

6.2: THE WHY- THE REASONS FOR DOING THE EXPERIMENT.

Section 1: Title

A single sentence that fully captures the main goal of the experiment.

Section 2: The purpose of the Experiment

(1) General: This section should be a brief statement about the ultimate goal of the experiment. This section should never be longer than two sentences, and in many instances kept to only one sentence. Common goals are the identification of a compound, the synthesis of a compound, or the purification of a mixture. Techniques (TLC analysis, IR spectroscopy, extractions) should be mentioned only when these were the means to achieve the goal, and not a goal, and not the goal in themselves.

(2) Things to watch out for: The purpose must be result oriented, which means that general tasks like collecting data, performing calculations, getting results, and learning techniques, are inappropriate. Although learning to do new things is a top priority, it is never the purpose.

(3) Some examples:

Good: The purpose of the experiment was to synthesize benzoic acid through an oxidation reaction using bleach

Good: The purpose was to identify an unknown compound using TLC-analysis and melting point analyses.

Bad: The purpose of the experiment was to collect data and learn about recrystallization.

Bad: The purpose was to perform a four step synthesis that involved acetylation, hydrolysis, condensation and reduction, and use several new lab techniques such as extraction and sublimation. The student should learn about IR spectroscopy too, and analyze the data obtained.

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