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Issue 19



Proceedings of the
COST Action E40 Conference

Wood Quality and Niche Products

Edited by
Alfred Teischinger

in Co-operation:
COST - European Co-operation in the field of
Scientific and Technical Research
Action E40 - Innovative utilisation and products of large diameter timber

March 29th - 30th 2007
Grenoble, France

COST-aided

COST is an intergovernmental European framework for international co-operation between nationally funded research activities. COST creates scientific networks and enables scientists to collaborate in a wide spectrum of activities in research and technology. COST activities are administered by the COST Office.

Co-operation - LIGNOVISIONEN Issue 19

COST

COST- the acronym for European **CO**operation in the field of **S**cientific and **T**echnical Research- is the oldest and widest European intergovernmental network for cooperation in research. Founded in 1971, COST is an intergovernmental framework for European Co-operation in the field of Scientific and Technical Research, allowing the co-ordination of nationally funded research on a European level. COST Actions cover basic and pre-competitive research as well as activities of public utility.

The goal of COST is to ensure that Europe holds a strong position in the field of scientific and technical research for peaceful purposes, by increasing European co-operation and interaction in this field. COST has clearly shown its strength in non-competitive research, in pre-normative co-operation and in solving environmental and cross-border problems and problems of public utility. It has been successfully used to maximise European synergy and added value in research co-operation and it is a useful tool to further European integration, in particular concerning Central and Eastern European countries.

Ease of access for institutions from non-member countries also makes COST a very interesting and successful tool for tackling topics of a truly global nature. To emphasise that the initiative came from the scientists and technical experts themselves and from those with a direct interest in furthering international collaboration, the founding fathers of COST opted for a flexible and pragmatic approach. COST activities have in the past paved the way for Community activities and its flexibility allows COST Actions to be used as a testing and exploratory field for emerging topics.

The member countries participate on an "à la carte" principle and activities are launched on a "bottom-up" approach. One of its main features is its built-in flexibility. This concept clearly meets a growing demand and in addition, it complements the Community programmes. COST has a geographical scope beyond the EU and most of the Central and Eastern European countries are members. COST also welcomes the participation of interested institutions from non-COST member states without any geographical restriction. COST has developed into one of the largest frameworks for research co-operation in Europe and is a valuable mechanism co-ordinating national research activities in Europe. Today it has almost 200 Actions and involves nearly 30,000 scientists from 34 European member countries and more than 80 participating institutions from 11 non-member countries and Non Governmental Organisations.



34 member states in COST

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FORESTS AND FORESTRY PRODUCTS

COST Action E40

"Innovative utilisation and products of large dimensioned timber including the whole forest-wood-chain"

www.boku.ac.at/coste40

2004 - 2008 Chairman: Alfred Teischinger

BACKGROUND OF COST ACTION E40

In many European Countries large dimensioned timber ($\varnothing > 40$ cm) cannot compete with small diameter timber due mostly cost intensive harvesting and logging methods. Although it is well known that LDT has several special properties in terms of strength, fibre length or density there is a lack of scientific proofed evidence and methods for measurement.

Out of these problems the COST Action E40 was developed. Based on the knowledge compiled in the 4 working groups, strategies for innovative technical methods for processing, product development and marketing of this large diameter timber should be developed.

Objectives:

- Main objective: reach European wide and international competitiveness for large dimensioned timber products throughout the whole forest-wood-chain
- Scientific targets: properties and material characters of LDT, methods for standardized data acquisition, develop future strategies
- Technological targets: innovative technical methods, software tools for optimised product planning and realisation
- Economical targets: new products made by LDT and new markets for them

Benefits:

- Long- term strategies
- scientific evidence for specific properties
- new impulse for R&D
- strengthening the economic situation especially of SME's along the forest-wood chain

Scientific Programme:

The Action is divided into four scientific Working Groups each directed by an expert in the concerning field in order to guarantee professional guidance and high quality in the scientific approach.

Working Groups

Working Group 1: Data analysis

- Timber Stock Analysis
- Silviculture Analysis
- Wood Supply Chain Management



Working Group 2: Research

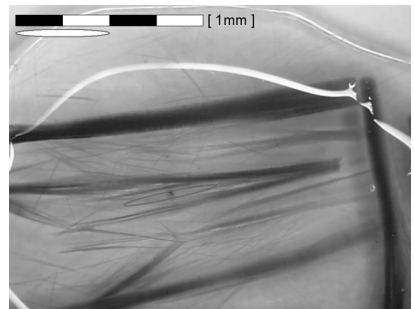
- Wood properties
- Scanning and Grading

Working Group 3: Processing technologies

- Optimized sawing structure and sawing techniques
- Determination of conversion factors and machining properties
- Optimisation and adaptation of drying technologies

Working Group 4: Product development

- Product Planning, design and development
- Creation of a label
- Outlining of rural development strategies



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Edited by Alfred Teischinger



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The current proceedings of the conference "Wood Quality and Niche Products" are in line with a series of workshops and conferences within the COST action E40:

- Survey on the large diameter roundwood situation in Europe, BOKU Vienna, Austria
- Concepts of large diameter roundwood processing, Göttingen, in alliance with LIGNA Hannover (international wood machinery fair), Germany
- Large diameter timber: Problem or Chance? Biel, Switzerland
- Processes and new products, innovation workshop, excursion to special large diameter roundwood forests, San Michele/Trento, Italy
- Innovation workshop "products from large diameter timber" Warsaw, Poland
- Wood quality and niche products, including excursion wood processing, Grenoble, France

The various presentations reveal a huge variety of possible niche products and special applications beginning with a specific fibre morphology of large diameter timber (LDT), solid wood applications but also marketing issues and challenges. How can a proper roundwood price be matched to the dimension or quality of the logs?

The proceedings are rounded up by a survey on the forest wood chain and LDT aspects in the Ukraine.

An die

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