

For this issue, we are delighted to have **Dr Bhavik Harish Lodhia** as the member spotlight. He was recently elected as the secretary of the NSW branch. Hope he will enjoy this amazing new role!

### **1. Can you briefly introduce yourself?**

I am originally from the UK and recently joined UNSW as a Postdoctoral Fellow in Geology, Geophysics and Energy Technology and am a recent recipient of the Australian Government Global Talent Program. My work focuses on coupling fluid flow and basin evolution. Before joining UNSW, I completed a PhD and was a Postdoctoral Research Associate in Geology and Geophysics at Imperial College London and gained an undergraduate master's degree in Earth Sciences from the University of Oxford in 2014. I am also a fellow of the Geological Society of London, American Geophysical Union, European Geosciences Union and a keen caver/outdoors explorer.

My wider research interests include geodynamics, mantle convection, basin evolution, carbon capture and storage, low-carbon technology and sedimentary source to sink processes.

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

Being a geophysicist is having a diverse range of skills. Geophysics is an incredibly broad field, covering everything from seismology and geodynamics to fluid dynamics, mineral physics and much more. What I like most is being able to be involved in such a wide range of subject areas.

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

If I was not a geophysicist, I would like to either be an expedition medic, or a soldier.



**4. What is your best interview tip?**

My top tip is to study the position description and backgrounds of the interviewers and organisation thoroughly. Applicants should also save the job description and all of their application documents, as it is easy to forget what job you applied for when you get an interview!

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

I am a keen caver!

**6. Tell us about your best field meal?**

My best field meal was a salad in the arctic!

**7. What are you reading at the moment and what is your most treasured textbook??**

I am currently reading "*Meditations*", written by the Roman Emperor Marcus Aurelius.

For the textbook, reading the book "Sedimentary Environments and Facies" by Harold G. Reading is a treasured memory from my time at the University of Oxford. The Department of Earth Sciences named the annual social newsletter after this book, since it never seemed to end!

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

Whilst the internet certainly existed when I completed my undergraduate degree (2010-2014), I wish someone had told me to use online resources instead of solely relying on textbooks to learn. There are lots of youtube videos, online tutorials etc. available that cover nearly all subject areas. Making use of these would have saved a lot of reading time!

**9. Your funniest or worst field memory?**

Both my funniest and worst memory of the field is my supervisor and I being chased by wild and vicious baboons in the Arabian desert. After running away and escaping, we found a wadi with an oasis and stopped for water, only to find the same troop of vicious baboons were also there. So, we had to run, again!



**10. Your most respected geophysicist?**

This is a difficult question as there have been so many famous geophysicists throughout history. Going back in time, Eratosthenes of Cyrene is an example of one of the first great geophysicists. In 240 BCE, he measured the circumference of Earth using geometry and the angle of the Sun at more than one latitude in Egypt.

**11. What do you do in your spare time?**

I like rock climbing, hiking and caving in my spare time.

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

Many of the world's greatest problems will require geophysics to solve. I think a challenge that geoscience faces today is retaining a technically skilled community of researchers and professionals capable of solving the present day and future problems.

**13. Where do you think exploration geophysics will head in the next 10-15 years?**

I think exploration will continue, as the world is and will remain dependent on energy and mineral resources. However, I believe that future exploration geophysics will be part of a drive towards more sustainable methods of producing energy, e.g., carbon sequestration and hydrocarbon production, carbon storage, hydrogen exploration and more.

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

I don't think the machines will rise up just yet and leave us at the mercy of Skynet any time soon (see The Terminator movies!). Working practices will evolve as technology evolves. Just as farming was not taken over by machines even though automation replaced manual labour during the industrial revolution in Europe in the 1700s and 1800s, I do not believe AI will take over my job as a researcher. As an academic researcher, I am required to conduct research, teach/supervise students, apply for research grants and much more. AI will certainly have an impact on research, but I believe it will continue to be used as a tool for research not replacing the researcher.

**15. What do you think of the Covid impact on the geophysical industry?**

The Covid-19 pandemic has had a significant impact on all industries across the globe, including the geophysical industry. Undoubtedly, smaller companies and universities struggled to stay afloat much more than large multinational organisations. However, as economic recovery requires raw materials and energy, I believe that the geophysical industry will survive as the world bounces back from the pandemic.