**Reviewer A:**

ADDITIONAL COMMENTS

Please indicate the page numbers for suggested corrections.

Please, be as specific as possible if major correction by the author(s) is recommended! : see the report

REPORT:

The manuscript entitled "Towards edible ionic liquids – cholinium taurate" is a very interesting and up-to-date study of a newly synthetised ionic liquid and its potential use as a dietary supplement. The study contains the analysis of the cholinium taurate structure, thermal stability, thermophysical properties and antiproliferative activity. The manuscript is very well structured, comprehensible, and sends a clear message to a reader.

I would recommend publication of the manuscript after considering a few minor suggestions.

*Thank You very much for acknowledging the significance of the Manuscript. We have improved the Manuscript thoroughly and hopefully in its present form is ready to be considered for publishing.*

1. Brief information regarding experimental conditions should be introduced in the Abstract section (for example temperature and pressure conditions for density and viscosity measurements, etc.).

*It is corrected, as suggested.*

1. The sentence "In recent years,..." (lines 51 and 52, Introduction section) is unfinished.

*It is corrected, as suggested.*

1. Define abbreviations, for example EDTA.

*It is corrected, as suggested.*

4. Figure 2 is very briefly discussed, discussion should be extended for all obtained results (DTA, DSC curve...).

*We have improved the discussion about DTA and DSC curve in the Manuscript thoroughly and hopefully in its present form is enough.*

*It can be seen from Figure 2 that the decomposition is* ***a*** *two-stage process, and begins at the 197 ºC. Thermo-gravimetric analysis for choline ionic liquids with amino acids containing the COO group instead of SO3 group showed one-stage thermal decomposition between 150˚C - 203˚C (10.1039/C2GC16128A). Based on the weight variation curves, the temperature by 2 and 5% weight loss (T2%, T5%) was specified, and obtained values are 137.4 oC and 189.2 oC. High thermal stability of ionic liquid does not require special temperature conditions during warehousing and preservation. Also, presented thermal stability enables high...*

5. Reference for the thermal stability of choline chloride (line 204) is missing.

*Thank you for the insightful observation. It is added (*[*D. J. Tao*](https://pubs.acs.org/author/Tao%2C+Duan-Jian)*,* [*Z. Cheng*](https://pubs.acs.org/author/Cheng%2C+Zheng)*,* [*F. F. Chen*](https://pubs.acs.org/author/Chen%2C+Feng-Feng)*,* [*Z. M. Li*](https://pubs.acs.org/author/Li%2C+Zhang-Min)*,* [*N. Hu*](https://pubs.acs.org/author/Hu%2C+Na)*,* [*X. S. Chen*](https://pubs.acs.org/author/Chen%2C+Xiang-Shu)*, J. Chem. Eng. Data* ***58*** *(2013) 1542. (*[*https://doi.org/10.1021/je301103d*](https://doi.org/10.1021/je301103d)*))*

6. Provide the equation for "Gibbs energy of activation for viscous flow" or literature source; it is molar so please add the complete name of the property if necessary (is it excess property?).

*The part with "Gibbs energy of activation for viscous flow" is removed from Manuscript. Instead of that, the viscosity results are presented as variation of viscosity with temperature in improved version of Manuscript.*

7. The Abstract in Serbian contains a few typographical errors.

*Thank You, it is corrected in the Abstract in Serbian language.*

In my opinion, this manuscript should: be published after minor revision without additional review.

**Reviewer B:**

ADDITIONAL COMMENTS

Please indicate the page numbers for suggested corrections.

Please, be as specific as possible if major correction by the author(s) is recommended! :

1. Concerning the experimental part, no information is given on the water content of the samples? Performing Karl-Fischer titrations would be welcome to clarify this issue.

*Thank you for the suggestion. It is added in the Manuscript.*

What was the inert standard for calibration of the TA/DSC analyzer?

*Thank you for the question. The instrument was calibrated (temperature and enthalpy) using the indium standard. It is added in the Experimental part of the Manuscript.*

2. It is not clear that how the Gibbs energy of activation for viscous flow was calculated? Authors should add some equations used for such a calculation.

*The part with "Gibbs energy of activation for viscous flow" is removed from Manuscript. Instead of that, the viscosity results are presented as variation of viscosity with temperature in improved version of Manuscript.*

3. Based on the density results, the authors could calculate the thermal expansion coefficient for ionic liquid and honey. Please do so, since these data are important for industrial processes.

*Thank you for the insightful question. Based on the density results, the thermal expansion coefficient for ionic liquid and honey are calculated and tabulated.*

4. How do the authors explain the increase in the toxicity of [Chol][Tau] compared to the compounds from which it is synthesized?

*Formation of additional non-covalent interactions between cation and anion (choline and taurate; [Chol]+ and [Tau]–), allowing a different type of transfer through the cell membrane (through passive diffusion) and thus enable entry into the cell through the cell membrane and thus the expression of toxicity.*

5. In the introduction, the growing application areas of ILs are mentioned, but no relevant citations are given. For instance, colloidal particles dispersed in ILs or in IL solutions are important class of materials in many of the listed applications. For example the following relevant papers should be cited to address this issue: Phys. Chem. Chem. Phys. 2014, DOI: 10.1039/c4cp00804a, Phys. Chem. Chem. Phys. 2016, DOI: 10.1039/c5cp07238g and J. Phys. Chem. C 2019, DOI: 10.1021/acs.jpcc.9b03983.

*Thanks to Your important observation we acknowledge that we did not address the use of the articles related to colloidal particles dispersed in ILs or in IL solutions in the previous version of the Manuscript, so we have revised it and now clearly indicated references connected to this field.*

*Thank You very much for acknowledging the significance of the Manuscript. Thank to Reviewer for sharing the valuable experience with us. Some weak points are revised, as suggested from You. We have improved the Manuscript thoroughly and hopefully in its present form is ready to be considered for publishing.*

REPORT:

The manuscript „Towards edible ionic liquids – cholinium taurate“ deals with the physico-chemical characterization of [Chol][Tau] IL. On the basis of the results, its use in the food industry was recommended to prevent the development of microorganisms for instance. In general, the topic is interesting, the findings bring significant novelty and the experiments are well-performed. In addition, the text is well-written and the conclusions are adequately supported by the experimental data. I recommend publishing this nice piece of work in the Journal of the Serbian Chemical Society, provided the mentioned minor issues are addressed in a revised form.

In my opinion, this manuscript should: be published after minor revision without additional review.