Dear Editor,

The enclosed paper “Effective valorization of barley bran for simultaneous cellulase and β-amylase production by *Paenibacillus chitinolyticus* CKS1: Statistical optimization and enzymes application” presents results obtained using agricultural by product of the barley milling process- barley bran as a resource for an economically and environmentally acceptable enzymes production. Obtained enzymes can be used in the process of hydrolysis for obtaining valuable biotechnological products.

In the presented study we have used barley bran as substrate for simultaneous production of cellulase and β-amylase using a bacterial isolate *Paenibacillus chitinolyticus* CKS1.This study represents a novelty in using barley bran as agricultural by product for simultaneous cellulase (CMC-ase and Avicelase) and β-amylase production by genus *Paenibacillus*.There have been no studies, so far, about simultaneous cellulase (CMCase and Avicelase) and β-amylase production from *Paenibacillus* using agricultural by products or barley bran as substrate which makes our results fundamental. Also, degradation of barley bran using genus *Paenibacillus* was not previously reported in literature.

Conditions for cellulase (CMC-ase and Avicelase) and β-amylase production were optimized in a liquid medium using response surface methodology. The results of the study are also highly applicable since the produced cellulase and β-amylase could hydrolyse cotton waste material and barley bran, respectively with an additional secondary product from the process – glucose and maltose. Considering that the production of the enzymes is very expensive, preference is given to bacterial isolate which produce simultaneously two enzymes using low cost substrate. According to this, *P. chitinolyticus* CKS1 is a promising candidate for saccharification of lignocellulosic biomass for bioethanol production.

We trust that this work will have a considerable impact and hence hope that the manuscript can be considered for publication in Journal of the Serbian Chemical Society.

The authors have seen, read, and understood the journals guidelines on copyright.This manuscript describes original work and is not under consideration by any other journal. All authors approved the manuscript and this submission. The authors declare no conflicts of interest.

On behalf of other authors with kind regards,

Dr Katarina Mihajlovski

Dept. Biochemical Engineering and Biotechnology

Faculty of Technology and Metallurgy

University of Belgrade, Serbia

Address: Karnegijeva 4, 11000 Belgrade

Tel.: +381 64 1731020

E-mail: kmihajlovski@tmf.bg.ac.rs

List of proposed reviewers:

1. Esther Menendez

Universidad de Salamanca ,Department of Microbiology and Genetics, Spain

esthermenendez@usal.es

2. Antonio Francesko

Universitat Politecnica de Catalunya, Molecular and Industrial Biotechnology group, Spain

email: antonio.francesco@upc.edu

3. Anita Klaus

Faculty of Agriculture, Food Technology and Biochemistry, Serbia

aklaus@agrif.bg.ac.rs