COVER LETTER

Dear Editor-in-Chief of HEMIJSKA INDUSTRIJA

Herewith attached is the manuscript with the following title: **The Effects of water pretreatment on properties of pellets made from beech particles**, which we submit for the publishing in your esteemed journal Hemijska Industrija.

The general idea for this work comes from the global trends of wood utilization as the renewable and environmentally friendly source of energy. The manuscript itself addresses the possibility of improving the properties of wood pellets through introduction of water pretreatment in the pellet production process. The application of water pretreatment on wood material changes its properties in several ways. Primarily, the carbon content and the heating value of treated wood are increased, while the ash content is decreased. Water pretreatment also reduces the amount of hemicelluloses, which have relatively lower heating value (16.2 MJ/kg) amongst the main wood components. Hence, the pellet produced with water treated wood particles, having appropriate moisture content (10.54%), showed higher heating value and lower ash content, with improved physical properties (higher density and lower equilibrium moisture content) in regard to the pellet made from nontreated particles. In addition, the introduction of pretreatment may rationalize the utilization of wood, since the extracted hemicelluloses sugars may be used for further processing (xylitol, furfural, etc).

STATEMENTS

As the first author, I confirm that the above manuscript is an original work of me and stated co-authors. This manuscript has not been published in this form before and will not be submitted for publication elsewhere while in the reviewing process in the journal Hemijska Industrija. If accepted, it will not be published elsewhere including electronically, in the same form, in English or in any other language, without the written consent of the copyright-holder.

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Best Regards

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