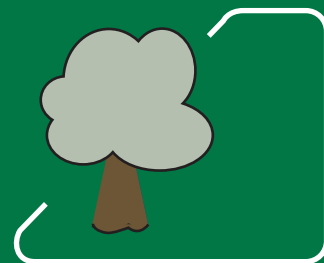




Building European Science



Action E55:

## Modelling of the Performance of Timber Structures

### First Workshop and Opening Seminar

14. / 15. May 2007

### Graz University of Technology Austria

#### Presentations and discussions on the following topics:

- Analysis of Failures and Malfunctions
- Vulnerability of Timber Components
- Robustness of Structures

#### Participating experts from 17 European countries

##### Local Organisers:

Prof. Dr. Gerhard Schickhofer  
Thomas Bogensperger  
Institut für Holzbau und Holztechnologie  
Technische Universität Graz  
Inffeldgasse 24  
A-8010 Graz  
email: thomas.bogensperger@ignum.tugraz.at  
Tel: +43 316 873-4608  
Fax: +43 316 873-4619

##### Scientific Lectures by:

Michael H. Faber, ETHZ, Switzerland  
Matthias Frese, TU Karlsruhe, Germany  
Eva Frühwald, Lund TH, Sweden  
Heinrich Kreuzinger, TU München, Germany  
Tomi Toratti, VTT, Finland  
André Jorissen, TU Eindhoven, The Netherlands  
Staffan Svensson, DTU, Denmark  
Gerhard Schickhofer, TU Graz, Austria  
John D. Sørensen, Aalborg Univ., Denmark  
Gerard Canisius, BRE, United Kingdom



ESF provides the COST Office through an EC contract

<http://www.cost-e55.ethz.ch>

<http://cost.esf.org>



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## **Program** (Version May, 2007; subject to minor alterations)

### **Monday 14.05.2007**

*Graz University of Technology*

*Room 'Hörsaal WB' Number WB02046*

*Stremayrgasse 10, 2nd floor*

- 10.00 Registration / Coffee
- 10.30 Welcome Address, Workshop Overview; by Gerhard Schickhofer and Jochen Köhler
- 10.50 General Introduction to COST Action E55; by Jochen Köhler
- 11.10 Presentation of the scope of the three working groups; Tomi Toratti (WG I), André Jorissen (WG II) and John D. Sørensen (WG III)
- 11.30 Keynote Lecture  
Michael H. Faber (ETH Zurich, Switzerland)  
*Reliability Assessment of Structures*
- 13.00 Lunch
- 14.30 Presentations related to WG I / Chaired by Toratti
- Analysis of Failures
- Matthias Frese (TU Karlsruhe, Germany)  
*Analysis of failures on timber structures in Germany*
- Eva Frühwald (LTH Lund, Sweden)  
*Analysis of failures on timber structures based on a Nordic project*
- Heinrich Kreuzinger (TU München, Germany)  
*Guidelines on maintenance and failure assessment*
- Tomi Toratti (VTT, Finland)  
*Guidelines for quality in the timber building process*
- 16.15 Coffee
- 16.45 WG I Discussions
- System Identification and Representation  
*What are the Systems or Components leading to failures or malfunctions?*  
Introduced by Tomi Toratti
- Further discussion topics related to learning from failures:
- *Cracks in glulam structures: how do we assess them? How do we repair them?*
  - *Special teaching and training efforts for designers on stability of slender structures.*
  - *How do we ensure a good communication from design to the construction site?*
  - *Durability failures - are we missing them?*
  - *Any needs for further joint European activities on the topics presented.*
- 18.00+ Closure
- 20.00 Dinner  
*Gösser Bräu Graz*  
*Neutorgasse 48, A-8010 Graz*

## **Tuesday 15.05.2007**

*Graz University of Technology*

*Room 'Hörsaal ISW*

*Inffeldgasse 25/F, ground floor*

- 09.00 Presentation and Discussion of a draft TOC of the first COST E55 publication on the analysis of failures and malfunctions. (by Tomi Toratti)
- 09.20 Presentations related to WG II / Chaired by André Jorissen
- André Jorissen, TU Eindhoven, The Netherlands  
*Connections in Timber Engineering*
- Staffan Svensson, DTU Lyngby, Denmark  
*Modelling Duration of Load Effects*
- Reinhard Brandner, holz.bau forschungs gmbh, Austria  
*Bearing model for glued laminated timber in bending – new aspects concerning modelling*
- André Jorissen, TU Eindhoven, The Netherlands  
*Durability Aspects*
- Discussions
- 11.10 Coffee
- 11.40 Presentations related to WG III / Chaired by John D. Sørensen
- John D. Sørensen, Aalborg University, Denmark  
*Introduction*
- Jochen Köhler, ETH Zurich, Switzerland  
*General principles for robustness*
- Gerard Canisius, BRE, UK  
*JCSS task group on Robustness*
- John D. Sørensen, Aalborg University, Denmark  
*Implementation of Robustness in Codes, System effect in Timber Structures*
- Discussions
- 13.30 Conclusions (J. Köhler)
- 13.40 Closure
- 13.45 Lunch
- 14.30 3. MC meeting
- 16.00 End of MC meeting