

Egenvurdering Oppgave: Computation of Laminar Hydrogen Flames

The person working on this project was Piotr Pasiak. The project was very interesting to work on and to learn. This was the first time I was working with any combustion mechanics and chemical kinetics. I did not have a lot of experience with the topic, but during this project I learned a lot about the study of combustion system and became very interested in hydrogen as a future alternative for fossil fuels.

Working alone on such a big project was challenging. The work had to be prioritized by what was the most important and needed the most time. Since it was not possible to split the workload, I had to do the research, calculations and factchecking alone in steps.

On the other hand, it was nice to be able to have control over everything that had to be and was done during the project. Also, by doing all the work alone I was able to learn a lot more than in a group where each person focuses on their part.

The biggest challenge was in the beginning where I did not get the program to work on my home computer. Because the campus was closed due to the pandemic, I was not able to use the machines at HVL. In the end my supervisor Shokri Amzin was able to find an alternative software and after that I was able to start doing all the computations. All the work was done on a computer at home and only aids needed were other literatures on similar studies. It was also necessary to know some Python and MatLab to be able to use the software to do the computations and view and present the results.

In the final report I present many different parameters calculated in the software. During the work I learned a lot about them and became more interested in how they compare to other fuels and methods. If I had more time, I would have done more research and include these comparisons in the report since some of the results are very interesting.



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Piotr Pasiak