**Date:** 23rd December 2023

**Title:** Anti-Reflective Coating with Multiple Layers

**Purpose:**

I intended to employ the guidelines I fortuitously obtained from COMSOL for creating a model of an anti-reflective coating. My goal is to glean insights from this model, which I plan to apply to my own model through reverse engineering. The original instructions are available [here](https://www.comsol.com/model/anti-reflective-coating-with-multiple-layers-19279).

**Experimental setup:**

The detailed modeling instructions are available at this [link](https://www.comsol.com/model/anti-reflective-coating-with-multiple-layers-19279).

**Results:**

Regrettably, I've been unable to achieve any results due to the absence of the ‘Ray Optics’ module in my setup. I've already reached out to COMSOL Customer Service regarding this issue, and I'm awaiting their response. This situation is quite frustrating as it hinders my progress; I can't even move forward with defining parameters without this module. I also attempted to run the mph file, available at this [link](https://www.comsol.com/model/anti-reflective-coating-with-multiple-layers-19279), but COMSOL displayed an error stating it couldn't generate the study because the ‘Ray Optics’ module is missing.

**Conclusions/Future work:**

I'm optimistic that the issue will be resolved shortly. There's a concern about potential extra costs, but I'm hoping it won't be too expensive. In the meantime, the one aspect I can focus on is my writing.

**Date:** 22nd January 2024.

**Title:** Chapter 1 Edits.

**Purpose:**

In our recent weekly meeting with Professor Hudgings, which Fernando and I attended, she indicated that she would address the issue of the missing module. She also advised me to contact Prof. Higdon for his views on acquiring the Ray Optics module, as he is the registered holder of the COMSOL license. Meanwhile, she has tasked me with making revisions to Chapter 1.

**Experimental setup:** <https://www.overleaf.com/project/652ebe35032010e71fe7d54f>

**Results:**

I have made corrections and edits to the sections highlighted by Prof. Hudgings. Additionally, I have added a provisional bibliography.

**Conclusions/Future work:**

I will focus on referencing the figures and elaborating on them within the main text of the chapter. Additionally, Prof. Hudgings has directed me to include an extra subsection for a literature review.