WHERE CAN SCIENCE TAKE YOU?



THE LIGHT DETECTIVE

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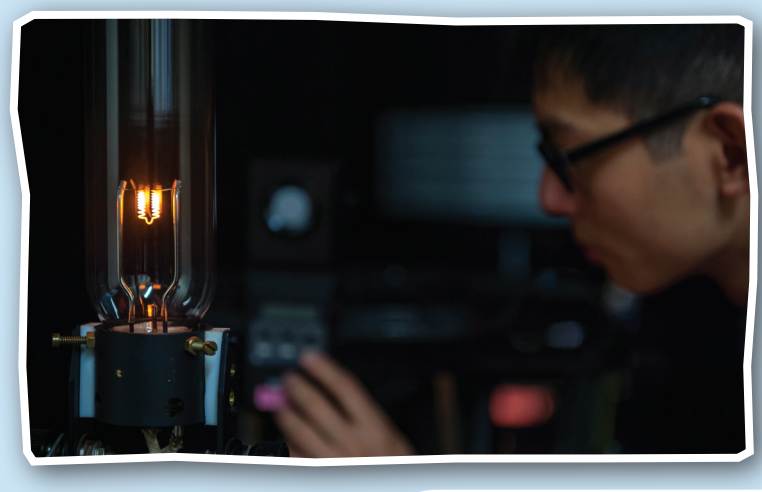
Why did you choose SCIENCE?

"Growing up, *MythBusters* was my favourite show. Watching them put many common beliefs to the test inspired me to question and test everything myself. Most of all, it showed me that science isn't just about formulas—it's genuinely fun when you watch the theory you've studied make sense in real life. It made me want to build things, experiment and figure out how things work.

"This led me into physics and engineering, ultimately landing me in the field of metrology—a fancy word for the science of measurement. Today, I help maintain New Zealand's national standards for light. This means measuring and comparing against the SI unit of light, the candela, while providing expert advice and calibration services to industry."

What's the COOLEST part of your job?

"The coolest part is being able to solve measurement problems by using some of the most accurate instruments in the world. Whether it means testing if a sunhat is effective in blocking dangerous UV rays, or checking the accuracy of meters used in aircraft simulators, it is great to know that I am helping inform important decisions through trusted measurements. No measurement is perfect, but by comparing with other labs all around the world, we can estimate how far we are from the true value. And we can only get better at it over time."



ABOVE: A tungsten lamp used to calibrate light meters. CREDIT: Measurement Standards Laboratory

SHADES OF SENSITIVITY

"Not all colours are created equal, at least to our eyes. Our eyes are more sensitive to green than other colours like red or blue. Knowing this helps us measure light more accurately by designing devices that see light the way our eyes do."

NZASE
New Zealand Association of Science Educators