



UNIVERSIDAD  
DE GRANADA

MÁSTER DE ESTRUCTURAS

SEMINARIOS DEL MÁSTER DE  
ESTRUCTURAS

# MODELING OF TIMBER COMPOSITE STRUCTURES



**Kay Uwe Schober**

Mainz University of Applied Sciences  
Institute of Innovative Structures (iS-mainz)  
Professor of Timber Engineering and Structural Design



**Institute of Innovative Structures**  
TECHNIK HOCHSCHULE MAINZ UNIVERSITY OF APPLIED SCIENCES

Día : Miércoles 5 de Febrero de 2020

Hora : 10:30h

Lugar : Seminario I, planta 4 de la E.T.S.I. Caminos, C. y P.

Campus Fuentenueva

**Universidad de Granada**

<http://masteres.ugr.es/iestructuras/>

<http://doctorados.ugr.es/ingenieriacyil/>



UNIVERSIDAD  
DE GRANADA

M Á S T E R D E E S T R U C T U R A S

## MODELING OF TIMBER COMPOSITE STRUCTURES

In recent years composite structures for upgrading or rehabilitation of new and existing timber floors have become famous in research. The range covers the determination of the properties of the connectors and the internal stresses for the short term and long term loading. At the same time, timber composites, e.g. timber-concrete-composites (TCC), fiber-reinforced plastic composites (FRPC) or glued laminated structures (CLT) have been realized in practice, so the academic knowledge has already been transferred to real buildings.

In the lecture relevant aspects of the design of timber composites will be presented, focusing of TCC structures and their introduction as Eurocode 5 part 1-3:2022. Difficulties exist in using the models and formulas for discontinuous systems in rehabilitation. Therefore, simple numerical models for the daily work will be introduced and discussed followed by an design example.

### Kay Uwe Schober



- 1985-88 Apprenticeship as bricklayer
- 1988 Trade test and final secondary-school examination
- 1989-94 Studies of Civil Engineering with main focus on Structural Engineering, Dresden University of Technology
- 1994-95 Postgraduate education as „Certified Surveyor for Timber Preservation“, European Institute for Postgraduate Studies
- 2008 PhD Thesis in Timber Engineering and Polymer Composites Research, Bauhaus-University of Weimar, Germany
- Since 1994 Managing Partner, Schober + Partner Architects and Civil Eng.
- 1999-01 University Lecturer for Structural Design, Technical University of Dortmund, Germany
- 2002-09 Research Fellow, Department of Timber and Masonry Engineering, Bauhaus-University of Weimar, Germany
- Since 2009 Full Professor of Timber Engineering and Structural Design in Mainz, Germany Director of Civil Engineering Studies

**U n i v e r s i d a d d e G r a n a d a**

<http://masteres.ugr.es/iestructuras/>

<http://doctorados.ugr.es/ingenieriacivil/>