Learning in a hair's breadth: metamaterials and nanofabrication

Students from King Edward VI School watch closely as the logo of their school is written on a human hair by focused ion beam milling at the Optoelectronics Research Centre (ORC): it is the world's smallest King Edward VI School logo.

The ORC's Nanophotonics and Metamaterials group hosted the group of 33 six-form students this week as one in a series of outreach events designed and organised by the Centre for Photonic Metamaterials to widen awareness and participation of students in engineering and science subjects.



King Edward VI School students and staff with members of the Centre for Photonic Metamaterials

Dr Eric Plum, Lecturer at the Centre for Photonic Metamaterials, organising the visit, said: "It is great to host a group of interested and curious students. By exposing them to the opportunities arising from cutting edge nanotechnology, which builds on the foundations of their A-level physics, we hope to inspire some of them to become the scientists and engineers that will drive progress in the future."



The smallest King Edward VI School Logo ever made: This logo has been written on a human hair by focused ion beam milling while the students were watching. Picture by Oleksandr Buchnev.

This event is a continuation of the strong theme of education and outreach through the International Year of Light. These events underline the value of scientists and engineers to the UK economy at a time when many companies report that they are unable to fill vacancies due to skills shortages. The nation needs more young people to take A-level physics.

Dr Helen Dean, Physics Teacher, King Edward VI School commented: "It's been fantastic to be able to bring the students to see the world-leading research conducted here. The students found the visit very interesting and seeing their School Crest etched onto a human hair was top of their 'cool' list."

Find out more about the <u>Centre for Photonic</u> <u>Metamaterials</u>.

Learn more about outreach activities at the University of Southampton.