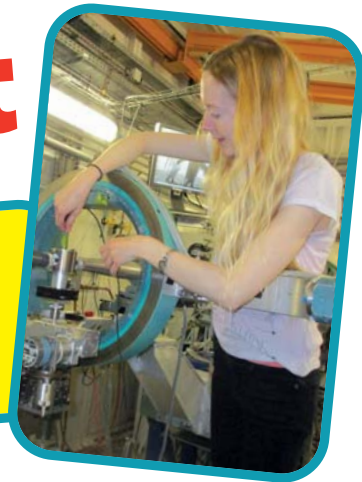
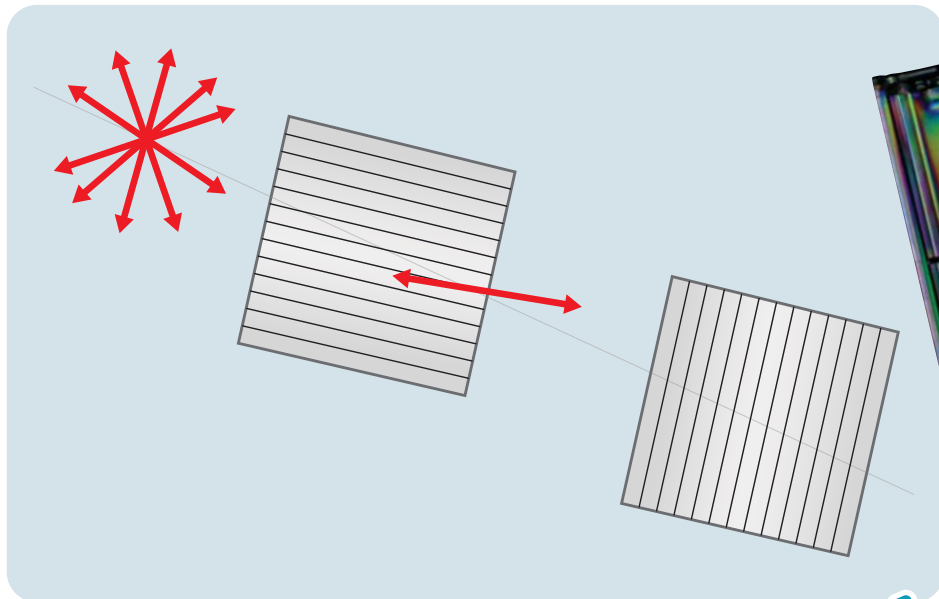


Trick of the Light

Dr Karen Syres is a Lecturer in Physics in the Jeremiah Horrocks Institute. Physicists use polarised light to investigate and invent materials to collect solar energy.



Light travels in a wave that vibrates in lots of different directions. Polarising filters only let the light that is vibrating in a certain direction pass through. Polarised light is what we call light when it has passed through one of these filters.



You will need:

- Two Polarising filter sheets
- Clear tape

Look at your television or at another screen through one Polaroid filter.

What happens when you place the other Polaroid filter in front and twist it?

Find plastic items around your house such as clear plastic boxes, cd cases or plastic bottles and look at them through the Polaroid filter. You can also stick different layers of sticky tape together.

Scientists use Polaroid filters to look at where plastics may be damaged or bent. As bends in the plastic change how the light passes through it.

When light bounces off shiny surfaces such as water it can also become more polarised (vibrating a single direction) which can appear as a bright glare. Some people wear Polaroid sunglasses to help block that light.

