Meet the scientist

Name: Alecia Nickless

Place of Birth: Somerset West, South Africa

Place of Work: Atmospheric Chemistry Research Group (ACRG), School of Chemistry, University of Bristol, UK

Job Title: Postdoctoral Research Associate

Who do you work for? Dr. Matt Rigby at the School of Chemistry, University of Bristol, UK

What do you do? I model emissions of CO2 from human (anthropogenic) and natural (biogenic) sources using a computer. I use mathematics to work out how greenhouse gases are changing the climate.

What skills do you have to use in your job? I completed a university degree in Statistics and Ecology, followed by a masters' degree (MSc) in Statistics and then a doctorate degree (PhD) in Statistics, studying emissions of carbon dioxide (CO_2) from the City of Cape Town, South Africa. Foremost, I consider myself a type of mathematician called a statistician. Before I started my PhD, I used my mathematics skills at the Council for Scientific and Industrial Research, South Africa. I then spent a few years working at the University of Oxford as a statistician analysing clinical data. I started my research at the University of Bristol to continue my work on CO_2 emissions

Why do you like your job? Understanding where carbon dioxide emissions are coming from and how they are changing over time is important if we are going sort out climate change. I enjoy problem-solving and analytical challenges, particularly getting computer programming code to do what I want! I enjoy collaborating with other researchers in this field from all around the world.

What inspired you to choose a career in science? I love the natural world and I love analysing data. I decided to pursue a career in science because I wanted to use my maths skills for data analysis, and it gave me the opportunity to work with people on interesting research questions and learn new things all the time.