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9th June, 2015

Dear Editor

Herewith, I am submitting the manuscript of our paper entitled “Original enzyme-catalyzed synthesis of chalcones: Utilization of hydrolase promiscuity’. It describes the first synthesis of chalcones (1,3-diaryl-2-propen-1-ones) via enzyme-catalyzed Claisen-Schmidt condensation. Such “green” approach to synthesis of these compounds is of great interest, because of their important applications as formula ingredients in pharmaceutical, food and cosmetic industry. However, the material so far is sufficient to be published as a Short Communication and as such it could be of help to some researchers willing to try enzymes for chalcone synthesis. We found that 3 representatives from a set of hydrolases were active towards the chalcone synthesis in the presence of imidazole as a promoter. This is a new example for hydrolase promiscuity. Further investigation of this reaction will be performed in view of clarifying the *modus operandi* of imidazole. Applying molecular modeling, protein engineering, and process engineering tools should help for finding the optimal conditions to reach high yields and selectivity in the biocatalytic synthesis of variously substituted chalcones.

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We believe that this work strongly contributes to the development of large-scale methods for synthesis of chalcones with significant properties, which is highly topic. Hopefully, you will find it suitable as a Short Communication for the Journal of Serbian Chemical Society.

Yours truly,

Assoc. Prof. Dr. Daniela Batovska