD Victoria, London, UKIC, 1992, p. 74-75

*WYPYCH George, *Handbook of Solvents*, Toronto: ChemTech Publishing, 2001, XXV-1675 p.

Vidéos

Getty Conservation Institute videos prepared for the Cleaning Acrylic Paint Surfaces (CAPS) workshops :

Calibrating Conventional pH Meters
<https://www.youtube.com/watch?v=9Ktlz0uw6kw>

Calibrating pH and Conductivity: Horiba Meters
https://www.youtube.com/watch?v=_nx3gNnKsUE

Preparing pH- and Conductivity- Adjusted Water
<https://www.youtube.com/watch?v=hGAUAgNYZjl>

Preparing a Pemulen Gel from MCP and Making an Emulsion
<https://www.youtube.com/watch?v=2O5pYyc45Qo>

Making Agarose Gel and Preparing an Agarose Plug
<https://www.youtube.com/watch?v=SX4n2DO6Lao>

Measuring Surface pH and Conductivity Using Water Drop and Agarose Plug Methods
<https://www.youtube.com/watch?v=bOqZEE7Kb8Y>

Mixing and Using Velvesil Plus
<https://www.youtube.com/watch?v=i6cet8sa-6Y>

Preparing a Dow Mineral Spirits Microemulsion (With Cosurfactants)
<https://www.youtube.com/watch?v=SGkf3i7rnDw>

Preparing a Silicone Microemulsion (With Cosurfactant) – [without cosurfactant]
<https://www.youtube.com/watch?v=xDpwIoLqJS4>

Droits d'auteur

© Institut national du patrimoine
