WHERE CAN SCIENCE TAKE YOU?

THE LIGHT DETECTIVE



REAL-LIFE SCIENCE CAREERS

NAME: Yang Yenn Tan

ROLE: Research Technician, Measurement Standards Laboratory

FROM: Born in Malaysia, now lives in Lower Hutt.

STUDIES: Bachelor of Engineering (Hons) in Mechatronics from Massey University.

FOLLOW: www.measurement.govt.nz

WHY SCIENCE?

Growing up, Yang Yenn loved watching *MythBusters*, a TV show where people tested wild ideas and everyday beliefs to see if they were true. It inspired him to ask questions, build things and try experiments of his own. He discovered that science wasn't just about learning formulas–it was about having fun, testing ideas and seeing how things worked in real life. His curiosity led him to study physics and engineering, and eventually into metrology (the science of measurement). Today, Yang Yenn helps make sure light is measured accurately across New Zealand, working with a special unit of measurement called the candela, which measures how bright a light source is in a particular direction.

WHAT'S THE COOLEST PART OF THEIR JOB?

The coolest part of Yang Yenn's job is solving tricky measurement problems using some of the most accurate instruments in the world. One day, he might test how well a sunhat protects people from harmful UV rays. Another day, he could check whether measuring equipment in an aircraft simulator is giving the correct readings.



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

FUN FACT!

Human eyes are more sensitive to green light than to red or blue light. Scientists like Yang Yenn use this knowledge to design special instruments that measure light in a similar way to our eyes. This helps make light measurements more accurate.

NZASE
New Zealand Association of Science Educators