

Local students discover metamaterials and nanotechnology

Students from King Edward VI School found out how metamaterials unlock novel possibilities during a visit to the Optoelectronics Research Centre (ORC) which culminated in live nanofabrication of their school logo on human hair.

The ORC's Nanophotonics and Metamaterials group hosted the group of 38 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



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.

Dr Eric Plum, Lecturer at the Centre for Photonic Metamaterials, organising the visit, said: “Hosting such a group of bright and curious students who are about to choose a career is a great opportunity to inspire them to choose science. This has become particularly important as Brexit will make it more difficult to compensate for the shortage of British researchers by recruiting the best people from elsewhere.”

The students learned how the ability to control every property of light with metamaterials in unprecedented ways opens up opportunities for imaging, data storage, communications and information processing. They visited the University’s state-of-the-art cleanrooms to find out about nanofabrication from metamaterials and nanoelectronics to optical fibre technology.

Dr Helen Dean, Physics Teacher, King Edward VI School commented: “The students were very impressed with what they saw and thought the etching of the School Crest into a hair was ‘very cool.’”

Find out more about the [Centre for Photonic Metamaterials](#).

Learn more about [outreach activities](#) at the University of Southampton.