

This time, we will have another experienced geophysicist **Lisa Vella** from Fortescue Metals Group Ltd as the member spotlight. You must learn or find something interesting from her!

Before the general questions, Lisa also shares her thoughts on the important role of women in geophysics, reflecting on her experiences.

While I have had an enjoyable, successful and rewarding career in geophysics and the mining industry, that is not to say I have not faced certain challenges due solely to being a woman. Unfortunately, women are underrepresented in mineral geophysics and there is still significant gender inequity throughout the industry. An interesting article elaborating on this can be found [in EGU Advances in Geoscience](#).

Let's now go to the general questions:

1. For how long have you been a geophysicist?

30 years and counting!

So...Anything about the workplace changes in the geophysical industry over the last 30 years?

Safety, environmental considerations, indigenous heritage, workplace diversity, work/life balance, and corporate culture and values are some of the topics that feature far more in the industry today than they did when I graduated. Which is a good thing.

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

I enjoy the challenge and variety, as well as the opportunity to work with (and learn from) teams of bright people working towards a common goal i.e. discovery.

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

A veterinarian.

4. Tell us about your best field meal?

I am not sure I would call it the 'best', but certainly the most memorable: fresh BBQ goat meat, followed by chocolate cake, with my local crew in Eritrea. Such an awesome group of people.

5. Where was your best sunrise/sunset location?

Sunrise at orbicular granite near Caldera, Chile.



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

That the mining industry is cyclic – there is always another bust to follow each boom.

7. What's your most treasured textbook?

“Physical Properties of Rocks and Minerals”. By R.S. Carmichael.

8. Your funniest or worst field memory?

On reflection, I couldn't recall a bad or worst field memory, but plenty of challenges and fun times. One funny memory comes from a field trip in Mongolia. We were camping in those little single-person igloo-shaped tents in the Gobi Desert. I was woken early in the morning by an animal pawing at my tent, above my head, trying to get in. When it couldn't get into mine it went from tent to tent until it found an open one, went inside and lay down beside a colleague and promptly fell asleep. It was a small cashmere goat. When we all got up, we had a good look around but couldn't see its herd anywhere. That little goat joined us for breakfast, came with us in the 4WD, walked to outcrops with us and kept us company for the entire day until we could find someone to give it to.

9. Your most respected geophysicist?

Don Emerson. But, there are so many other geophysicists (and geologists) who I am simply in awe of.

10. What is a challenge that you see in geoscience today, and how do you see the community overcoming it?

In the transition to 'clean' energy, the mining industry will need to improve mineral discovery success and meet the increasing demand for certain minerals into the future (e.g. copper, nickel, lithium etc.). To this end, the shortage of geoscientists, particularly minerals geophysicists, is a huge challenge. Things which can be done to help overcome the problem include, campaigns to raise awareness among politicians and the public about the need for geoscientists, promotion of geoscience from primary school upwards showing what an exciting career a geoscientist can have, incentives to encourage more geoscientists to teach in high schools and better funding models for universities. The number of geoscience students coming through our universities needs to somehow be disengaged from the boom and bust cycles. Meeting this challenge requires collaboration between industry, educational facilities and government.