General Feedback 1.

CHEM 3492 –Reports 1

Note: you can choose the title that best describes what you did !

Abstract: No more than half a page. Identify the main goal of the work and write down all new/important measured results with uncertainties. Give a very short description of (1) instruments used in measurements and (2) theoretical methods/models. A “one sentence” -brief comparison with previous work or referenced results (literature values). Needs “one sentence” about conclusions and relevance. You must identify what is important!!!!

Introduction: More than three pages. NO your RESULTS ARE TO BE PRESENTED HERE. You must clearly cover all applied methods of measurements and all theoretical methods used. The reader must understand the procedures. Provide references to other relevant material. You must cover all important points so that your peers can repeat the experiment. It is important to visualize the devices and physical objects used and describe what you– not others –did with them. Check the meaning of your words. Use photography and drawing tools to better explain instrumentation etc. Link the goals you have with the previous knowledge. You can briefly identify here what is expected when experiments/measurements started. Visualizations of chemical reactions, formulas, molecular structure and other available information is very important here, as well as in the results section. Write in clear easy to understand sentences. Make sure that the information is not overwhelming or irrelevant to the work you do. You can present some of your theoretical work here, but it is much better to put theoretical calculation results in the results section (if that was your work) or (if not your work) in the discussion, which is actually closer to the results !!!!

Results : Long, all pages you need. The reader should have access to all your results. Visualize the data from tables and files into the graphs, charts maps etc. Present clearly the results in the form that will be used in the discussion and for the comparison with other relevant literature values. YOUR results and uncertainties are mandatory here. Avoid mistakes by reading twice what you have written!! Think about the methods/tools you use for the better visualization of the results. Present the literature values and modeling results that are directly comparable with your measurements also here with your experimental results, but clearly identify what is what!! Consult the lab notebook, the textbook and the web forms to see if some information is missing. You should put here the photos captured during the experiment, LabView captures, acquired files and diagrams etc.. You must put and reference the hardcopy or file-produced figures, plots, diagrams, charts , fits, etc. that contain your data.

Discussion: At least three, better more pages. Focus on the results and your goals. Comment on the specific outcomes of your measurement procedures (described earlier in the introduction) –what worked, what was to be abandoned, changed etc. This is the place to double check your calculations and uncertainties. Do results make sense? Address data, assumptions, other information you have and compare them with the results of models. Evaluate the quantitative agreements or disagreements and discuss the consequences for the models used. Identify conclusive results and those that may be inconclusive. Make sure you are in control and understand (reasonably) the material. For open ended thoughts there is room in conclusions. Which model, approach did work better? What are the next steps – the link between known and unknown? Are instruments you used good for the goals you projected? Do you need something better, based on the results you obtained here?

If needed, add more tables, graphs etc . visualization components here or go back into results and change the way you presented the results to emphasize your point (NOT TO CHANGE THE RESULTS)

If needed, consult with me or TA here.

Conclusions: Yours: – it must summarize one or two main points and your reflections. You can identify future perspectives and your scope of interests. Think about bigger picture too. What are the consequences of your results for the work you do (chemistry). What, if anything, was completely unusual and unexpected, almost unexplained? Would you do things differently next time?

References: All you used