



## Education

- > MChem in Chemistry – University of Sheffield
- > MSc in Chemistry (TMCS CDT) – University of Oxford
- > DPhil with Prof. Jon Doye – University of Oxford



## Current research

In the group we use molecular dynamics to simulate systems such as cholesteric liquid crystals and DNA nanostructures. I simulate and model the latter (specifically large nanostructures called DNA Origami, some of which have found potential as anti-cancer drug delivery devices) to determine their physical and mechanical properties.



## Questions

> [I chose to study chemistry because](#) it's a broad-spectrum discipline. My undergraduate degree allowed me to further study complementary branches of science such as maths and chemistry-focused biology, alongside classic chemistry. Later on, during my MSc year, I was able to expand my knowledge base further into areas such as computer programming and quantum mechanics.

> [I chose to work in theoretical chemistry because](#) of projects I undertook during my undergraduate degree. In particular, during my final year project I used computer modelling to optimise basis sets for Ytterbium which, to me, was a completely new topic and method, and I found this research highly engaging. This experience, combined with a supportive supervisor and research team, inspired me towards my current area of study.

> [The most rewarding part of my work is](#) acquiring new skills and being able to effectively implement them in my research. I went into graduate study with minimal coding experience and considering I am now in a position where I can readily write the scripts/code I need is a big achievement!

> [My science hero has to be](#) Rosalind Franklin. As I work on DNA structures, I have a lot to thank her for!

> [The greatest scientific advancement](#) in my opinion has to be space exploration (and more so the maths calculations involved in it). Who could not be inspired by the iconic Earthrise photo taken from lunar orbit during the Apollo 8 mission?

> [I wish I made more time for](#) ballet. I started as an adult learner a couple of years ago and, whilst I am diligent in attending classes, I need to do more practice outside of them!