

Member Spotlight

A monthly highlight featuring an ASEG member. All past member spotlights can be found in our newsletter [archive](#).



We welcome **Jackie Hope** under the spotlight in this issue as she shares her enlightening story!

Jackie is a Geoscientist as part of the Integrated Geological Mapping team, Mineral Systems Branch at Geoscience Australia. She is also not a stranger to ASEG as she volunteers as the Treasurer of the ASEG ACT Branch.

I grew up in South Africa, and have been lucky enough to live in Australia, Canada, England and the United States as well as visit many other countries since then. I've been very fortunate in my career to work with some very smart people who have taught, and continue to teach, me so much. I started out my career as a geoscientist working part-time for a small explorer, where I was involved in field and underground mapping as well as data entry. After graduating, I worked with a mining seismicity monitoring company in Welkom that was also developing a ground penetrating radar system for engineering applications but left to pursue a PhD in Canada. There, I tested out academic life as a postgraduate student, a postdoc, and as a visiting scientist at the Geological Survey of Canada in Ottawa, but ultimately decided it wasn't for me. I moved to England and worked as an interpretation geophysicist for a service company that offered marine gravity and magnetics as well as airborne gravity gradiometer data acquisition, processing, and interpretation services, and transferred across to their Houston office for a couple of years. Still working (though for a different contractor) as an interpretation geophysicist, I moved to Perth, where I added AEM interpretation to the potential fields mix. More recently, in 2021, I moved to Canberra, and joined Geoscience Australia's Mineral Systems Branch. As an interpretation geophysicist, I enjoy the challenge of trying to put the puzzle pieces together to come up with a model that explains the data.

1. Tell us who you are and what you do?

I am currently the data custodian of, and look after, the Estimates of Geological and Geophysical Surfaces (EGGS) database.

2. For how long have you been a geophysicist?

Since 1996! At least, that's when I graduated with my first degree in geophysics.

3. What do you like most about being a geophysicist?

The constant on-the-job learning is probably my favourite thing about being a geophysicist. Every new project brings a new set of challenges that need to be sorted out in new and interesting and/or more efficient ways. I enjoy looking at data from different areas of the world to solve problems at different scales.

4. If you weren't a geophysicist, what would you be?

Something to do with ocean sciences or astronomy.

5. What made you decide to be a geophysicist?

When I was growing up, I wanted a job that would allow me to work outside rather than being confined to an office all day. As it turns out, I have not been as successful on this front as I had initially hoped. But I also wanted a job that would enable me to travel and see new places, and I would say this part of my plan did succeed. 😊.

6. What reaction do you mostly get when you tell someone that you are a geophysicist?

Usually a blank look, and, "What?"

7. When you are asked what you do – what do you do?

I explain that I try to build earth models using different datasets, whether it's gravity, magnetics, or borehole data.

8. What aspect of geophysics do you enjoy most?

The challenge of figuring out what all the data means (or, at least, what we think it means).

9. Do you think AI will take over your job or will the human element remain vital to exploration successes?

I think the human element will always have a role to play. We'll need people to validate the model, or fix the data, or figure out how best to train the algorithm, or provide the data for the algorithm to work on. AI is a very useful tool, but I think of it as just a tool.

10. Do you have any volunteering experience?

At the moment, I am the ASEG ACT Branch treasurer, but aside from that, sadly not.

11. What's one thing you wish someone had told you when you were at university?

When you graduate, no matter what degree you graduate with, you will never have all the answers. And that's a good thing.

12. What is your best interview tip?

Be yourself. I think an interview is an opportunity for an employer to get to know you, and you to get to know them, and for both of you to decide if you want to work together. Trying to be someone you're not for the sole purpose of getting a job seems to me to be ultimately self-defeating.

13. What are you reading at the moment?

"Myth and Geology", edited by Piccardi and Masse; and Keeper of Enchanted Rooms" by Charlie Holmberg.

14. What's your most treasured textbook?

All of them. I can't pick between them.