

Harvesting Sunshine: a solar energy family fun day

On Saturday 7th August, the unsuspecting public were challenged to 'Meet the Photon Scientists' - a solar energy family-friendly scientific event, packed full of fascinating table-top demonstrations and exciting interactive activities, which took place at the Museum of Science and Industry in Manchester. The event was run by a team of 15 PhD students and staff from the PSI, and organized by Darren Graham, Samantha Hardman, Andrew Thomas with quite a few helpers! The event was supported by an Institute of Physics Public Engagement Grant to Darren Graham, Andrew Thomas and Wendy Flavell.



The PSI team – having survived the event. From L-R back row: Stuart Stubbs, Graham Dinsdale, David Cant, Darren Graham, Ben Spencer, Patrick Lunt, Andrew Thomas (the tall one!), Nic Hylton and Simon Hammersley. Front row: Sam Hardman, Karen Syres, Louise Pogson and Wendy Flavell. Not on photo: Richard Lane, John Fielden.

The event addressed the key physics behind harvesting solar energy with activities including the solar concentrator challenge, demonstrations of the latest solar technologies.....and even a giant solar marshmallow cooker! It answered questions like 'Why is the Sun yellow and the sky blue? – and gave the kids the opportunity to have fun with hydrogen-powered model racing cars and make a working solar cell from blackberries (and a bit of titanium dioxide!)



Sam prepares to cremate marshmallows using the Sun's energy....staggeringly effective, even in rainy Manchester



Darren demonstrates that yellow light generates the most current in a solar cell



Patrick and Simon explain why the sky is blue and sunsets are red....using Dettol!



Making a solar cell from strawberries



Stuart and Graham playing with hydrogen-powered model racing cars – their idea of a dream Saturday!

The audience came in large numbers from all corners of the globe, but was predominantly made up of families (adults with children aged 5 – 14 years old). The idea was to help them realize the importance of physics in tackling the problem of climate change and reducing our dependency on dwindling fossil-fuel energy sources, as well as enabling them to learn some principles of physics. Judging from the smiling faces, amounts of artwork produced and marshmallows consumed, a great time was had by all (including the PSI team).

And finally – a massive thankyou to: **Aaron, Abigail, Alfie, Alicia, Alice, Amaelie, Amber, Amelie, Anna, Anne, Beth, Bethan, Betti, Betty, Broghan-Lee, Callum, Casey, Cerys, Conner, Daisy, Daniel, Eleanor, Ella, Elle, Ellie, Emily, Emma, Erin, Eva, Eve, Evie, Ewan, Finlay, Freddie, Gethin, Hannah, Hollie, Holly, Isaac, Isabelle, Jacob, James Jamie, Joe, Jon, Jonathan, Joseph, Joshua, Kate, Katie, Kitty, Maddison, Madeleine, Madison, Maggie, Martin, May, Maya, Megan, Millie, Milly, Mobelk, Mollie, Molly, Ned, Oliver, Olivia, Poppy, Rab, Rachael, Ruby, Ryan, Sara, Sarah, Swyn, Thomas, Tom, Tomos, William and Wesley** who helped the PSI team build a rainbow from their artwork at the Rainbow Colour Station.



Darren demonstrates his artistic talents at the Rainbow Colour Station