

Studying for a PhD presents its own challenges. From deciding where to study to the application process and finding the ideal work/life balance, can be a different experience for each person studying at different countries. Or maybe not?

We spoke to members of GMPA partners who are currently studying or recently graduated, and this is what they had to say about their experience.

Dr Bianca Newcombe, Australia

Bianca has been a member of AusIMM since 2018. She is currently working on major geo-metallurgical evaluation projects for both Newcrest and Evolution based in Orange NSW and has over 20 years' experience in both operations and technical roles, incorporating daily plant management, geometallurgical studies, plant projects and process optimisation. She studied for her PhD at Sustainable Minerals Institute in Brisbane remotely while living in Kalgoorlie. She chose to complete her PhD as a thesis by publication and the 6 published papers in Minerals Engineering, formed the basis of the final thesis document.

How long does it take to complete a PHD degree in your chosen field?

A PhD in mineral processing typically takes 3 and a half years (or the equivalent of that time). I had 3 babies during my PhD, and it ended up taking 5 years as I had time out after each baby was born.

How did you get involved in this area of study/research?

My research stemmed from the role I had working at a production metallurgist in a complex gold processing plant. There was a very large gap in the knowledge of plant performance where flotation is performed within the grinding circuit and my work addressed this problem directly.

Tell us about the process of applying for a PHD degree

The process was not difficult as the company I worked for was a major sponsor of an industry-based research consortium and wanted to place their employees into research degrees. There was the usual paperwork, interview and meetings, however I had the backing of my company, so the process was streamlined.

What were the factors contributing to the choice of university?

I went back to the university where I did my undergraduate degree. I knew the lecturers and research staff and it ranks as one of the world's best universities, especially in mineral processing.

How are PHD degrees funded in Australia and how are you doing so?

My research was funded by the company I was working for. Budgets were established at commencement of the work and funding was managed as it would be for any other corporate project.

What challenges/surprises/opportunities have you experienced along the way?

A significant challenge was that I was remotely located, and this made discussions with my supervisors difficult. I was also the primary carer for 3 children under 4 years old, so managing my time was often arduous. I was very fortunate in having the opportunity to travel internationally during my PhD allowing me to engage with and learn from the experiences of many unique individuals from diverse backgrounds.

How do you manage work/life balance while studying?



With great difficulty! The ebb and flow of information from labs, the deadlines of publishing as well as those review meetings, sometimes calm, sometimes frantic! The experience has indeed made me a much better project manager.

Were your expectations met?

Since completing my PhD I have worked as an independent consultant on many technically challenging projects for both large and small operations. Taking the route of publishing along the way has helped establish my name within the industry as a technical specialist, in this respect my expectation has been met.