Dear Ms Nedić,

We have decided to undertake the revision of our original manuscript in accordance with Your decision. All reviewers’ suggestions and corrections are answered and point-by-point list of responses to the reviewers’ comments are given in following text. In order to meet all reviewers’ requests, we have inserted additional Table that summarizes the most important relevant support parameters. Likewise, additional experiments were performed, and an additional figure and proper discussion are provided in the revised manuscript. Finally, in accordance with the editors’ request correction of the figure 2. axis was performed. All performed corrections are highlighted in the revised manuscript.

We hope You will be satisfied with quality of the revised manuscript and responses to reviewers’ comments.

Kind regards,

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**Response to reviewers` comments**

**Reviewer 1:**

*- Introduction section: authors should explain their choice of supports used for this i-immobilization. They should give more details about their mechanical and chemical properties, main advantages concerning application in bioreactor etc. On the other hand, Purolite A 109 is not intended for use as an enzyme immobilization support, but rather as an ion exchange resin, so please explain this choice.*

**Answer:** In accordance with both reviewers` requests we have inserted a new table that summarizes the most important relevant parameters of employed supports. Also, main reasons for support selection are highlighted in the revised manuscript.

*- In the results section, Table 1, it could be useful to add another column with the results of specific activity of the immobilized enzymes, and discussion about these results.*

**Answer:** In order to meet the reviewers` request, additional column comprising the results of specific activity of the immobilized preparations and appropriate discussion were added in the revised manuscript.

*- On page 8, authors presented the support capacities achieved when using thiosulfonate supports. Is it possible to compare these results with the capacities achieved on unmodified supports or epoxy supports?*

**Answer:** In revised manuscript we have compared capacities of thiosulfonate supports with capacities of unmodified supports and epoxy modified supports used throughout this study.

*- Also, during the immobilization mechanism study, please indicate if immobilization mechanism of enzyme on thiosulfonate supports is similar to immobilization mechanism on epoxy supports.*

**Answer:** In order to meet the reviewer request, we have analyzed these mechanisms briefly in the introduction section of revised manuscript.

**Reviewer 2:**

*- Please provide essential information of Eupergit C and Purolite supports such as (non)porosity, particle size, mechanical properties etc.*

**Answer:** We have inserted an additional table covering the most relevant support properties (porosity, particle size, specific surface area…) and extended the corresponding discussion.

*- Specify value of Δt in calculation of enzyme activity. Since it is usually susceptible to large experimental errors, have parallel experiments been conducted? Was it a linear part of the c vs t curve, i.e. initial reaction rate*

**Answer:** Enzyme activity was measured using *p*-nitrophenyl-*α*-D-glucopiranosyde (*p*-NPG) as substrate. The reaction was allowed to proceed 2 min, (during that period released *p-*NP was measured every 0.5 min) in order to ensure initial kinetics conditions. Constructed graph (c-t curve) was linear and its slope was used for enzyme activity calculations. All experiments were performed in duplicate, and average values are presented throughout the manuscript.

*- What does the activity in blank experiment mean? Please define this in a sentence.*

**Answer:** We added the explanation of the term “ the activity of the blank sample” in the revised manuscript.

*- Line 145 Authors state that the second modification step resulted with decrease ….it is not clear of what (protein immobilization yield?). Please add the clarification.*

**Answer:** We are thankful to the reviewer for noticing this omission, in the revised manuscript we have defined that the modification resulted in protein immobilization yield decrease.

*- Was the operational stability of the immobilized enzyme tested in a reactor System?*

**Answer:** In order toanswer reviewers` question, an additional experiment, namely the thermal stability study at temperatures higher than optimal operational, was performed, in terms of getting better insight into the enzyme stability. The obtained results were inserted in the revised manuscript.