

Laboratory Report Guideline

Freezing Point Depression

1. **Cover Page** - title of the report, name, partner's name

2. **Data**

unknown ID

three graphs - freezing point of pure water, freezing point of non-electrolyte solution, and freezing point of electrolyte solution

determine the freezing point from all the graphs

3. **Calculation**

calculation of average freezing point of pure water, non-electrolyte, and electrolyte solutions

an example of calculation of the molar mass of the non-electrolyte solution

an example of the van't Hoff factor value of the electrolyte solution

4. **Results and Discussion**

general errors from the experiment

% error calculations for both non-electrolyte and electrolyte solutions and explain the value: what possible errors?

5. **Conclusion**

general summary of the experiment

restate the results - the freezing point of water, the average molar mass of non-electrolyte substance, and the van't Hoff factor value of electrolyte substance

answer questions on page 42 - #1, 2, and 3 (be specific to your answers)

6. **Reference**

Reminder: be sure not to use pronouns and make sure all the graphs and calculations have units, appropriate significant figures, and labels