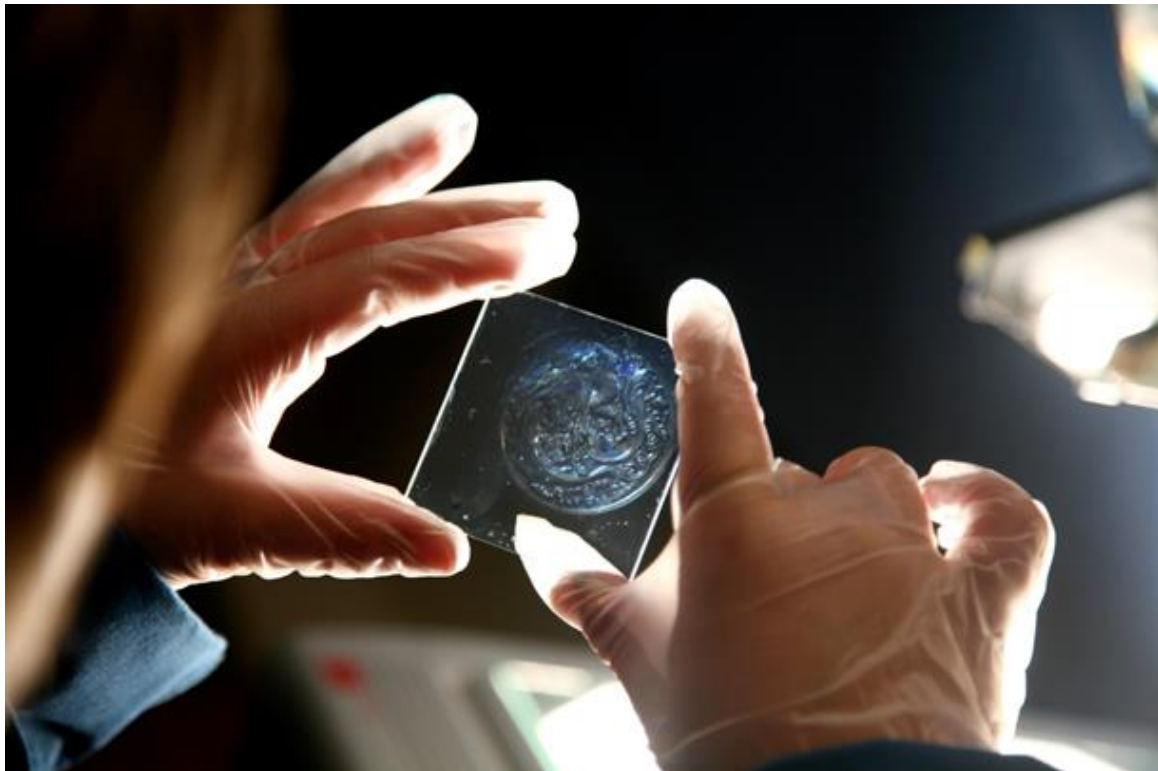


Holography & the EM Spectrum
A free Fab Lab London workshop for GCSE students!

Making Holograms!

Wednesday 1st November 2017

At Green Lab, London SE16 4EE



In this workshop students will make their own hologram and learn about how Photonics (laser technology) is a key technology for the 21st Century.

A Partnership between Fab Lab London & the University of Southampton.



PHOTONICS²¹
PHOTONICS PUBLIC PRIVATE PARTNERSHIP

This project has received funding from the European Union's Horizon2020 Research and Innovation Programme under the Grant Agreement No: 631610. Project Duration 1/12/2016-31/05/2019.

Title of Workshop: Holography & the EM Spectrum: Making Holograms

Start date: Wednesday 1 November 2017

Times: 10-12pm or 1-3pm.

Location: Green Lab (3Space), Corner of Keeton's & Collett Road, Bermondsey, London SE16 4EE.
Directions can be found [here](#).

Summary: A hands-on workshop in Photonics (laser technology) for GCSE students of all genders. Students will learn about and apply basic light theory to create holograms, working with an experienced team of educators and researchers. Students will learn about Photonics, a key cutting-edge technology, important for solving societal challenges in the 21st Century; (challenges such as; energy, medicine, telecommunications and manufacturing), in a creative, informal environment.

Number: Maximum 25 students – minimum 20. Please bring at least 50% young women.

Outcomes: Students will:

- make a hologram to keep
- understand the basic physics of light and lasers (reflection, refraction, diffraction & interference, 2D/3D, subtractive/additive colour)
- have a basic understanding of Photonics (laser technology) applications in manufacturing and telecommunications
- learn about careers in Physics/Photonics.

Session Description

- Brief introduction to holography, Photonics and the Green Lab, including safety. Groups attending are then split into two further groups and will rotate around each activity listed below:
- Activity 1: making optical holograms and developing them
- Activity 2: making 'scratch holograms' and learning about the light theory which makes holography possible
- Plenary.

Please note that we would like to film and photograph the student's activity for educational and marketing purposes. Please make it known to the photographer if a student does not want to be filmed/photographed.

To book a place or for more information about the workshop content please contact: pj@soton.ac.uk. Tel: 02380592159

More information about Fab Lab London can be found at: <https://www.greenlab.org/>

More information about EU PHABLAB 4.0 project can be found at: <http://www.phablabs.eu/>