Monday, February 22nd 2016

Dear Dr Nikolić,

Please find enclosed a manuscript entitled “**Relevance of N-terminal Proline for the Promiscuous Activity of 4-Oxalocrotonate Tauromerase (4-OT)**”.

The manuscript describes:

* Effect of substitution of 4-OT terminal proline (Pro1) with basic amino acid lysine containing ε-amino group was examined by generation of three specific 4-OT variants containing lysine at N-terminus
* Three different 4-OT variants generated by site-specific mutations, were assessed for the ability to utilise β-nitrostyrene (1), (*E*)-2-(thiophene-2-yl)nitroethen (2) and *p*-chloro-*trans*-β-nitrostyrene (3) as Michael acceptors with isobutanal as Michael donor
* Direct comparison of biocatalytic reactions with the reactions utilizing Li salts of Lysine as catalyst

No study has previously examined the effect of lysine mutations on promiscuous activity of 4-OT. The major finding was that Pro1 is important for promiscuous activity of 4-OT but not essential, since generated lysine mutants showed slight improvement in activity on tested substrates **2** and **3**.

Thus we feel that our results reflect the multidisciplinary nature of the work, and that you would find it suitable for the publication in the Journal of the Serbian Chemical Society.

We also suggest three possible reviewers:

**dr Maya Guncheva**

Institute of Organic Chemistry, BAS

Acad. G. Bonchev Str. Bl. 9, Sofia – 1112, Bulgaria  
[e-mail: maiag@orgchm.bas.bg](mailto:e-mail:%20maiag@orgchm.bas.bg)

**dr Radivoje M. Prodanović**

Faculty of Chemistry

Studentski trg 12-16, Belgrade, Serbia

e-mail: [rprodano@chem.bg.ac.rs](mailto:rprodano@chem.bg.ac.rs)

**dr Igor Opsenica**

Faculty of Chemistry

Studentski trg 12-16, Belgrade, Serbia

e-mail: igorop@chem.bg.ac.rs

Kind regards,

dr Lidija Đokić