## SS. CYRIL AND METHODIUS UNIVERSITY IN SKOPJE FACULTY OF DESIGN AND TECHNOLOGIES OF FURNITURE AND INTERIOR – SKOPJE REPUBLIC OF MACEDONIA

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## Preface

Dear Colleagues,

We are more than pleased to present you with the fourth issue of the *Journal "Wood, Design & Technology"*. This issue covers 1 professional article and 9 original research articles.

In the first original article presented in these issues Mihajlova *et al.* have found that increment of the pressing temperature in certain limits has positive effect on physical and mechanical properties of the panels, i.e., water absorption and thickness swelling decrease, while bending strength and internal bond of the panel increase.

In the second article, Elva Çaushi *et al.* describe the current situation of Albanian wood products and furniture manufacturing industries as compared to the Western Balkans. During the last decade, these industries in the western Balkan countries have been greatly affected by economic cycles, rising production and transportation costs, and changing buyer habits

Iliev et al. studied the production of stable multipurpose plywood from deciduous raw materials that are resistant to prolonged water impact, as well as to mutual impact of water and heat. The research showed that panels are characterized by high stability during this kind of treatment. The panels showed consistency in form and dimensions, as well as consistency of the adhesion in glue lines.

Koljozov *et al* evaluate the effect of the number of circular saw blades on the cutting force and the cutting power. The research was focused on creating a mathematical model of the interaction mechanism between tool and wood as a workpiece. Analytical tool is designed for determining some important factors in the wood cutting process – cutting force, cutting power, etc.

Valyova and Ivanova analyze the influence of tartaric acid, ferric chloride, phthalic anhydride and quebracho extract on the setting time of phenol-formaldehyde resin and adhesive strength of adhesive-bonded joint. It was found that added compounds exert a positive influence on the setting time of the resin, as well as they improve binding strength of the produced plywood.

In the original articles of this issue, Zlateski *et al.* evaluated the timber drying quality according to European Drying Group (EDG) Recommendation in industrial dry kiln with convect drying process. Measurements and data analysis of the moisture content distribution in conventional dry kiln process indicate that 80% of moisture content readings were within the range satisfying the (Q) quality dried class, which guarantees quality production of final products from solid wood.

Jakimovska Popovska *et al.* in their article elaborate the nail withdrawal resistance of composite water-resistant wood-based panels for use in construction. The results of the research showed that the different veneer species used for particleboard overlay significantly impact the nail withdrawal resistance perpendicular to the plain of the composite panels.

Nikoljski analyzed Ithe design of a healthy and stimulating bedroom environment for preschool children. The author conclude that there are nine important dimensions of children's settings: softness, security, safety, privacy, order, autonomy, mobility, the adult dimension and ergonomics.

The article by Cherepnalkovska *et al.* describes construction product regulation (CPR 305/2011) and implementation of the harmonized standards in the area of wood-based panels in the Republic of Macedonia. By expression of the above standards, the authors want to point out that application of the harmonized standards and referring to them is the easiest and simplest way to guarantee product conformity with the essential requirements of the relevant Directive / Regulation.

In the last original articles of this issue, Aziri *et al.* showed that the multilayered plywood made from beech veneers are characterized by uniform density, stability in volume, without any deformation of the shape and dimensions of the test specimens

We hope that the papers in this issue will prove helpful toward the most recent developments in wood technology and product design. I would like to take this opportunity to thank the authors for their valuable contributions to this issue and the editorial staff for their dedication and hard work

Yours Sincerely,

Goran ZLATESKI

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