**Reviewer A:**

REPORT:

The present paper is interesting contribution since it studies a particular sustainable mixed solvent. Studies of this kind are always welcomed since they offer the possibility of tuning of solvents performance simply by changing its composition. I suggest this as a very imminent future task for the authors. After some minor changes, stated below, are included, the paper is certainly suitable for publishing.

1. Line 43: Should be said “…One class of the new green solvents are Deep Eutectic Solvents (DESs)…”

**ANSWER:** The sentence is changed according to Reviewer’s suggestion as follows: “*One class of the new green solvents having these appealing properties are called deep eutectic solvents (DESs).*”

2. Caption to Table III: it should be states “…ternary system Heptane (1) + Methanol (2) + DES (3)…” and “…ternary system Toluene (1) + Methanol (2) + DES (3)…”

**ANSWER:** Caption to Table III is now renamed as follows: “*Experimental tie line compositions, distribution ratio and selectivity values for the ternary systems Heptane (1) + Methanol (2) + DES (3) and Toluene (1) + Methanol (2) + DES (3) at 298.15 K and at atmospheric pressurea,b*”.

3. Figure 2: It should not be said that dots represent curves and lines. I suggest “Filled circles represent cloud points depicting the related bimodal curve…” and “…Lines connecting hollow circles refer to tie lines…”

**ANSWER:** Figure caption is now renamed as follows: “*Experimental ternary LLE diagrams at 298.15 K for: (a) heptane (1) + methanol (2) + DES (3); (c) toluene (1) + methanol (2) + DES (3); Filled circles represent cloud points depicting the related binodal curve and lines connecting hollow circles refer to tie lines*”.

4. Figure 3 is not very clear since the experimental and modelled results agree very well and the lines practically coincide. I suggest that Figure 3 should be excluded and only table representation of the comparison (Table IV) should be given, with rmsd included.

**ANSWER:** According to Reviewer’ssuggestion,Figure 3 is excluded from the manuscript and now only Table IV is expressing modeling results. The rest of the tables are renumbered.

5. In Table 4 σ should be defined and equation (15) cited.

**ANSWER:** Table IV caption is now renamed as follows: “*Binary interaction parameters obtained for NRTL and UNIQUAC equations for two ternary mixtures Heptane (1)+Methanol (2)+DES (3) and Toluene (1)+Methanol (2)+DES (3) along with root-mean-square deviation (σ) calculated by equation (15)*”.

6. In Table 4 NRTL and UNIQUAC should be given in table columns with the respective deviations.

**ANSWER:** Table IV now includes the respective deviations for NRTL and UNIQUAC models in two separate columns.

7. Lines 349 and 350: should be stated that the parameters and energies of activation are given for the system DES+Glycerol

**ANSWER:** The sentence is now cited as follows: “*Calculated parameters, energy of activation and evaluated goodness of fit statistic R2 for the system DES+Glycerol (choline chloride:dl-malic acid:glycerol is in molar ratio 1:1:0.5) are presented in ESI (Table SIV).*”.

**Reviewer B:**

REPORT:

Experimental Investigation and Modeling of Thermophysical and Extraction Properties of Choline Chloride + dl-Malic acid Based Deep Eutectic Solvent

The experiments seem to be carried out carefully and thus the data are reliable. The treatment of data is correct and the obtained results are new and interesting. This paper could be suitable for publication in this journal Journal of the Serbian Chemical Society while some improvements as

mentioned in the letter above have been made.

Reviewer(s)’ General Comments to Authors:

1. Page 4, line 94, and page 5, line 103, which was exactly pressure (Authors mentioned vacuum)? The pressure value along with the water content is therefore crucial in assessing the success of the drying procedure.

**ANSWER:** Vacuumpressureapplied for drying the samples was around 5 mbar. This information is now in the manuscript and the change is highlighted.

2. At the end of Results and their Discussion, additional measurements with water and glycerol are well known things. Because of that, these measurements distract from the basic idea of the separation of these two components of the azeotropic mixture and any discussion or experiments were not done in terms of how addition of water and glycerol affected the efficacy of separation.

**ANSWER:** The measurements of DES+water and DES+glycerol mixtures are part of the DES characterization. These data for density, viscosity and refractive index are missing in the literature for this particular eutectic mixture. The basic idea of this work is investigation of extraction ability of DES for azeotrope separation. We consider mentioned data as necessary for design of separation processes applying DES+water or DES+glycerol as solvent mixtures. The investigation of their extraction ability can certainly be the part of our further investigation.

3. Which were used models for KF titrator, NMR and DSC instruments; (Authors wrote models for digital vibrating U-tube densimeter, viscometer and refractometer)?

**ANSWER:** The suppliers for each instrument are now listed: DSC (Micro Cal MC-2 sensitive differential scanning calorimeter), NMR (Bruker AVANCE III 500 NMR spectrometer (500.26 MHz for 1H, 125.8 MHz for 13C, with 5mm BBO probe head)) and KF (Metrohm KF Titrator (798 MPT TITRINO, 703 TI STAND, 728 STIRRER)). All changes are highlighted.

4. Authors wrote abbrevation “ILs“, page 13, line 270, but they were not previously explained what that means.

**ANSWER:** In page 13 abbreviation for ionic liquids (ILs) is now introduced and the change is highlighted.

5. Same thing with abbrevations is with “ NRTL and UNIQUAC models“, without explanation mentioned in the Abstract and at the page 4 , line 76 in the introduction. References 20 and 21 should be mentioned in page 4, line 76.

**ANSWER:** The full names for Non-random two-liquid (NRTL) and Universal quasichemical (NRTL) models are introduced in the Abstract and Introduction sections. All changes are highlighted. Also, References 20 and 21 are now introduced in page 4, being renumbered to references 15 and 16, respectively. The rest of the references are renumbered too.

6. Should be given in Manuscript CAS number for used chemicals (Table I)

**ANSWER:** CAS numbers are now introduced in Table I for choline chloride and dl-malic acid, according to Reviewer’s suggestion.

7. Beware about units, especially for temperature. It has been noticed that everywhere in Manuscript are “K” used for unit, but on page 5 (line 95) C)°and in caption for Figure I that is not case (Authors wrote °C)

**ANSWER:** Thanks to Reviewer’s suggestion, now all temperature units are consistent and given in K.

8. Everywhere in text are for example “298.15 K” but in the caption for Figure 1 is not the case (there is “298.15K”)

**ANSWER:** Thanks to Reviewer’s suggestion this typographical error is corrected and the change is highlighted.

9. Page 8, line 165, γ should be written as italic.

**ANSWER:** The change is made and *γ* is now given in Italic letters.

10. Page 21, line 399, there is one latin letter “s“ written in Cyrillic Abstract.

**ANSWER:** This typographical error is now corrected, thanks to Reviewer’s suggestion.