Important Dates

Abstract submission, deadline	February 28, 2015
Notification of acceptance	March 31, 2015
Early registration, deadline	April 30, 2015

Accommodation

We recommend to book a room using following sites: http://www.dresden.de/dig/en/uebernachten.php, http://www.hrs.de/.

Social Programme

Banquet

The banquet will take place in the city of Dresden at 'Sophienkeller', Taschenberg 3, Dresden on Thursday, May 28 at 7 p.m.

Registration Fees

Early registration fees are applicable if payment is received not later than April 30, 2015.

	Early	Late
EUROMECH-Members	€ 290	€ 340
non EUROMECH-Members	€ 314	€ 364

The fees include the Book of Abstracts, coffee breaks, lunches, and the banquet.

EUROMECH membership is obligatory in order to register for the colloqium. Non EUROMECH members will automatically become members for a one-year period when they register for the conference. An extra fee of € 24 will be charged to the registration fee and will be forwarded to the EUROMECH Secretariat. New members will have to fill in a EUROMECH application form which will be provided at registration.

The full registration will be completed by transferring the fee to the following bank account:

Depositor:	TUDIAS GmbH
IBAN:	DE 10 85080000 0401221500
BIC:	DRESDEFF850
Purpose:	*7027/15, surname, first name*

Colloquium Venue

The colloquium will take place at Technische Universität Dresden, HSZ Hörsaalzentrum, Bergstraße 64, 01069 Dresden in the auditorium centre.

It can be easily reached by public transport from Dresden International Airport and Dresden Hauptbahnhof (main station).

Local Organizing Committee

Katrin Fischer-Petzsch
Clemens Gebhardt
Michael Kaliske
Daniel Konopka

Colloquium Secretariat

Technische Universität Dresden
Institute for Structural Analysis
01062 Dresden, Germany

Email: euromech556@mailbox.tu-dresden.de
Phone: (+49 351) 463 34386
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Organizing Institution

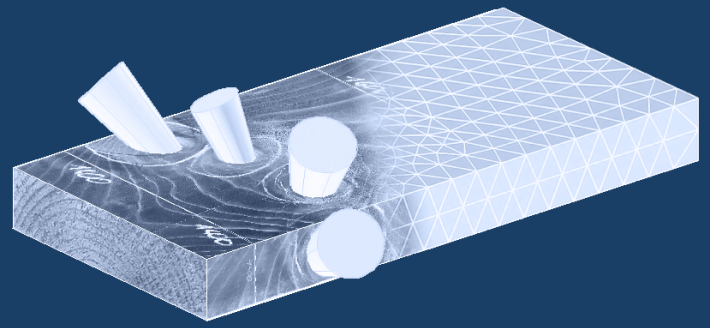
TUDIAS Technische Universität Dresden
Institute of Advanced Studies

EUROPEAN MECHANICS SOCIETY

EUROMECH Colloquium 556

May 27-29, 2015 Dresden, Germany

Theoretical, Numerical, and Experimental Analyses in Wood Mechanics



http://556.euromech.org

TECHNISCHE UNIVERSITÄT DRESDEN

TU WIEN TECHNISCHE UNIVERSITÄT WIEN Vienna University of Technology

Objectives

Wood is one of the oldest materials used by mankind. Nowadays, it is of significance for a huge variety of applications starting from large span glue lam beams and load carrying components in civil engineering, up to for example music instruments as well as pressure, heat and moisture modified material for new, innovative products. Apart from the mechanical and aesthetical quality of the material, its eco-friendly features are of high significance. Thus, it can be assumed that the importance will even grow in the future.

In order to provide the desired, optimized components and to develop new applications, deep mechanical knowledge, theoretical modeling and numerical simulation approaches are required. Features to be identified are amongst others anisotropic elasticity, ductile plasticity, brittle fracture and time-, moisture- and temperature-dependency. Moreover, the material shows very pronounced properties on different length scales so that it even could be described as a composite structure itself instead as a homogeneous material. The features depend on a large number of influence factors like growth conditions and yield a significant amount of scattering with respect to its properties. Due to this complexity and manifold dependencies, much research is required in order to be able to understand and to describe wood from the mechanical point of view. Currently, lively and advanced research activities are under way in order to develop a comprehensive knowledge.

The motivation of organizing this EUROMECH colloquium is to provide a dedicated forum for wood mechanics. Basic research as well as application oriented aspects from industry should contribute to the mechanical description of this unique material. The exchange of ideas, methodologies and results in wood mechanics shall be fostered.

Colloqium Topics

The colloquium topics are related to the **theoretical** (design concepts, dimensioning, standardization, material modelling), **numerical** (nonlinear simulations, stochastic simulations), and **experimental analysis** in wood mechanics at different length scales:

- **wood microscale** (cell behaviour, fibers, pulp and paper)
- **wood macroscale** (solid wood, wood products, laminated members, joints)
- **structural scale & applications** (building constructions, construction details, historical applications, musical instruments)

Keynote Lecturers

Hans Joachim BLASS (KIT Karlsruhe, Germany)
Numerical and experimental analysis of glulam and crosslam members

Ingo BURGERT (ETH Zurich, Switzerland)
Functional wood materials

Erik SERRANO (Lund University, Sweden)
Finite element analyses of fracture in wood and wood products

Call for Abstracts

Prospective authors are kindly invited to electronically submit an abstract related to a colloquium topic at the colloquium e-mail address **euromech556@mailbox.tu-dresden.de** by February 28, 2015. Please use for submission the word template file available at the official website **http://556.euromech.org**.

Hosting Scientific Institutions

Technische Universität Dresden (TU Dresden)
Institute for Structural Analysis

Vienna University of Technology (TU Wien)
Institute for Mechanics of Materials and Structure

Chairman

Michael KALISKE (TU Dresden)

Co-Chairman

Josef EBERHARDSTEINER (TU Wien)

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