

## Bertrand MARCON, PhD

### International published peer-reviewed journals (\*corresponding author)

Goli G., Marcon B.\*, Fioraventi M. *Poplar wood heat treatment: Effect of air ventilation rate and initial moisture content on reaction kinetics, physical and mechanical properties*. Submitted in March 2014 in Wood Science and Technology, 2014. (DOI : [10.1007/s00226-014-0677-5](https://doi.org/10.1007/s00226-014-0677-5))

Marcon B.\*, Fouvry S., Guegan J. and Daniel G., *Fracture mechanics of impacted laminated glass subjected to various fatigue stressing conditions*. Engineering Fracture Mechanics, 2014. (DOI: [10.1016/j.engfracmech.2014.05.013](https://doi.org/10.1016/j.engfracmech.2014.05.013))

Marcon B.\*, Mazzanti P., Uielli L., Dureisseix D. and Gril J., *Mechanical study of a framing technic for cupping control of cultural painted panels combining crossbars and springs*. Journal of Cultural Heritage, vol. 13(3): S109-S117, 2012 (DOI: [10.1016/j.culher.2012.04.003](https://doi.org/10.1016/j.culher.2012.04.003))

Dureisseix D.\* and Marcon B., *A partitioning strategy for the coupled numerical simulation of hygromechanical wood structures of Cultural Heritage*. International Journal for Numerical Methods in Engineering, vol. 88(3): 228-256, 2011 (DOI: [10.1002/nme.3173](https://doi.org/10.1002/nme.3173))

### - Submitted in 2015 -

Cocchi L., Marcon B., Mazzanti P., Uzielli L., Castelli C. and Santacesaria A. *Examination of an elastic crossbar system applied to a panel painting: The Deposition from the Cross by an anonymous artist from Abruzzo, XVI Century*.

Cocchi L., Goli G., Mazzanti P., Marcon B., Uzielli L. *Slippage between planking and dovetailed crossbeams: factors affecting the friction forces and results from monitoring a very large panel painting*.

### - Non ISI publication -

Cocchi L., Marcon B.\*, Mazzanti P., Uzielli L., Castelli C., Santacesaria A. *Examination of an elastic crossbar system applied to a painting on a panel: The Deposition from the Cross by an anonymous artist from Abruzzo, XVI Century // Verifica del funzionamento di una traversatura elastica applicata su un dipinto su tavola: la Deposizione dalla Croce di Anonimo abruzzese, XVI sec.* OPD Restauro no27, 2015.

### PhD thesis: Montpellier 2 University (FR) and Università degli Studi di Firenze (IT)

*Hygromécanique des panneaux en bois et conservation du patrimoine culturel - Igromeccanica dei dipinti su tavola e conservazione dei beni culturali.*

*Jury:* Pr Ario Ceccotti (Reviewer), Pr Frédéric Dubois (Reviewer), Pr David Dureisseix (Advisor), Pr Luca Uzielli (Advisor), MdC Delphine Jullien (co-advisor), Pr Alberto Corigliano (Reviewer and President), DR CNRS Joseph Gril (Scientific director and invited), Dr Emmanuel Maurin (invited)

Download: [http://tel.archives-ouvertes.fr/docs/00/70/43/01/PDF/2009\\_TheseMarcon.pdf](http://tel.archives-ouvertes.fr/docs/00/70/43/01/PDF/2009_TheseMarcon.pdf)

### **International conferences with proceedings**

Gril J., Marcon B., Bremand F., Cocchi L., Dionisi Vici P., Dupré J.C., Gauvin C., Goli G., Hesser F., Jullien D., Mazzanti P., Ravaud E., Togni M., Valle V., Uzielli L. *The Mona Lisa Project: an update on the progress of measurement and monitoring activities*. EuroMech Colloquim 556 « Theoretical, Numerical, and Experimental Analyses in Wood Mechanics », mai 2015, Dresde, Allemagne.

Marcon B., Cocchi L., Mazzanti P., Uzielli L. *Methodology for the design of crossbeams and springs system for cupping control of wooden panel paintings*. EuroMech Colloquim 556 « Theoretical, Numerical, and Experimental Analyses in Wood Mechanics », mai 2015, Dresde, Allemagne.

Goli G., Marcon B. et Fioravanto M. *Wood heat treatment modifications: effects of initial moisture and air exchange rate on kinetic and final product characteristics*. COST FP0904 Final Meeting « Recent Advances in the Field of TH and THM Wood Treatment », May 2014, Skellefteå, Sweden.

Marcon B., Kawai S., Matsuo M., Gril J. et Uzielli L. *Artificial aging versus natural aging of poplar wood*. COST FP0904 Meeting «Modelling the isolated and combined effects of chemical modification and hygro-thermo-mechanical loading of wood”, December 2012, Paris, France

Marcon B., Kawai S., Uzielli L. and Gril J., Physical properties of artificially aged poplar wood in view of application to cultural objects. Workshop Action FP0802, Experimental and Computational Micro-Characterization Techniques in Wood Mechanics, October 2012, Edimburgh, Scotland.

Uzielli L., Gril J., Cocchi L., Colmars J., Dionisi Vici P., Dureisseix D., Goli G., Jullien D., Marcon B. and Mazzanti P., *Experimental studies on the wooden support of the « Mona Lisa »*. In Strategic Workshop for The Safeguard of Cultural Heritage : a Challenge from the Past for the Europe of Tomorrow. 2011, Florence, Italy

Dubois F., Dureisseix D. and Marcon B., *Code coupling for thermo-hygro-mechanical problems with application to wooden structures and painting supports of cultural heritage*. European Conference on Computational Mechanics, May 2010, Paris, France

Dubois F., Dureisseix D. and Marcon B., *Simulation of wooden structures and painting supports of cultural heritage with a code coupling for thermo-hygro-mechanical évolutions*. Meeting COST Action IE0601 Wood Science for Conservation of Cultural Heritage, April 2010, Cracow, Poland

Dureisseix D. and Marcon B., *A partitioning algorithm to couple diffusion and elasticity for the simulation of hygromechanical wood structures of Cultural Heritage (Poster)*. US National Congress on Computational Mechanics, July 2009, Columbus Ohio, USA

Colmars, J., Marcon B., Maurin E., Rémond R., Morestion F., Mazzanti P. and Gril J., *Hygromechanical response of a panel painting in a church: monitoring and computer modeling*. Meeting COST Action IE0601 Wood Science for Conservation of Cultural Heritage, October 2009, Hamburg, Germany

Marcon B., Dureisseix D., Jullien D., Uzielli L. and Gril J., *Experimental and numerical mechanical study of a framing technique for cupping control of painted panels combining crossbars and springs*. Meeting COST Action IE0601 Wood Science for Conservation of Cultural Heritage, November 2008, Braga, Portugal

### **National conferences with proceedings**

Cocchi L., Goli G., Mazzanti P., Marcon B., Uzielli L. *The lapidazione di santo stefano by Giorgio Vasari: How monitoring and analyzing the wooden support's deformations contributed to the restoration decisions and to the successive surveillance*. ESRARC - 6th Symposium: “Religious Art – Restoration and Conservation”, juin 2014, Florence, Italy

Marcon B., Uzielli L., Santacesaria A., Castelli C., Piacenti D. *Evaluer l'interaction entre un châssis à ressorts et son support pour garantir son utilité*. 4ème journée d'étude « Lorsque nos certitudes sont mises à l'épreuve Ces objets qui nous surprennent ». Section française de l'institut international de conservation (groupe Bois), October 2013, Paris, France.

Marcon B., Masuo M., Kawai S., Uzielli L. and Gril J., *Wood aging: Physical properties of heat-treated poplar wood in view of application to cultural objects*. 62<sup>nd</sup> Annual Meeting of Mokuzai Gakkai (the Japan Wood Research Society) (Poster), March 2012, Sapporo, Japan

Marcon B., Dureisseix D., Dubois F. and Jullien D., *Couplage de codes en thermo-hygro-mécanique pour les panneaux peints en bois du patrimoine*. Congrès français de Mécanique 2009, Marseille, France

Marcon B., Noirfalise C., Destrebecq J.F. and Poumarat G., *Analyse du comportement mécanique d'un os ostéoporotique à partir d'images scanner*. Congrès français de Mécanique 2007, Grenoble, France

Noirfalise C., Marcon B., Destrebecq J.F. and Poumarat G., *Characterization of the mechanical behaviour of cancellous bone by means of the three dimension scanner technique (LaMI/Laboratory of Anatomy and Biomechanics)*. Photomécanique, 2006, Clermont-Ferrand, France

Coutand C., Marcon B., Toussaint E. and Vacher P., *Mesures de déformations résiduelles longitudinales de maturation du bois de peuplier par corrélation d'images*. Photomécanique, mai 2004, Albi, France

### **International communications without proceedings**

Uzielli L., Gril J., Cocchi L., Colmars J., Dionisi Vici P., Dureisseix D., Goli G., Jullien D., Marcon B., Mazzanti P. and Rémond R., *Monitoring and modelling deformation of the « Monna Lisa »*. 5<sup>th</sup> International Congress « Science and technology for the safeguard of Cultural Heritage in the Mediterranean Basin », 2011, Istanbul, Turquia

Marcon B., *Hygro-mechanical study of panel paintings of cultural heritage*. International Workshop on biological characteristics of wood and its related properties, November 2008, Teheran, Iran Rep.

Marcon B., Dureisseix D., Jullien D., Uzielli L. and Gril J., *Contribution de la mécanique à la conservation du patrimoine*. Communication de vulgarisation avec relecture, DOCTISS, April 2009, Montpellier, France

Marcon B., Dureisseix D., Jullien D., Uzielli L. and Gril J., *Hygro-mechanical study of painted panels*. Meeting COST Action IE0601 Wood Science for Conservation of Cultural Heritage (Poster), June 2007, Tervuren, Belgium

## **REVIEWING ACTIVITIES FOR SCIENTIFIC JOURNALS**

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### **Reviewer for iForest - Biogeosciences and Forestry**

Open Access, peer-reviewed, published by the Italian Society of Silviculture and Forest Ecology.  
Journal website: <http://www.sisef.it/forest/>

### **Reviewer for BioResources**

Open access, peer-reviewed online journal devoted to the science and engineering of lignocellulosic materials, chemicals, and their applications for new uses and new capabilities.  
Journal website: <http://www.ncsu.edu/bioresources/>