



national science week 2014

Matthew Tucker

Synthetic Chemist

Have you ever wanted to be an adventurer and go somewhere no one has ever been before? Or discover something that no one has ever seen before? Maybe create something that no one has ever made before? I am a synthetic chemist and I make molecules that have never before existed and study how these molecules interact.



Everything is made of molecules. From the water you drink and food you eat, the medicine you take when you get sick, the clothes on your body, and of course you are also made up of molecules. Creating new molecules can lead to better medicines, or more robust materials. Because everything is made of molecules, learning about how they interact can lead to all sorts of advancements; from medicine and agriculture, to power generation or even space travel, it all comes down to how molecules interact. That is chemistry.

I grew up in Tasmania, and completed year 12 at Hobart College with a broad range of subjects, including chemistry and physics but also creative subjects like English writing and music. I never agreed with the stereotype that those who are science-minded can't be creative, and I truly believe that a good scientist is creative as well as logical.

I started my university studies at the Australian National University in Canberra studying psychology as well as physical sciences with the aim of becoming a neuroscientist. Before long I decided that wasn't for me and moved to UTAS where I realised chemistry is what I wanted to focus on. I chose chemistry for many reasons, but mainly because chemistry requires scientific logic and creativity in equal measure to make new things. During my first research project I created a molecule that had never existed before. This creation was so thrilling, that from that moment on I knew what I wanted to be was a synthetic chemist.

For more information: www.utas.edu.au/chemistry

www.YoungTassieScientists.com