

Report Recommendations for FTIR Structure Determination

Introduction:

Statement of the problem and goals

Determine the functional group class and structure of an unknown liquid by FTIR

General approach to the problem

Students should give a very brief statement of their approach to solving the above stated problem. This should NOT be an experimental section but should be more of a general approach to the problem.

Form

Is this an introduction? These are discretionary stylistic points.

Conclusion:

Conclusion

This is much like a concluding paragraph on an essay and is a summary statement related to the purpose of the lab.

Form

Is this written like conclusion section?

Discussion:

Discussion

The discussion section states the major conclusions drawn from the results in light of how these results compare to or contrast with previous findings by other scientists. The discussion section is where the burden of proof falls on the researcher. Every article makes certain claims of results found. Here is where you must show that you were correct in making your conclusions and that your results mean what you say they mean.

Some things that should be included:

How was IR used to determine functional group

What logic is used to determine remaining structure

Limitations of method

Form

Is this written like a discussion section?

Experimental:

Logical description of the procedure as ACTUALLY followed

Form

Is this written like an experimental section?

Calculations:

Sample calculations

Just a description of how the structure was determined. This may show up elsewhere.

Data/Results:

Data

Spectra

Spectral assignment to get functional group

The spectrum or reference to the spectrum used for comparison