



14. Chemical Oscillators

REVIEWER

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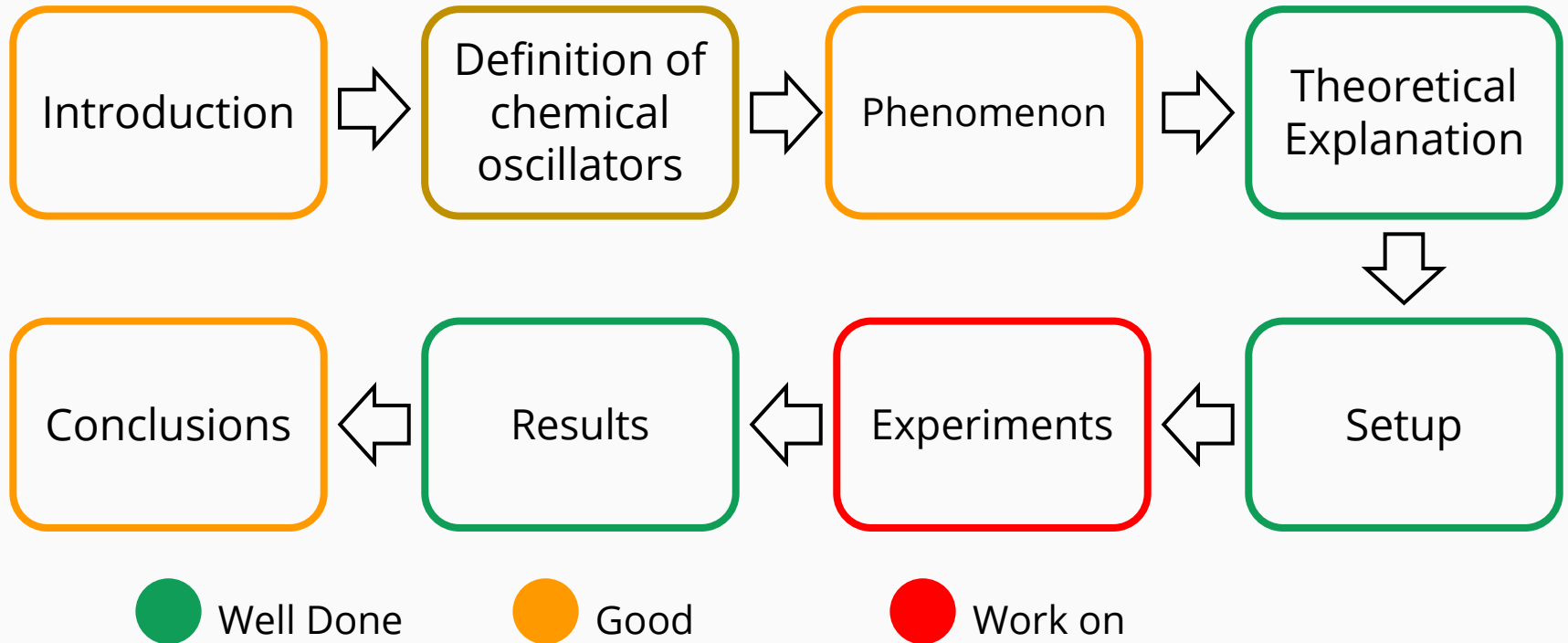


Problem to be investigated

Examples of oscillating chemical reactions are the reaction Briggs-Rauscher or the Belousov- Zhabotinsky reaction which result in periodic color changes. While some of such reactions are difficult to reproduce, there are multiple ways to produce a simpler and more reliable chemical oscillator. Propose a problem about an interesting and simple chemical oscillator.



Outline of Report





Performance

Reporter

- + Understanding of the topic
- + Able to answer opponents questions
- + Detailed explanation of the experimental setup
- + Showed us some of the possible errors
- + Explained most of the formulas included
- The line of the graph (temperature-time) is not accurate because not many measurements were done
- Key parts of the experiment were unexplored (only one parameter tested → temperature)
- Not many trials were done (only 3)
- Human error was excessively used as an excuse for potential errors

Opponent

- + Challenged reporters solution
- + Highlighted that the reporter experimented only with temperature
- + Was evident that he had one some background research on topic
- + Did not interrupt the opponent
- Did not refer to the stirring speed
- Did not state his opinion in all of the topics during the discussion
- Time Management of the discussion
- Did not ask when she prepared the solution



Discussion Topics I

Temperature

Only temperature? Other parameters that can be changed?

Yes only temperature, there are other parameters that can be tested

Error bars

How was it calculated?

Excel standard deviation

Concentration/time

Did you have any research?

Of Course, this is what I examined



Discussion Topics II

Experiment	
Angle of velocity. Did you change it?	No it was constant



Thank you