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# **WOOD, DESIGN & TECHNOLOGY**

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# P r e f a c e

Dear Colleagues,

This volume (Vol. 05, No. 01, 2016) of International Research Journal Wood, Design & Technology contains research articles related to fields of wood based panels, wood industry business management, MDF production, primary wood processing and wood drying. Each article provides an example of a concrete industrial application.

Ivanova and Valyova have investigated the interaction between beech wood and phenol formaldehyde resin. It was found that the activity of different materials in hydrogen bond formation can be made if the values of the applied characteristics form IR spectra. The results obtained confirmed the formation of hydrogen bonds in the mixtures of beech wood or its derivatives – PFR after different treatments.

The second article by Jakimovska Popovska and Iliev is entitled “Nail withdrawal resistance of composite water-resistant wood-based panels for use in construction”. The authors conclude that different wood species and their combinations used for particleboard overlay have significant impact on the values of nail withdrawal resistance perpendicular to the plain of the composite panels. Higher mean value of this property is achieved in composite models that have beech veneers in its structure, which is in accordance with the values of the density of the panels.

Stankevik Shumanska analyzed wood industry with relation to raw material basis, the installed capacities and the available professional staff in the Republic of Macedonia. This paper points out that the quality of products is a primary factor for the competitive advantage of wood industry enterprises across the markets in Europe and throughout the world.

Mihajlova and Savov in their article studied an examination with respect to the effect of some factors in the production of MDF. They found that MDF may successfully be produced entirely from wood of hard hardwood tree species. This may be accomplished in case of application of urea-formaldehyde resin.

Rabadjiski *et al.* analyzed the taper of beech logs. It was found that log taper is directly dependent on the diameter of thin and thick end of the logs. If the logs have a greater cylindrical shape the log taper is smaller and vice versa.

Zlateski *et al.* describe optimisation of drying schedules. The schedule of drying pine boards was defined. There are four phases in the drying schedule: heating, drying, equalizing and conditioning. It was found that the boards were dried from their initial average moisture content of 50,2 % to their final average moisture content of 10,0 % for a period of 8 days.

And in the end, I would like to point out that this issue would not have been possible without the great support of the Editorial Board members, and we would like to express our sincere gratitude to all of them. It is our hope that this fine collection of articles will be a valuable resource for scientists, engineers and people in wood industry and will stimulate further research into the vibrant area of wood science.

Yours Sincerely,

Goran ZLATESKI

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