

Dr Sandra Occhipinti (pictured above, being a **keynote speaker** at AEGC 2021) is in the member spotlight this month. She is the Research Director, Discovery Program (Mineral Resources) at CSIRO.



1. For how long have you been a geologist?

Nearly 30 years

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

Trying to make sense of the data, integrating it so that I can understand the geology and ultimately how the area developed through time – basically the ‘storytelling’ component

3. If you weren’t a geologist, what would you be?

Possibly - an English teacher

4. What is your best interview tip?

Mmmmm, don’t say ummm and mmmm – I’m very bad at it.

5. What’s one thing that we wouldn’t know about you?

If I told you, then it would be another thing you knew about me

6. Tell us about your best field meal?

Spaghetti Gamberi, with fresh prawns straight off the boat

7. Where was your best sunrise/sunset location?

The Kimberley

8. What's your most treasured book?

To kill a Mockingbird (I haven't read it for years, but I read it about 4 times as a teenager) and All the light that shines on me

9. Your funniest or worst field memory?

Having the headlights/spotlights of a 4WD vehicle, with Roo Shooters in it shine on my tent around midnight. I'd heard the gun shots and the vehicle getting closer. I was working/camping alone in the Capricorn region. I was 22, and petrified.

10. What made you decide to be a geologist?

I like the field work component and stitching together bits of information to configure the story of development of a region, and thinking about how that has influenced the landscape that we see now.

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

Exploration through cover. We're still not great at it. Using multiple datasets, looking at different petrophysical properties, together with sparse data such as lithology, geochemistry (which is sometimes only 1D, or generally not spatially extensive) is something that has developed through time. Using ML as a decision support tool to predict geological units/features is great, making ML a spatial and knowledge-based approach, rather than a data-driven approach will help. This might help to further de-risk exploration through cover.

Sandra will have a talk entitled "Mineral Systems and data integration as part

of the foundation for the future of mineral exploration" *during AEGC 2021. The virtual program is [here.](#)*