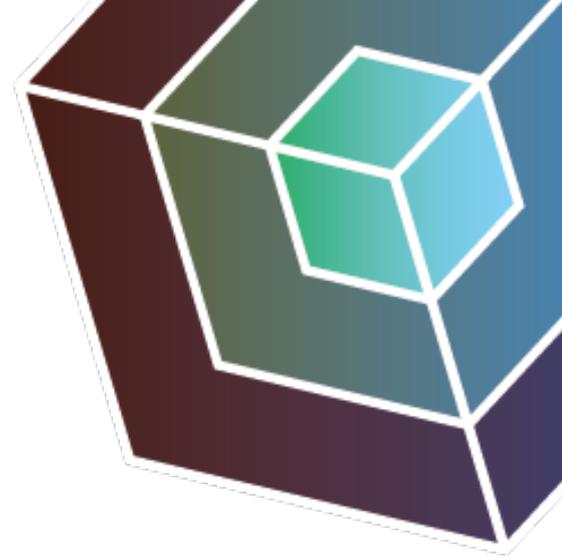


Project: Kinetics and mechanism of syngas chemistry

“The aim of this project is to combine a nanoscale description of the individual reaction steps in the Fischer-Tropsch reaction obtained by quantum-chemical calculations with a reactor engineering model to predict the overall catalyst performance.”

Robin Broos (TU/e)



Can you do a short presentation about you?

My name is Robin Broos and I was born in Roosendaal, North-Brabant, The Netherlands. I always wanted to do something that has an impact in society. Therefore, after secondary school, I moved to Eindhoven to start my academic career, first by doing a Bachelor in Chemical engineering and Chemistry and later doing a master in the same field, with a specialization in Molecular Engineering. I am now half way my PhD project, (still) enjoying.

Would you advice a friend to come to the Netherlands?

Yes. I think it is a great country, but as any other, it also has it flaws.

How/why did you finish in Eindhoven?

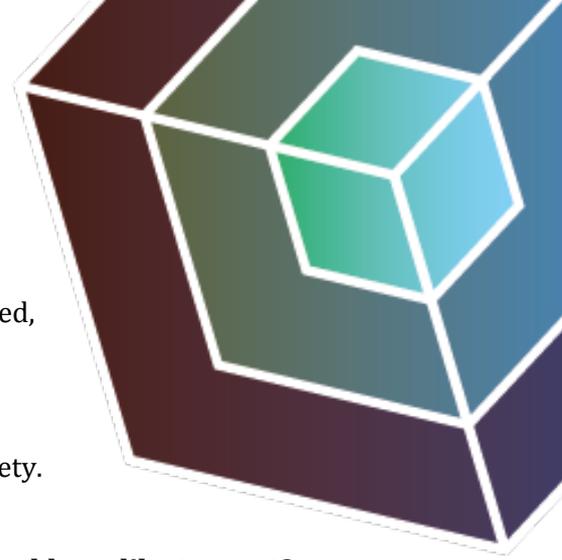
It was a practical reason, since I knew I wanted to study either Chemical Engineering or Mathematics. However, when I started my first year of the Bachelor in Eindhoven, I did not quite make up my mind yet. Therefore, I chose a university that was closest to my parents' place, as I did not want to move twice in a short period of time, if I decided to switch my studies/university. Later on I did move to Eindhoven, as travelling takes away the full potential of all student activities after the lecture hours.

How did you become interested in science?

When I was young, I was curious how (new) things worked. Furthermore, I was looking for short-cuts when dealing with problems. These are probably the main treats for an engineer. Furthermore, at secondary school, I noticed that I liked the courses in science most.

Did you know right away that you wanted to be a research scientist?

No, I am still not sure if I will stay in Academia or go to industry after my PhD. On the other hand, when going to industry, I would like a position as a research scientist.



What do you enjoy the most about your research?

I like the pioneering work we do in understanding the mechanisms, in a field which is already quite well-established, yet not understood at all.

What is your biggest motivation?

I like that our actions as scientist beneficially influence society.
I like to contribute like this.

If you had a time machine and 2 beers, with which scientist would you like to meet?

If I would ever have to make this choice, I would not go for a single scientist, rather for an era with various famous scientists. But if I have to make a choice it would either be Albert Einstein, Erwin Schrödinger or Richard Feynman. As you have a time machine, I would argue that you could visit all of them, as it was the same period of time in which those world-changing scientists lived, being the early 1920's.

Which is the most memorable "Eureka" moment in your life (not necessarily connected to science)?

That looking to the stars is looking into various parts of history, ranging from 4 to 1000 years in the past, not knowing if they are still there, only that they were there many years ago.

Which scientific term/phenomena you think is the most misused by media?

In my opinion, it is the word "organic". Predominantly in the food industry, people use the word "organic" in combination with "natural" and "chemical-free" (another term which is misused a lot). Organic things can be natural and very dangerous, yet some synthetic things can be harmless and in some cases even the better choice.

What do you like to do in your spare time?

Drinking beer, ballroom/salsa dancing (not particularly in this order).

Is science the answer to everything?

No, that would be 42, as 42 is the "*Answer to the Ultimate Question of Life, the Universe, and Everything*"¹, calculated by an enormous supercomputer named Deep Thought over a period of 7.5 million years. Unfortunately, no one knows what the question is.

What do you want to do after finishing your PhD?

I don't know for sure yet if I go into industry or if I continue in academia, but I would like to stay in a position in which I can keep contributing to our generation of world-changing scientists.

¹ Douglas Adams, *The Hitchhiker's Guide to the Galaxy*, 1978, Pan Books, ISBN 0-330-25864-8