

Dr. Robert Jockwer (Switzerland)

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COST FP1402, MC Member, WG3 Member

*Personal*

Years of experience in relevant field: 6
Expertise: connections, reinforcement, modelling of moisture induced stresses, fracture mechanics
Degree: Dr. sc. (01.06.2014)

Organisation

Institute of Structural Engineering, Chair for Timber Engineering (www.ibk.ethz.ch)
Focus: theoretical and practical research / innovation and education/training.
Facilities: Universal testing machines -2MN, Strong floor, Optical Measurements, Climate chambers

No. of staff	PhD students	MSc/year
-	8	20

Research projects

<http://www.ibk.ethz.ch/fr/research/index>

WP 2: Solid Timber Construction

"Influence of local strain differences on the bearing capacity of glulam", Dr. Gerhard Fink

"Structural behaviour of glued-laminated timber members subjected to axial compression or combined compression and bending (2nd order analysis)", Dr. Matthias Theiler

"Structural behaviour of glued-laminated timber beams with notches or holes", Dr. Robert Jockwer

"Glued laminated timber from Beech wood", Thomas Erhardt

WP 3: Connections

"Enhancement of compression perpendicular to the grain strength and stiffness of glulam members with the use", Dr. Robert Jockwer

"Assessment of the residual load-carrying capacity of large span members in wood", Dr. Robert Jockwer

WP 4: Hybrid Timber Structures

"Post-tensioned timber frame structures", Flavio Wanniger

"Reliable timber and innovative wood products for structures - Beam-type structural elements made of LVL beech wood", Peter Kobel

" - Plate-type structural elements made of LVL beech wood", Lorenzo Boccadoro

"ETH House of Natural Resources", Claude Leyder

Publications

WP 1: Basis of Design

Kohler, Jochen; Steiger, René; Fink, Gerhard; Jockwer, Robert, "Assessment of selected Eurocode based design equations in regard to structural reliability", 45th CIB-W18 Meeting 2012, 45, CIB-W18/45-102-1.

Steiger, René; Jockwer, Robert, "Tragwerksanalyse und Bemessung", Dokumentation SIA, Holzbau: Teilrevision der Norm SIA 265, Ausgabe 2012, Zürich, Switzerland.

WP 3: Connections

Jockwer, Robert; Steiger, René; Frangi, Andrea, "Fully Threaded Self-tapping Screws Subjected to Combined Axial and Lateral Loading with Different Load to Grain Angles", Materials and Joints in Timber Structures, 2014, 9, 265-272.

Jockwer, Robert, "Structural behaviour of self-tapping screws - Theory", COST Timber Bridge Conference - CTBC 2014, Biel, Switzerland.

Jockwer, Robert, "Self-tapping screws as reinforcement in areas of recessed beams under transverse shear loads", 20. Internationales Holzbau-Forum (IHF 2014), 2014, Garmisch-Partenkirchen, Germany.

Jockwer, Robert; Steiger, René; Frangi, "Design model for inclined screws under varying load to grain angles", International Network on Timber Engineering Research: 1st INTER Meeting, 2014, Bath, United Kingdom.

