



Mini Profile Samira

Tell us about your career steps in science so far. What have you done so far to get here?

I did a Bachelor in Life, Science and Technology at the Delft University of Technology and Leiden University and a Master in Bioinformatics and Systems Biology at the Vrije Universiteit Amsterdam and the University of Amsterdam. During my Master I got the opportunity to participate in the iGEM competition, where I was responsible for the mathematical modeling framework to predict metabolic engineering strategies. Furthermore, I did a research project in the Systems Biology lab at the Vrije Universiteit Amsterdam, studying patterns of research allocations in yeast using complex metabolic models. I also have been involved in a community of researchers who study resource allocation in microbes: 'Economic Principles in Cellular Physiology'. We organize regular meetings to keep each other updated about our scientific endeavors. In January, I started my PhD at the RWTH Aachen University on method development for advanced metabolic modeling and combining metabolic with bioprocess models.

What do you hope to learn and achieve during project HYDROCOW?

During the HYDROCOW project I hope to learn more about the use of computational tools outside of Science. My main aim is to build methods which can actually be applied to a process, with the ultimate goal to decrease process development times. Also, I would like to familiarize myself more with computational fluid dynamics, bioprocess modeling and software development. I would love to use my Science to develop processes which can help build a more sustainable tomorrow.

The EIC funds transformative technologies, what excites you about a career in Applied Sciences?

People who knew me as a child, know that I am a born scientist and ideologists. I have always had an interest in mathematics and have felt a strong connection to the nature around me. Furthermore, as an early career scientist, I feel responsible for contributing to a solution for real-world problems, such as loss of biodiversity and the growing world population. In Applied Science, and especially the HYDROCOW project, I can combine my passion for mathematics and biology to develop methodologies which can foster our world for the next generation. This is according to me, the best job in the world.

What do you like to do outside Science.

When I am not behind my computer developing, I love to be in nature. Hiking with my dog, horseback riding, or just watching birds. Furthermore, I like to spend time in the kitchen. Not only to make my own food from scratch, but also to make sustainable cosmetics and cleaning agents.