

Quiz 2- Biomass

1. What are the parameters which must always be specified for a user-defined conventional solid?

- ☐ (A) Molecular weight, solid enthalpy of formation
- ☐ (B) Solid heat capacity, solid molar volume, temperature of fusion
- ☒ (C) Molecular weight, solid enthalpy of formation, solid heat capacity, solid molar volume
- ☐ (D) Temperature of fusion, solubility in water, solid molar volume, molecular weight
- ☐ (E) Molecular weight, solid Gibbs energy of formation, solid heat capacity, solid molar volume

2. What are the reagents for the Organosolv process, apart from biomass?

- ☐ (A) Water and ethanol
- ☐ (B) A homogeneous catalyst, like sulfuric acid
- ☐ (C) An organic solvent, like ethanol
- ☒ (D) Water, a homogeneous catalyst and an organic solvent
- ☐ (E) Water, a heterogeneous catalyst and an organic solvent

3. What is the equation used to calculate the vapour pressure (parameter PLXANT)?

- ☒ (A) Extended Antoine Equation
- ☐ (B) Wagner Vapor Pressure Equation
- ☐ (C) PPDS Modified Wagner Vapor Pressure Equation
- ☐ (D) IK-CAPE Vapor Pressure Equation
- ☐ (E) NIST TDE Polynomial for Liquid Vapor Pressure

4. The tab "CI Solid" doesn't appear when I create a new material flow, what should I do?

- ☐ (A) Create a new simulation from a different template
- ☒ (B) Change the Steam class in the Setup of the Simulation
- ☐ (C) Add all my components in the Mixed tab

5. I made a mistake when entering the solid heat of formation of cellulose, how can I most efficiently fix it?

- ☐ **A** Delete the compound and start again
- ☐ **B** Ask my TA to do it for me
- ☐ **C** Type the corrected value in the REVIEW tab
- ☒ **D** Type the corrected value in the USERDEF tab