Earth angel
Passivhaus goes mainstream residential.
PRAGMATIC DREAMER

Nicki Parker, M.AIRAH, is the sustainability lead for the Brisbane office of Norman Disney & Young. She is also the chair of AIRAH’s Resilience Special Technical Group.

Originally from a small town in the UK’s South Wales, Nicki studied mathematical engineering in Birmingham. Although she loved the core maths and mechanical engineering elements of her degree, it was a third-year course in fluid dynamics where Parker’s close association with HVAC&R really began.

After graduating, she took on a computational fluid dynamics modelling role with AECOM’s Advanced Design Group in Manchester. It was here that Parker expanded her thinking into sustainability and energy-efficient design.

In 2011, Parker moved to Australia, originally settling in Melbourne before making the move to Brisbane in 2016. Her current role at NDY involves the growth and development of the engineering consultancy’s sustainability offerings in Queensland. She looks forward to pushing the concept of performance-based sustainable, pragmatic design into the future.

GETTING INTO THE INDUSTRY

I didn’t know a great deal about how buildings worked when I first left uni, but having a carpenter/joiner as a dad helped me understand a lot about how buildings were constructed. I was able to put the physics behind different opportunities and look at how conditions change throughout the year. It was then that I realised that you could really optimise the buildings we work and live in to use less resources and be more comfortable.

FAVOURITE HVAC&R-RELATED MEMORY?

So many great memories, from working with clients and colleagues to helping to break down the stigma around computational fluid dynamics (CFD) modelling, to seeing design solutions like large fans installed in Adelaide Oval as a result of some thermal comfort work I had done. Probably my favourite, though, has been getting to know people through AIRAH – some of whom I now call very dear friends.

AIRAH TENURE

I remember going to my first Future of HVAC Conference in Melbourne in 2015. I was so excited to hear people talking about things I understood and, even better, about things I hadn’t thought about. From that moment I was sold, and joined AIRAH pretty much straight after!

SOMETHING WE NEED TO KNOW …

That simulation doesn’t have to be painful and take forever! This covers energy modelling, CFD or any other type of modelling the industry does. The key to performance-driven design is using appropriate levels of detail at the right time, and being comfortable with what your models don’t do, as well as what they can do.

WHERE HVAC IS GOING OVER THE NEXT 100 YEARS

With the levels of automation and data generation we are currently seeing, it would be naive to think the way we approach building design isn’t going to change dramatically. Rather than just having responsive systems, we need to think about responsive buildings and how to provide comfort at zero energy penalty. Not only that, but we have seen the growth of health and well-being consideration over the past few years, and it still has far to go. What if our buildings made us healthier throughout the day? I don’t have the answers but I’m excited to see where our industry can lead the charge in this area.

The 100 faces of AIRAH

Nicki Parker, M.AIRAH, is one of the 100 faces of AIRAH. To read more, go to www.airah100.org.au