

Education

- > BSc & PhD in Chemistry – Pontificia Universidad Católica de Chile (PUC), Chile
- > Postdoctoral Researcher – Department of Cell and Molecular Biology, Uppsala University, Sweden
- > Newton Research Fellow – Department of Chemistry, University of Oxford, UK
- > Chancellor's Fellow – School of Chemistry, University of Edinburgh, UK



Group research

My group's field of research is computational chemistry. We use and develop computational tools to investigate the chemistry of chemical and biological systems. We wish to understand how molecules interact and react in solution, and use this knowledge to design new functional molecules and catalysts. We strive to break down some of the disciplinary barriers traditionally associated with chemistry and combine modelling and experimental efforts to tackle current challenges faced as a society.

Questions

> **I chose to study chemistry** even though my first choice was mining engineering - I was told it was not the type of career for a woman. Then, without much thinking, I went into chemistry which seemed similar. Although I hope that this type of comments disappears, I'm happy about my choice, as I love what I do.

> **I chose to be an academic because** I enjoy been challenged by new problems and find it extremely rewarding working toward solutions together with students and colleagues. In that sense, academia perfectly combines these aspects.

> **The most exciting thing about my work is that** I can design and carry out thought experiments that would be almost impossible in the lab. I can use the knowledge gained through them to uncover novel mechanisms and guide experimental efforts.

> **The main piece of advice I would give someone looking to work in academia is** challenge yourself, be perseverant and humble. Don't despair if things don't seem to work out at first; there is a lot of luck involved in the process.

> **I'm waiting for the day when someone will discover** a way to repair the damage already made by global warming.

> **The greatest scientific advance of the last century was** quantum mechanics (QM). Many of the big discoveries in chemistry, physics and biology were only possible because of QM.

> **The biggest challenge facing scientists is** funding, it is scarce, highly competitive and, in many cases, lacks a long term vision and transparency. The excessive pressure it puts in publishing may, in the long term, affect the quality of the science being done.