

## Outreach newsletter: March 2023

Welcome to the March edition of our Outreach newsletter!

Please do pass this on to anyone who may be interested in receiving this bulletin. They are very welcome to subscribe using this [link](#). If you wish to be removed, please email [outreach@chem.ox.ac.uk](mailto:outreach@chem.ox.ac.uk).

With best wishes,

Dr Malcolm Stewart (Director of the Chemistry Teaching Laboratories), Saskia O'Sullivan (Educational Outreach Officer), Matt Fifield (CTL Administrator) and Natalie Armstrong (Outreach Programmes Manager)

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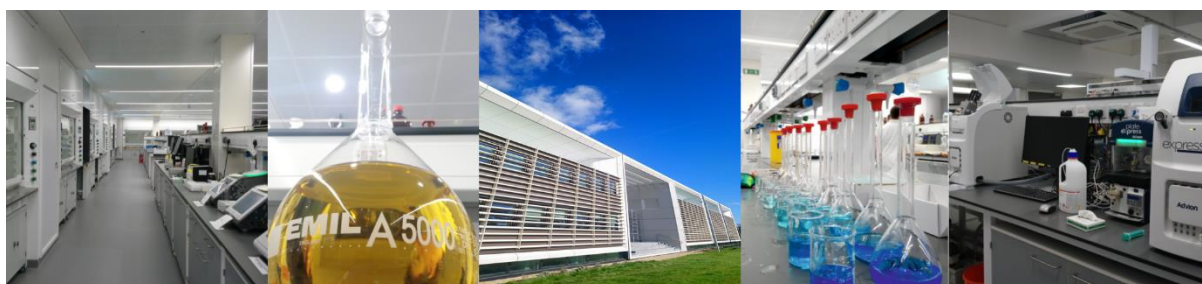
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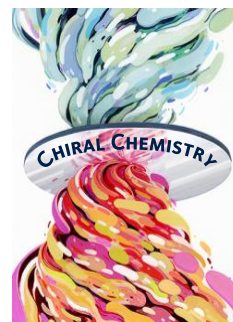
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## Upcoming events:

### KS5 Chiral Chemistry Workshops **[REPEAT]**

Our Chiral Chemistry workshops will soon conclude for the 2022–2023 academic year. This is our online workshop for UK state school KS5 Chemistry students and teachers, which is delivered by our Department Ambassadors. Dates and times have been designed to avoid interruption of lessons. The session focuses on 3D shapes, chirality, the role of chirality in biological systems and the resources available to research chemists looking at proteins, such as the main protease in SARS-CoV-2, the latter being an active area of research in our Department. There is also an opportunity to ask our Ambassadors questions about their research and their academic careers to date. Students may attend without a teacher, provided we have a teacher contact.



The workshop will be delivered on the following dates/times:

Monday, 13 March 2023 16.00–17.00

Thursday, 20 April 2023 16.00–17.00

**REQUEST A SPACE**

Please note that places are limited to students from state schools in the UK, Isle of Man and Channel Islands, and where we are oversubscribed, we will prioritise places for students who meet our widening participation and access criteria. Further information about this can be found at <https://www.ox.ac.uk/about/increasing-access>

### Choosing Oxford 2023 **[NEW]**

Choosing Oxford's registration page is open for students, teachers, and parents/guardians to register their interest in attending one or many of the live sessions that will be running.

Choosing Oxford is an online conference with a series of live sessions that will:

- Give students and teachers up-to-date information about our courses, colleges, and the Oxford undergraduate admissions process
- Explain how we can support students with their application
- Give students an insight into what living and studying at Oxford is like
- Provide an opportunity to speak to and ask questions of both tutors and current student ambassadors



**REGISTER HERE!**

## KS4 Spring Chemistry Conference 2023 **[UPDATE]**

We are holding our second Virtual Spring Chemistry Conference for KS4 (14–16 yrs) students and their teachers on **23rd March 2023 16.00–18.00 GMT**. Open to all Year 10 and 11 students (or equiv., 14–16 yrs) and their teachers interested in finding out more about the cutting-edge research happening in the field of chemistry, and hosted by the Department of Chemistry, University of Oxford. Students are welcome to attend unaccompanied by a teacher.

### Confirmed speakers :

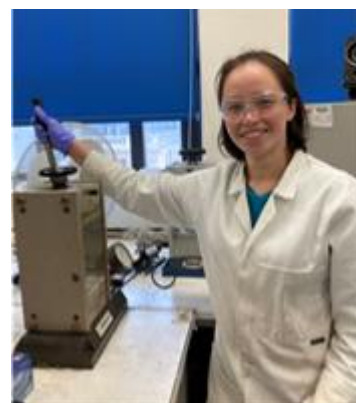
**DPhil Denis Hartmann** (Booth Group) graduated with a First Class Honours MChem degree from the University of Oxford, St. Anne's College and now works on ways to chemically control DNA expression.

Denis will present a talk entitled *Using Light to Understand and Control Biology*.



**Dr Nicola Kelly** is a postdoctoral researcher in inorganic/materials chemistry, who first studied chemistry at Oxford, spending her final year working on layered solids with Prof. Simon Clarke. After a PhD in Cambridge supervised by Dr Sian Dutton, working on magnetic solids containing lanthanide ions, Nicola came back to Oxford and the Clarke Group in April 2022 and is now investigating another new set of layered ionic solids. A typical day in the lab involves high temperature synthesis (a bit like baking) and looking at the structures of the materials using X-rays. Outside the lab Nicola is usually found in the playground or reading stories with her 1-year-old son.

Nicola will present a talk entitled *Solid State Chemistry: What, How, Why?*



**REGISTER HERE!**



## Future Events:

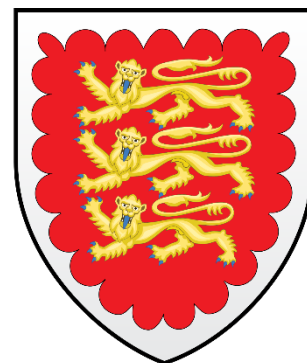
### Oriel Women in Sustainability Programme **[NEW]**

As part of their Easter Residential Programme, Oriel College will be holding a Women in Sustainability programme on **11<sup>th</sup>** and **12<sup>th</sup> April** for students considering degrees in STEM or Social Sciences who have an interest in exploring Sustainability through academic study.

These programmes are designed to support Year 12 students from non-selective state schools in the UK who are considering degrees at highly selective universities like the University of Oxford. Attendees will participate in subject sessions, applications workshops, and opportunities to work with academics at the University of Oxford.

All expenses (accommodation at Oriel, meals, and activities) are funded thanks to the generosity of an Oxford alumnus. Travel costs to Oxford to attend a residential programme will also be reimbursed.

Applications are open until March 12<sup>th</sup> at midday. For more information on selection criteria and to sign up, please see the [Easter residential website](#).



### St Johns Year 12 Chemistry Inspire Study Day **[REPEAT]**

St John's College, Oxford will be holding a Chemistry Study Day on **Wednesday 17<sup>th</sup> May 2023**. This is a fun and free event for students to visit Oxford to attend an academic taster session, take on Chemistry challenges run by the Oxford Chemistry department, receive application advice, find out more about the course at Oxford, and meet current St John's students.

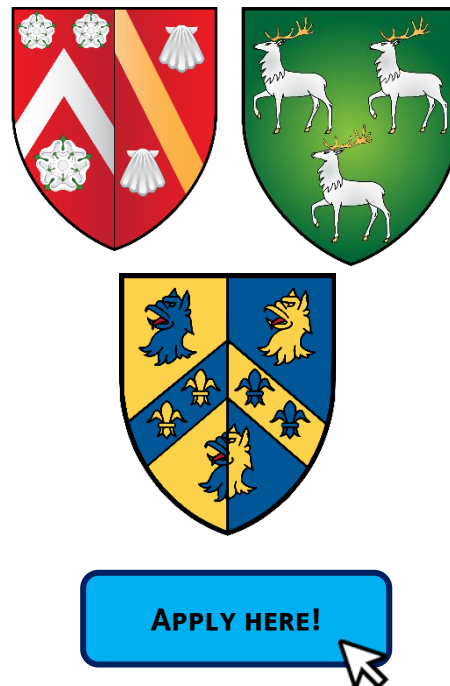
Y12 students studying Chemistry at A-level (or equivalent) at non-selective UK state schools are eligible to apply, but check the individual event for any subject-specific requirements. Students may be eligible for travel support if they are otherwise unable to afford travel to Oxford.

Applications will open on **Monday 20<sup>th</sup> March** and close **Monday 17<sup>th</sup> April** at **8am**. You can find our more information on the study days in the meantime [here](#).



## Women in Science Day 2023 **[NEW]**

Do you know Year 12 female scientists who are looking to explore the sciences at university? The Oxford colleges of Trinity, Jesus, and Wadham are pleased to announce Women in Science Day 2023! The University of Oxford offers over 20 different undergraduate courses in science subjects, so we want to showcase just how diverse a degree in the sciences can be. On **Friday 23<sup>rd</sup> June 2023**, we are inviting 100 young female scientists in Year 12 to visit Oxford, where they will hear from Oxford academics about a broad range of science subjects through a mixture of lectures and seminars. There will also be admissions advice and support sessions, empowering young women to make informed decisions about the next steps in their education. The deadline for submitting an application is 23:59 on Friday 12th May 2023



## School / Community Workshops **[REPEAT]**

### Online Primary Workshop: Plastic Fantastic?

This workshop is for a class of students in Years 5/6 (England and Wales), P5/6 (Scotland) and P6/7 (NI) in a UK primary school. Co-led with the class teacher, the students will interact with Oxford Chemistry ambassadors via MS Teams, whilst undertaking small-scale investigations using materials which have been sent to the school in advance.

All workshops for the current academic year are fully booked. Dates for the 2023-24 academic year will be released in the summer term.

## Oxford College Workshops **[REPEAT]**

You are warmly invited to request a **College Workshop** when arranging a group visit with a College. Find out about your link Colleges [here](#). *If you do not hear back from your link college within 14 days, do get in touch directly with us.*

### Unlock the OxBox – Poison Puzzle

This is for KS4 (14-16 yrs) and is a series of practical and theoretical chemistry problems. Minimum of 12 students.

*"It is fantastic for the students to have this opportunity to apply their knowledge to a problem-solving activity and so enjoyable for them."* – Teacher



### Unlock the OxBox – The Lab Lurker

A series of practical and theoretical chemistry problems for KS5 (16–19 yrs) students. Would suit a class where at least half of the students are studying A level (or equivalent) in Chemistry. Minimum 12 students (at least 6 studying Chemistry A level, or equivalent).



*You can mix and match Poison Puzzle and Lab Lurker puzzle boxes for groups including KS4 and KS5 students, as long as there is a minimum of 12 students in total (a minimum of 3 from a Key Stage is required).*

### Other Opportunities:

### Chemistry for Science Teachers Part 1 and Part 2 [REPEAT]

This live online four-part professional development fully funded course provides an opportunity for science teachers to explore effective strategies for teaching chemistry across the 11–16 age range. We will explore how to teach key topics in chemistry and a number of ways to support your confidence in delivering practical work. Built in to each session, there will be time to discuss up and coming teaching topics, practicals tried out as well, as an opportunity to ask general questions. Please click below for more details.

Part 1: February, March and May 2023, 3.45–5.30pm, online

Part 2: Wednesday January, February, March and May 2023, 6.45–8.30pm, online

### Competitions:

### RSC WIC: Star Chemist Baking Competition [UPDATE]

Congratulations to Rachel (age 15) and Thea (age 13) for their winning entries for the RSC Wic Start Chemist Baking Competition. The judges were impressed with Rachel's spectacular Fizzing Flask cake and Thea's deep and fudgy Chocolate Cake! Both winners received a £25 book token and a hamper full of Co-Op baking goodies.

Take a look at our [website](#) to see the winning entries for yourself!



## National Scientific Thinking Challenge [REPEAT]

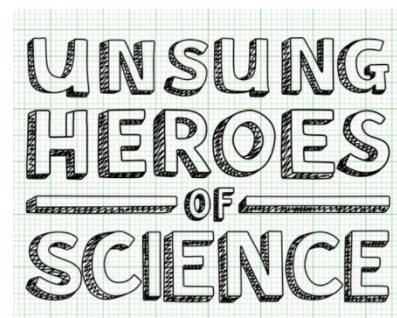
In 2021, a group of friends from Warwick, Southampton, Bristol, Newcastle, Manchester and Oxford Universities created a test for Year 10 students to try. They wanted to encourage students and give them something positive and enjoyable to try at a difficult time.



Last year they had 95 teachers from 69 schools and 4,397 pupils taking part! For 2023, the free challenge will take place in the last week of April. Any school from anywhere in the UK is welcome to enter and you can enter as many students as you wish from Year 10. For further details please visit [National Scientific Thinking Challenge \(warwick.ac.uk\)](https://warwick.ac.uk/national-scientific-thinking-challenge).

## Unsung Heroes of Science [NEW]

Share your unsung hero with us in our 2023 video competition, organised by Oxford University's Hertford College. We're challenging you to make a short video celebrating an unsung hero of science who you think deserves wider recognition. The competition is open to everyone everywhere aged 16-18 and there are no restrictions on who you can choose to celebrate. We want to see who from the world of science inspires you and to learn more about them.



The deadline to submit your video is Friday 28th April 2023 (23:59 BST).



## Learning Resource [REPEAT]

Our website has lots of learning resources available. Our most recent surrounds our [LEGO spectrophotometer](#) activities. We encourage you to take a look at the resources available which include Teacher PowerPoints and Student scripts. Enjoy!

