

## CURRICULA VITAE

### DR. HANNELORE ROEMICH

#### Education and training

- 1984 Diploma in Chemistry at the University Dortmund, Germany  
1987 PhD in Chemistry at the University in Heidelberg, Germany

#### Employment

- 1988 Scientist in the “Research for conservation” group at the Fraunhofer-Institut für Silicatforschung (ISC), Würzburg, Germany  
1994 Head of the “Research for conservation” group at Fraunhofer ISC  
2003 Head of the Bronnbach Branch at Fraunhofer ISC  
2004 Science Officer at COST Office, European Science Foundation, Brussels, BE  
2007-2009 Associate Professor of Conservation Science at the Conservation Center, Institute of Fine Arts, New York University  
Since 2009 Professor of Conservation Science at the Conservation Center, Institute of Fine Arts, New York University  
2008-2011 Acting Chairman, Conservation Center, Institute of Fine Arts, New York University

#### Fellowships and further training

- 1984 Grant for 3 months internship at the Ecole Nationale Supérieure de Chimie, Montpellier, France  
1987 Post-doc grant for one year at the University of Montpellier, France  
1991 Sabbatical leave: guest researcher at the Conservation Center, NYU, USA (3 months)  
guest researcher at the V&A Museum, Science section, London (3 months)  
2001, 2002 Sabbatical leave: participation in archaeological excavations in Romania  
2004 Sabbatical leave: ICCROM fellowship (4 months)  
2011 Fall semester: term to research

#### Major research projects and grants

- 1988-1992 NATO-CCMS study on “Conservation of stained glass windows” Project funded by the German Agency for the Environment (Umweltbundesamt)  
1990-1995 Evaluation of cleaning techniques for stained glass windows Project funded by the German Ministry of Research  
1992-1995 New conservation methods for outdoor bronze sculptures EC-funded project EV5V-CT92-0107  
1997-2000 Investigation of lasers for cleaning stained glass windows Funded by the German Foundation for the Environment (DBU), Osnabrück  
1998-2002 Monitoring the corrosion state of archaeological glass with optimized micro-computed X-ray tomography, EC-funded project SMT4-CT98-2261  
1999-2003 Scientific aspects for the conservation of archaeological glass Funded by the German Foundation for the Environment (DBU), Osnabrück  
2001-2004 A light dosimeter for monitoring cultural heritage: development, testing and transfer to market, EC-funded project EVK4-CT2000-00016  
*Remark: this project gained the “Pan-European Grand-Prix of Innovation“ in Monaco (06 December 2003)*  
2002-2005 Physical, chemical and biological aspects of the degradation of stained glass windows with and without protective glazings, EC-funded project VIDRIO

- 1990-2006 Assessment of corrosivity levels with glass sensors at protective glazings (e.g. Leon, Canterbury, York, Cologne, Erfurt), at buildings (Lincoln), in museums (Berlin) and outdoors (20 sites worldwide, on behalf of DaimlerChrysler AG, Sindelfingen)
- 2007-2008 Investigations of crack patterns in glass by Synchrotron radiation. Collaboration with Dombauhuetten Koeln, Germany, and ELETTRA Synchrotron in Trieste, Italy
- 2010-2011 NYU University Research Challenge Fund (URCF) – collaboration with NYU Chemistry Department  
Project “Archaeological Glass: Characterization of Surface Degradation”.
- 2010-2011 National Endowment of the Humanities (NEH), Preservation and Access Awards for “Art and Material Culture Conservation and Training”  
Project title: Sustainability in Conservation
- 2011-2012 National Endowment of the Humanities (NEH), Preservation and Access Awards for “Art and Material Culture Conservation and Training”  
Project title: Conservation Training for Preservation and Access

### **Organisation of conferences and workshops or session chair (selection)**

- 1996 - 1998 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> European Workshop on cultural heritage: research and opportunities for European enterprises, Rome, Aachen, Santiago de Compostella (member of the international steering committee)
- 2001 Lighting in museums – assessment and control. Florence, Italy
- 2005 COST and cultural heritage: crossing borders. Florence, Italy (120 participants)
- 2006 European Forum on Nanosciences: a converging approach across disciplines. Brussels, Belgium
- 2007 Past – present – prediction: about simulation techniques, dosimeters, sensors in conservation research and application, Ohrid, (FYROM)
- 2007 41<sup>st</sup> World Chemistry Congress (IUPAC), Turin, Italy, session 3 “chemistry protecting cultural heritage”
- 2008 ART2008, 9<sup>th</sup> Int. conference on non-destructive investigation and microanalysis for the conservation of cultural heritage, Jerusalem, Israel
- 2009 Forum for the Conservation and Restoration of Stained Glass "The Art of Collaboration: Stained-Glass Conservation in the Twenty-First Century", New York City
- 2010 Interim Meeting of the ICOM-CC working group on glass and ceramics, Corning, NY (member of the Program Committee for the Meeting and Editor of the Preprints)
- 2011 The interface between field archaeology and conservation, Abu Dhabi, UAE
- 2012 SR2A: International Conference on Synchrotron Radiation in Art & Archaeology, New York, June 5-8, 2012; member of the organizing committee.
- 2012 Gordon Research Conference on “Scientific Methods in Cultural Heritage Research”, to be held at Mount Snow Resort, West Dover, Vermont, July 29 to August 3, 2012.

### **Teaching at The Conservation Center, NYU**

- Materials of Art and Archaeology I: Organic Materials and II: Inorganic Materials
- Advanced science courses, such as *Light and Color* or *Cellulose and Cellulose Derivatives*
- Preventive Conservation

### **Selected Publications**

- Roemich, H., Gerlach, S., Mottner, P., Mees, F., Jacobs, P., van Dyck, D. and Domenech Carbó, T.: Results from burial experiments with simulated medieval glasses. Proc. MRS Fall Meeting, Symposium II, Boston (2002), 1-12
- Roemich, H., Dickmann, K., Mottner, P., Hildenhagen, J., Müller, E.: Laser cleaning of stained glass windows – Final results of a research project. J. Cult. Heritage, 4 (2003) 112-117

- Roemich, H, Martin, G., Lavedrine, B., Bacci, M.: LightCheck – a new tool in preventive conservation. *V&A Conservation Journal*, 47 (2004) 18-18
- Roemich, H.: Evaluation of protective glazing systems. *A Review. E-Preservation Science 1* (2004), 1-8
- H. Roemich, F. Zanini, K. Wittstadt, C. Mueller-Weinitschke, N. Sodini: Degradation phenomena on historic glass: non-destructive characterization by Synchrotron radiation. "ART2008, Jerusalem, Israel (2008), publ. on CD
- N. Carmona, K. Nawroth, H. Roemich: New sol-gel based consolidants for paint on stained glass windows. *Journal of Cultural Heritage* 10 (2009) 403-409.
- F. Mees, E. Cornelis, P. Jacobs, M. T. Doménech Cárbo, H. Römich: "Microfocus X-ray computed tomography analysis of corroded glass objects." *Engineering Geology* 103 (2009) 93-99
- P. Bellendorf, H. Roemich, S. Gerlach, P. Mottner, E. López, K. Wittstadt: *Archaeological Glass: the Surface and Beyond*. In: "Glass and Ceramics Conservation 2010" (Editor: H. Roemich), Preprints, ICOM Committee for Conservation, Corning Museum of Glass (2010), 137-144
- H. Roemich and S. Weintraub: *Teaching Preventive Conservation: Preparing Conservators for the Complex World of Interdisciplinary Decision Making*. Proceedings of the Final Meeting of COST Action D42, published by Trinity College Dublin, Ireland and COST, Brussels, Belgium (2010)
- M. Tsukada, M. Leona, H. Roemich: Application of impact sensors for the study of environmental conditions in showcases at the Metropolitan Museum of Art. International Conference ART2011, Florence, Italy, January 2011

### Contributions to books

Book: **The conservation of Glass and Ceramics – Research, Practice and Training**. Norman Tennent (Editor), James & James, London (1999)

Contributions:

Römich, H.: Historic Glass and its interaction with the environment (page 5-14) and Laboratory experiments to simulate corrosion on stained glass windows (page 57-65)

Book: **Restaurierung und Konservierung historischer Glasmalereien**. Arnold Wolff (Editor), Verlag Philipp von Zabern, Mainz, Germany (2000)

Contributions:

Müller, W., Torge, M., Adam, K., Römich, H., Weißmann, R. und Drewello, R.:

Naturwissenschaft im Dienst der Restaurierung, page 65-99

Römich, H., Jägers, E., Torge, M., Müller, W. und Adam, K.:

Reinigung – eine Gradwanderung, page 101-128

Jägers, E., Römich, H. und Mueller-Weinitschke, C.:

Konservierungsmaterialien und Methoden, page 129-166

Oidtmann, S., Leissner, J. und Römich, H.:

Schutzverglasungen, page 167-209

Book: **Rational Decision – making in the Preservation of Cultural Property**. Edited by: N.S. Baer and F. Snickars, ISBN3-934504-07-8, Dahlem University Press, Berlin, Germany (2001)

Contribution:

Nanda, R., Burke, F., Burman, P.A.T.I., Kohler, N., Mileti, D.S., Römich, H., Snickars, F., Sörlin, S.:

Group Report: Values and Society. Page 61-80

Book: **Conservation Science – Heritage Materials**. Edited by: May and M. Jones, the Royal Society of Chemistry Publishing, Cambridge, UK (2006)

Contribution:

Römich, H.: Chapter 7 - Glass and Ceramics. Page 160-184

**Editor of books and conference proceedings:**

New Conservation Methods for Outdoor Bronze Sculptures. European Commission Research Report No 3 (ISBN 92-827-6232-7), Luxembourg (1996)

Reinigung von historischen Glasmalereien mit Lasertechnik (Cleaning of historic stained glass windows with laser technology). Abschlussband zu einem Forschungsvorhaben, gefördert von der Deutschen Bundesstiftung Umwelt, Osnabrück, Fraunhofer IRB Verlag ISBN 3-8167-5614-X (2001)

Glass & Ceramics Conservation 2010. ICOM Committee for Conservation, in association with The Corning Museum of Glass, Corning, NY.

**Membership in organizations**

**Network ENVIART**

The European Network ENVIART entitled Chemical Interactions between Cultural Artefacts and Indoor Environment was set up to perform field studies and laboratory experiments and transfer the results into preventive conservation practice.

<http://www.echn.net/enviart/ENVIArtHome/tabid/36/Default.aspx>

**Corpus Vitrearum (CV)**

Member of the Corpus Vitrearum US Conservation Committee

Member of the Board of the "International Scientific Committee for the Conservation of Stained Glass".

The Conservation Committee, as an organ of the Corpus Vitrearum, is concerned with the various questions of preservation, conservation and restoration of historical stained glass. To access a wider base of protection of cultural heritage, the Conservation Committee has been associated with the International Stained Glass Committee of the ICOMOS since 1982.

**International Council of Museums – Committee for Conservation (ICOM-CC)**

Coordinator of the WG Glass and Ceramics (2011-2014)

<http://icom-cc.org/27/working-groups/glass-and-ceramics/>

Further professional memberships:

GUS	German society for environmental engineering and accelerated aging
DMG	Deutsche Mineralogische Gesellschaft, member of the working group "Archaeometry"
JCH	Member of the editorial board of the Journal of Cultural Heritage
e-PS	member of the editorial board of E- Preservation Science
GNAA	German society for science in archaeology and archaeometry
ICOMOS	International non-governmental organization of professionals, dedicated to the conservation of the world's historic monuments and sites.