

## Alumni Profile

### Marika Niihori

Class of 2015

Completed Years 1 to 12 at TAS



### Where are you now?

"It's hard to believe I graduated from high school four years ago, but I hope to share my appreciation through my achievements and showcase what my education at TAS has allowed me to excel during my university years. I was accepted into the Bachelor of Philosophy (Honours) degree here at the ANU and I have graduated with First Class Honours in Physics. I have gained a specialisation in Optics, majoring in Physics with a minor in Mathematics.

Throughout my degree, I've undertaken five research projects from creating new materials by laser explosions, modelling the electric fields of neurons, imaging neural activity, producing a biosensor and making nanowire LEDs. It's been an amazing experience having hands-on experience since first year, and I'm even finalising a first author paper from a project I did back in 2nd year."

### What are your academic highlights?

"I was one of two students to be selected to attend the University of Tokyo to undertake a two-week intensive short course on Nanoscience through the International Alliance of Research University. I am a Wanda Henry Scholar and have received the scholarship for the past three years – this is awarded to the highest achieving student in optics/photonics. I had the opportunity to direct the first Women in STEM lunch at the ANU and invited back to run it again for a second time. I recently was titled the Regional Winner for Oceania for the category of Mathematics and Physics for the Global Undergraduate Awards! This was a bit of a surprise as this award is colloquially referred to as the Junior Nobel Prize (these medals are only awarded to the Global Winners). Winners were invited to attend the Summit in Dublin. I was fortunate enough to be sponsored by the Research School of Physics to attend the summit which has been an invaluable experience! I also visited some research groups in Cambridge, Oxford and Kings College as potential collaborators or PhD groups. I conducted a semester long research project as part of my honours on Nanowire LEDs to create an integrated optical sensor- if you would like to have a read of my thesis/want more information I would be more than happy to share!"

### What's your next step?

"The next step for me is to undertake a PhD and my current career prospects are to become an academic/scientist. I'm really interested in utilising physics and innovating new technology with the applications in the fields of biology/medicine, for example, wearable and portable sensors. I've already accepted my ANU PhD offer in Nanotechnology.

Thank you so much for all that you have done for us students and I hope you are making an inspirational impact on many more students as much as you have done for me."