

## Venue

The two-week intensive summer school will take place in the School of Chemistry at Newcastle University (Building 20 in the following map: <http://www.ncl.ac.uk/about/visit/maps.htm>)

Address: Bedson Building, Edward's Walk, NE1 7RU, Newcastle Upon Tyne, UK.

## Social Activities

This summer school will host students from the UK and Spain. Social activities will be organised during the evenings (between 5 and 8pm) and on Saturday 20<sup>th</sup> of August. The cost of these activities (approximately £120) is not included in the registration.

A gala dinner will be organised in Newcastle on Thursday 25<sup>th</sup> of August.



## Further information

Please contact Dr Anna Reynal, Senior Lecturer in Chemistry at Teesside University ([a.reynal@tees.ac.uk](mailto:a.reynal@tees.ac.uk))

## Sponsorship

We would like to thank the Royal Society of Chemistry and the Foundation Catalonia-La Pedrera.

# INTERNATIONAL SUMMER SCHOOL: COLOURFUL CHEMISTRY

15<sup>th</sup> - 26<sup>th</sup> of August 2016

Teesside University and Newcastle University



Would you like to explore the exciting chemistry of dyes and their real life applications?

Would you like to get a taste of university life and be able to work in a real research laboratory?

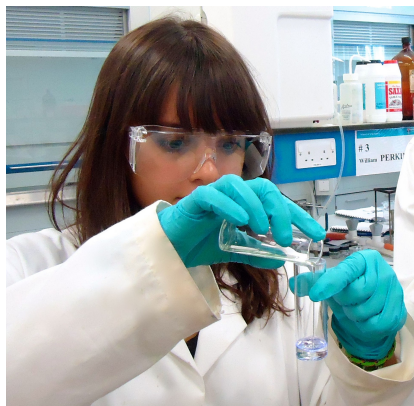
Join us in this two-week intensive summer school!



# What you will learn

The activities for this project have been divided in three groups:

- 1) Synthesis:** you will have the opportunity to synthesise an organic and an inorganic dye.
- 2) Characterisation:** you will study the physico-chemical properties of dyes by absorption, luminescence and infrared spectroscopies and by nuclear magnetic resonance.
- 3) Real applications of dyes:** you will use different dyes to detect fingerprints and blood (forensic chemistry), to prepare solar cells (renewable energies), to detect metal ions (sensor) or to build a LED (light emitting diode).



## Registration information

The International Summer School is a free-of-charge event for year 12 students beginning their final year of study in September 2016.

Public transport costs are not included in the registration.

Registration should be done through the following website:

<http://bit.do/colourfulchemistry>

## Deadline

Applications should be submitted before the **31<sup>st</sup> of May 2016**.

# About the summer school

The summer school is a two-week intensive workshop aimed at year 12 students beginning their final year of study in September 2016, with an interest towards Chemistry.

The course is delivered by a group of professors and researchers from Teesside University and Newcastle University. We aim to give a flavour of our research, by providing the opportunity to participate and explore the spectacular chemistry of dyes with our hands-on activities, lectures and laboratory experiments.

The course will take place from the 15<sup>th</sup> to the 26<sup>th</sup> of August 2016, Monday-Friday between 9am - 12pm and 2 - 5pm.

The topics of the sessions are provided below:

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1	Introduction: Sources of colour	Synthesis of organic and inorganic dye	Dye purification	Characterisation of dyes	Identifying an unknown dye
Week 2	Photo-chemical reactions	Forensic chemistry	Molecular sensors	Solar cells	Light emitting diodes (LED)

The summer school is aimed at 30 students from the UK and Spain, and is funded by the Royal Society of Chemistry and the Foundation Catalonia-La Pedrera.

