

Member Spotlight

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



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

Naima is a Senior Geophysicist working for engineering firm WSP, in Perth and a PhD candidate at the University of Southampton, UK. Naima is not a stranger to ASEG as she is currently serving as a committee member for WA Branch.

I am a geophysicist working in integrated teams with international experience in seismic and electromagnetic methods. I have worked in offshore oil and gas developments in the North Sea and Brunei, where I was involved in drilling operations, well planning, geohazards assessments, and site selection for new drilling centres. Before working in the oil and gas, I have work in research and consulting work using GPR, electric tomography and induction EM methods in onshore and offshore projects. Currently, I am completing a PhD. on Carbon Capture and Storage (CCS) with specific interest in Geophysical monitoring, rock physics property estimation from geophysical data and the regulatory and policy making aspects of CCS. These experiences have allowed me to work with groups from various cultures and diverse ways of thinking, providing exposure to a wide range of geophysical methods, targets and depths of investigation. I am actively participating in research on Carbon Capture and Storage monitoring and was recently invited to speak in Venice at the CO2Geonet forum, together with a panel of experts in geophysical monitoring for CCS sites in Europe.

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

Currently I work on engineering and environmental projects in an Australia wide Geophysics team. I work on onshore and offshore geophysics, focused on the shallow subsurface. I spend most of my time on technical work between my job and research.

However, I do love working with other people, building positive relationships and on developing and encouraging junior colleagues.

2. For how long have you been a geophysicist?

I do not want to count! I graduated as an Eng. Geophysicist in Venezuela in 2001 and finished my MSc. in Delft in 2004. I started work in 2005.

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

The work varies considerably and can be office and field based. My day-to-day work is diverse, coding in MATLAB, processing and inverting data one day and fieldwork the next, other days I can be creating colourful maps and sections and writing reports.

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

I loved chemistry at school and likely would have found my way to geochemistry. My other option was archaeology.



Acquiring CSEM data in the North Sea, as part of my PhD.

5. What made you decide to be a geophysicist?

When I completed my first year of studies in engineering, I had to choose three of my engineering preferences, either mechanical, chemical, electrical, electronic, production engineering degrees or Geophysical engineering. Initially, I considered chemical or production engineer. However, after attending a talk by an American Geophysicist working for Texaco who discussed what geophysicists do and the different applications, I changed my mind. He talked about the use of geophysics for groundwater, predicting seismic and volcanic activity, and finding archaeological ruins. I was then convinced!

6. When asked what you do – what do you do?

I say that I look under the ground or under the seabed at geological changes, objects, minerals, archaeological ruins or anything hidden, like a doctor looks inside our body with physical methods like X-ray, CT scan and Magnetic resonance.

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

They ask me if I am like a geologist or sometimes, they ignore the 'geo' and say, "ah you are a physicist, that is something!"



Acquiring Refraction Seismic and MASW at Mt. Holland WA

8. What aspect of geophysics do you enjoy most?

The variability of the work and ability to travel to different places that you would not normally experience.



Interpreting seismic attributes in Brunei for a regional exploration study

9. Who is your most respected geophysicist?

That is a very difficult question as there is not only one. I respect and enjoy interacting with Kerry Key and Steve Constable in relation to marine CSEM and love the work they do and how much they have contributed to the marine EM field. However, in my day to day work I appreciate all the principal geophysicist at WSP and how they bring a diverse range of experience, various ways of working and make work a place I want to return to every day. I have deep respect for our technical director Tariq Rahiman and how he manages to always find a pragmatic approach to the most difficult problems and how he cares deeply for all of us. I feel all the geophysicist that have supervised me during my MSc. and PhD studies have made me what I am today. I have also had an amazing opportunity to work with Yusen Ley-Cooper and Anandaroop Ray from Geoscience Australia, working with them on the

AusAEM project, a technically enriching and enjoyable experience.



Offshore Perth during a marine magnetic survey targeting potential UXOs.

10. Where was your best sunrise/sunset location?

Outside of Australia I would say in Brunei Darussalam. In Australia the best sunset was on Fitzroy Island.



Sunset at Fitzroy Island

11. What do you do in your spare time?

I love spending time with my family, which at present focuses around music and practicing the violin with my kids, swimming, snorkelling at the beach or cooking. I love reading, photography and dancing too but have limited time for this lately since my spare time is focused on finishing my PhD. and spending time with my family.



Humpback whale observed while working offshore

12. What's one thing that we wouldn't know about you?

I speak three languages fluently (Spanish, Italian and English). When I was 3 years old my second language spoken at home was Arabic (Syrian dialect). Unfortunately, when my grandma died, I refused to speak it.