

Dr. Carmen Sandhaas **(Germany)**  
 Karlsruhe Institute of Technology (KIT)  
 Karlsruhe Germany  
[sandhaas\(at\)kit.edu](mailto:sandhaas(at)kit.edu)  
 COST FP1402, MC Member, WG3 Vice Leader



*Personal*

Years of experience in relevant field: 5  
 Expertise: wood material and joint modelling, execution of tests, seismic behaviour of timber buildings  
 Degree: PhD (01.06.2012)

*Organisation*

Institute for Timber Structures and Building Construction ([www.vaka.holz.kit.edu](http://www.vaka.holz.kit.edu))  
 Focus: theoretical and practical research/innovation and education, training.  
 Facilities : testing lab (joint and element tests, shear wall tests, monotonic and cyclic tests, all relevant tests on fasteners), measuring equipment, drying chambers

No. of staff	PhD students	MSc/year
21	5	30

*Research projects*

WG2 CLT:  
 Contact joints in CLT (Tobias Schmidt)  
 CLT Beams (Marcus Flaig)

WG3 connections:  
 High-performance joints for engineered softwood and hardwood structures (Marcus Enders-Comberg)  
 Mechanical performance of timber joints with slotted-in steel plates (Carmen Sandhaas)

*Publications*

WG2 CLT:  
 Flaig, M., 2014, 'Design of CLT beams with rectangular holes and notches', Paper 47-12-4, Meeting 47 of International Network on Timber Engineering Research (INTER), Bath, United Kingdom, pp. 193-207.  
 Flaig, M., Blaß, H. J., 2014, 'Bending strength of cross laminated timber beams loaded in plane', Proceedings of the 13th World Conference on Timber Engineering (WCTE), Quebec, Canada.

WG3 connections:  
 Steilner, M., Blaß, H. J., 2014, 'A method to determine the plastic bending angle of dowel-type fasteners', RILEM bookseries 9: Materials and Joints in Timber Structures. Ed.: S. Aicher, Springer, Berlin, pp. 301-306.  
 Van de Kuilen, J. W. G., Sandhaas, C., Blaß, H. J., 2014, 'ASteel-to-timber joints with very high strength steel dowels using spruce, beech and azobé', RILEM bookseries 9: Materials and Joints in Timber Structures. Ed.: S. Aicher, Springer, Berlin, pp. 157-165.  
 Enders-Comberg, M., Blaß, H. J., 2013, 'Influence of holes in the compression area of members - Querschnittsschwächung bei Druckbeanspruchung parallel zur Faser', European Journal of Wood and Wood Products, Vol. 70, Issue 3, pp. 309-317..

