

**5<sup>TH</sup> INTERNATIONAL SYMPOSIUM  
WOOD STRUCTURE AND PROPERTIES '06**

SEPTEMBER 3–6, 2006  
SLIAČ - SIELNICA, SLOVAKIA

It has already become a good tradition, that the Faculty of Wood Sciences and Technology of the Technical University in Zvolen organizes symposia in different topic areas of wood science and technology. Among them, a special importance had four symposia focused on the recent advances in the research on wood structure and properties.

The first Symposium “Wood Structure and Properties” was held in September 1990. The progress in this field of science resulted in the need to organize further symposia regularly. The 2<sup>nd</sup> Symposium was organized in 1994, and the 3<sup>rd</sup> one was held in 1998. The 4<sup>th</sup> Symposium was organized in 2002 on the occasion of the 195<sup>th</sup> anniversary of the establishment of the university forestry studies in Slovakia and the 50<sup>th</sup> anniversary of the activity of the Faculty of Wood Sciences and Technology of the University of Forestry and Wood Technology in Zvolen, since 1992 Technical University in Zvolen.

The fifth – jubilee symposium is organized as a joint event in cooperation with the IUFRO Division 5 Forest Products, RG 05.01.00 – Wood Quality. The Symposium was concentrated on the recent progress in evaluation of wood properties, biological control of wood quality and the influence of wood quality on final products, and to outline the trends of further development.

The Symposium was considerably larger this year, comprising a much greater number of scientists from both eastern and western countries. Especially, it brought opportunity for local scientists to meet international colleagues, to exchange ideas and to discuss ongoing research projects. This year we have welcomed participants from the following countries: Australia, Austria, Brazil, Canada, China, Croatia, Czech Republic, Finland, Germany, Greece, Hungary, Japan, Korea, Latvia, New Zealand, Poland, Romania, Russia, Serbia, Slovenia, South Africa, Spain, Sweden, Switzerland, USA, and Slovakia. We hope that this positive trend will sustain and this Symposium will become an important feature of the international wood science scene in the future.

**Main Topics of the Symposium**

The Symposium was divided into sessions according to following topics:

- Biological control of wood properties
- Wood structure and dendrology
- Fundamental knowledge and variation of wood properties
- Evaluation of wood quality and its influence on final products
- Behaviour of wood in relation to technological processes

## Summary of the Symposium

The programme of the 5<sup>th</sup> International Symposium “Wood Structure and Properties ’06” was successfully fulfilled. On this Symposium took part 101 participants from 23 countries including Slovakia. During 3 days, papers were presented in two sessions. The first session was aimed at the:

- Biological control of wood properties and
  - Wood structure and dendrology,
- where participants presented 27 oral presentations. The second session was aimed at the:
- Fundamental knowledge and variation of wood properties
  - Evaluation of wood quality and its influence on final products and
  - Behaviour of wood in technological processes

In this session, 61 oral presentations were presented. In the poster session there were presented 38 posters.

We would like to express many thanks to all participants for their presentations. From the session and out of session discussion among symposium participants, it is clear that the symposium was an enlightened and important technical forum for presenting new ideas of the research. Some specific themes and ideas arose during the symposium and the summaries are as follows:

- The knowledge of the properties of various wood species gives the possibility to evaluate their qualities, in order to utilize wood raw material more reasonably. Studying these features points to practical significance of wood properties knowledge from wood products quality point of view.
- Some knowledge of wood properties can be deduced from the empirical relationships between structure and properties. Several characteristic features of wood can be determined more rapidly at the field than exact characteristics obtained using laboratory experimental measurements. Strategy of the basic research should clarify and determine step by step the wood properties and relations more effectively and lay the base for innovative technologies.
- The presented papers showed that some wood properties require attention of researchers in relation to wood structure.
- We hope that the presented results should help not only to increase competitiveness in the field of wood research and wood technological applications, but they will also contribute to the cooperation among institutions and people.
- It can be concluded that the Symposium resulted in the need to organize the next 6<sup>th</sup> Symposium Wood Structure and Properties in 2010.