

Meet the scientist



Name: Dr Md Anwar Hossain Khan

Place of Birth: Dhaka, Bangladesh

Where is your place of work? Atmospheric Chemistry Research Group (ACRG), School of Chemistry, University of Bristol, UK

Job title: Senior Research Associate

Who do you work for? The Atmospheric Chemistry Research Group, University of Bristol and the Primary Science Teaching Trust (PSTT).

What do you do? I am working on the development of a range of computer models (mathematical equations) used to simulate the emissions and transportation of chemical species linked to global and regional air quality and climate changes. Recently, I have been working on a naturally occurring chemical called isoprene and its impacts in the atmosphere. My research works also focuses on the impact of aircraft fuel/biofuel burn emissions on the climate through the changing of the greenhouse gas effect.

What skills do you have to use in your job? I have ample experiences of different computer programming languages, which I use to construct tools for simulating processes in mathematically modelling atmosphere. I can analyse the trace gas in air samples at the part-per-trillion (ppt) level. I also need to use my communication skills to write research reports and to give presentations/talks.

Why do you like your job? I like the freedom to do research independently whether to run atmospheric computer models and experiments with innovative and constructive ideas in different fields of chemistry in air quality, climate change and human health. I like my job, as it is an exciting and satisfying experience at the forefront of this vast, relevant field. I like to publish scientific papers, which allows me to interact with people in the same research field all over the world.

What inspired you to choose a career in science? Science influences many aspects of everyday life; it improves human life at every level from individual to global issues. By knowing science, we have a better understanding of how our world works so we can make more informed judgments on how to deal with many aspects of our complex lives. Science is an interesting, exciting and useful tool that can be applied in general problem-solving.