

Department of Chemistry - Macquarie University

Student Learning Experiences in the Laboratory

This survey will be used by the Department of Chemistry for the purpose of maintaining or improving the quality of this experiment for teaching purposes. Your cooperation in completing this anonymous form is greatly appreciated. It is not connected in any way to your assessment for this unit. Completion of this survey is voluntary.

Occasionally we would like to release this information into the public domain, for instance through presentations at conferences and publication in articles for journals. Such publication encourages discussion on good teaching practice. We would appreciate receiving your permission to publish your anonymous comment. If you **do not** wish to release your comments, please tick the box below.

I do not give permission for my comments to be used beyond the Department of Chemistry, Macquarie University.

The ethical aspects of this study have been approved by the Macquarie University Ethics Review Committee (Human Research). If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Research Ethics Officer (telephone [02] 9850 7854, fax [02] 9850 8799, email: kdesilva@vc.mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

Unit: CHEM102

Experiment Name or Number: SOLUBILITY AND COMPLEX EQUILIBRIA

1 Did this experiment help you to understand the theory and concepts of the topic? If so, how, or if not, why not?

Yes, the use of equations and trial calculations with its description were easy to take in, and also use in the actual experiments.

Yes. Seeing the process in practice allows me to tangibly understand the concept It helps explain what calculations apply to what situations.

Yes. Not a clue how or why but I understand it now.

Yes. I could see what was happening and the relationship between different quantities of reactants.

2 How is this experiment relevant to you in terms of your interests and goals?

I am completing a dipED to teach science but would also like to work in research.

It helps me understand the concepts a lot and therefore helps me with the course.

It helps me to better understand the concept which will hopefully help me get better marks in the exam. Good practice for prac tests as well.

Like all the other experiments my goal is to understand them in terms of concepts, so I think that it was a motivation to improve in my "chemistry".

Not very.

3 Did you find this experiment interesting? If so, what aspects of this experiment did you find of interesting? If not, why not?

Yes, the use of colorimeter was very interesting and the calculations followed were logical, so that was another interesting task.

Not particularly. It wasn't very exciting!

Yes. All pracs are interesting. It's just what I enjoy.

Definitely. The use of new equipment like the colorimeter is always of interest.

Not really test are too tedious

4 Can the experiment be completed comfortably in the allocated time? Is there time to reflect on the tasks while performing them?

Absolutely!

Yes.

This experiment was finished comfortably in the time frame but others are much more time consuming. Often its just a rush to get through the work and the real concept comprehension gets overlooked.

Not sure, we only did half (I think).

5 Does this experiment require teamwork and if so, in what way? Was this aspect of the experiment beneficial?

Doesn't require teamwork, however talking through problems with teammates can be really constructive.

No.

No.

No.

6 Did you have the opportunity to take responsibility for your own learning, and to be active as learners?

Yes.

Sort of.

Yes.

Yes.

7 Does this experiment provide for the possibility of a range of student abilities and interests? If so, how?

Yes.

It helps with techniques involving colorimeters titrations but it doesn't really test your abilities any further than that.

It was fairly basic experiment through calculations were a little more time consuming.

Yes. Anyone can pour solns into each other.

8 Did the laboratory notes, demonstrators' guidance and any other resources help you in learning from this experiment? If so, how?

Demonstrator wrote very basic notes which were in the lab notes so no, they weren't particularly useful but a good guide to necessary calculations.

Yes. If I'm not sure of something the demonstrator can explain it so I do.

Different demonstrators often help in varying degrees. It has a lot to do with the rapport between student and demonstrator. My current demonstrator seems irritated by my asking questions sometimes, however he seems OK with others in the group.

Lab notes give us something to study for in test.

9 Are there any other features of this experiment that made it a particularly good or bad learning experience for you?

Not particularly.

Not really.

I enjoy chem especially lab sessions!

No.

10 What improvements could be made to this experiment?

A smaller class group so that people aren't so rushed and pressured by their neighbours work.

Can't think of any.

Work the centrifuge machine ourselves.

11 Any Other Comments

Demonstrators should be actively checking each student or team's grasp of the experiment. Making sure they know why they are doing what they're doing.