



Apply here

Start date

As soon as possible

Duration

6 months

Languages

Good spoken and written English levels are required (B2 onwards)

Location

Oxford,

One of the world's most famous university cities, Oxford is a beautiful place. It is steeped in history and studded with picturesque buildings, yet maintains the feel of a young city, thanks to its large student population. This buzzing city has something for all tastes.

Are you eligible?

Are you a registered student?
Or

Are you eligible to participate in the Erasmus+ programme?

Benefits

See website for details of all ESPA benefits. For all internships over 6 months, additional benefits will be paid. Details available at interview.

Role

This is a fantastic opportunity for a Chemistry or Materials Science student looking to gain practical experience with this world leading host. Mentored throughout, you will be assisting in the Research and Development department of this Japanese owned electrical giant. You will be working at the forefront of technology in the design of the next generation display screens for televisions, mobile phones and tablets. The selected candidate will have an interest in light emitting devices and want to carry out hands-on laboratory work involving quantum dots and polymers. The project will focus on developing a new method to pattern quantum dots (QDs) in specific regions of a substrate. For the right candidate, this placement will provide a challenging, yet fulfilling experience.

Tasks

- Gather information on current status of relevant technology
- Prepare samples e.g. preparing polymer/QD mixtures, film deposition, centrifugation, and test them with appropriate instruments e.g. UV-Vis spectrophotometer, Fluorimeter, Atomic Force Microscopy, Thermal Gravimetric Analysis
- Exchange ligands on QDs and evaluate the change in optical properties and lifetime
- Write a report on the result obtained.

Personal Skills

- Has studied semiconducting and light emissive materials (OLED, quantum dots, QLED) and polymerisation processes during their Master/Bachelor degree
- Experience in preparing chemical solutions; knowledge of optical and thermal techniques (absorption/emission spectroscopies, thermal analysis)
- Experience in working with QDs will be beneficial
- Experience working with oxygen-free techniques e.g. glovebox, Schlenk line
- The candidate should demonstrate strong motivation, self-learning skills and analytical approach to problem solving.

The Host Company

This Host Company is the Research and Development arm of a Japanese multinational corporation with 50,000 employees worldwide and a turnover of \$28 Billion. This worldwide market leader in electrical goods is now developing the next generation displays for televisions, tablets and mobiles and is seeking ambitious students to contribute to their continued success.