



INWED #engineeringheroes 2021

Climate change heroes

Meet our climate change engineering heroes who are researching and developing ways to heal the Earth through science, technology, engineering, and mathematics.

Climate change affects us all and we need you all to make a difference to keep the Earth healthy. Your everyday actions affect people, plants, and animals all over the world, so why not try buying products made of recycled glass or plastic, turning off electronic equipment when it's not being used or composting your food waste to help replenish the soil.

You can find out more about all our heroes. Ask your parent, carer or teacher to visit our engineering heroes homepage at www.cranfield.ac.uk/INWED



Dr Irene Carra

Job title: I investigate new technologies to improve our drinking water.

Superpower: Chemistry.

STEM strengths: Maths and explaining science to others.

Teamwork skills:

- 1 Solving problems.
- 2 Being helpful.
- 3 Supporting others.

Challenge/weakness:

Speaking in public.



Helen Ryan

Job title: I am studying advanced mechanical engineering.

Superpower: Mathematics.

STEM strengths: Scientific investigation, logical thinking and computer programming.

Teamwork skills:

- 1 A good sense of humour.
- 2 Listening.
- 3 Being supportive.

Challenge/weakness:

Imposter syndrome (feeling like I'm not as good at things as people think).



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Dr Joy Sumner

Job title: I test metals to learn why they fail in tough industrial environments.

Superpower: Metallography (I understand how metals work and why).

STEM strengths: Recreating tough environments, microscopy, metallurgy and thoroughness.

Teamwork skills:

- 1 Working together.
- 2 Listening.
- 3 Persuasion.

Challenge/weakness:

Showing people how creative and fascinating science is.



Michelle Watiki

Job title: I research new ways of creating 'green' energy.

Superpower: Mathematics.

STEM strengths: Critical thinking (questioning what I see, hear and do), chemistry, physics.

Teamwork skills:

- 1 Organisation.
- 2 Listening.
- 3 Solving problems.

Challenge/weakness:

Multitasking (engineering involves covering a lot of topics at once which can be tricky, especially when you're a perfectionist like me!)

