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IN SKOPJE
FACULTY OF DESIGN AND TECHNOLOGIES
OF FURNITURE AND INTERIOR – SKOPJE
REPUBLIC OF NORTH MACEDONIA**



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PREFACE

Dear Colleagues,

It is my pleasure to present you, Volume 13 of the International Journal WOOD, DESIGN & TECHNOLOGY, published by the Faculty of design and technologies of furniture and interior in Skopje at SS. Cyril and Methodius University in Skopje, Republic of North Macedonia.

The journal covers a wide range of research and development concerning wood science, design of furniture and interior and wood processing technology. Through this publication, we hope to establish and provide an international platform for information exchange in different fields of wood industrial engineering and design of furniture and interior. In this inaugural issue of the journal, seven papers are presented.

In the first original article presented in these issues *Matin et al.* have found that forest species had slightly higher lignin content, while energy crops had significantly higher ash content. The calorific value was higher for energy crops due to a slightly higher content of cellulose and hemicellulose in forest species, and as mentioned earlier, cellulose and hemicellulose have a lower calorific value than lignin.

In the second article, *Veizovi et al.* describe the influence of thermal modification schedules on the natural weathering of maple and ash wood. The ash control samples had a MC ranging from 12% to 27%, while the ash TM samples had MC mainly between 5% and 15%.

The paper of *Miri -Milosavljevi et al.* deals with the modeling of the bending creep of particleboard based on the results of an experiment conducted on specimens loaded with a uniformly distributed load. The parameters of the model were estimated for four models, i.e. the Power-law, Zener, Burger and modified Burger models.

Stamenkoska analyze the yield distribution in first and second class quality of fir and spruce sawlogs in North Macedonia. It was found that logs classified as first- class yield higher values for quantitative utilization, averaging 68.83%, while second-class logs show an average yield of 61.55%.

Džin i and Palija in their article elaborate the influence of particleboard squareness on the edge bonding quality. The highest strength of the glued joint was shown by the samples with the smallest angular deviation of the edge to the wider side of the panel. The minimum strength that the edge bonding should require are not defined by the standard.

Bukara and Mili examine the development of inhomogeneous colour changes in oak timber during conventional drying and its relation to moisture content distribution across the wood thickness. The results shed light on the complex interactions between wood species, drying parameters and discoloration formation.

Lovri et al. analyzed the influence of the quality of poplar logs on the yield in the production of veneer packaging. The authors conclude According to the results of the research, a significantly higher quantitative utilization (71.93% and 75.55%) was obtained with F and L class logs compared to quality class I and II logs (58.83% and 53.69% respectively).

Zlateski et al. evaluated the impact of length and diameter in beech (*Fagus sylvatica* L.) sawlogs on the yield and waste. This study provides a comprehensive assessment of how variations in length and diameter influence the yield and waste distribution in beech (*Fagus sylvatica* L.) sawlogs. By focusing on sawlogs with lengths of 4.0 m and 5.0 m across various diameter classes the authors identified significant trends and interdependencies between log geometry and processing outcomes. These findings are instrumental in optimizing sawmill operations and promoting sustainable resource utilization.

The article by *Krstev* is to assess how computer software designed for manufacturing preparation affects the time needed to create comprehensive technical documentation when launching a new product in a micro enterprise that specializes in custom cabinet furniture production. The author want to point that it is important to recognize that *Corpus* is not an intelligent system; it still relies on human input. Moreover, as artificial intelligence continues to advance in various fields, there may come a day when software in the furniture sector evolves to autonomously handle design tasks.

Stankevikj Shumanska showed the need and efficiency of women's ability, organization and their management, as well as the extent to which employees and the environment accept women as leaders, in our country and in the world.

Yours sincerely,

Prof. dr. Goran Zlateski
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