

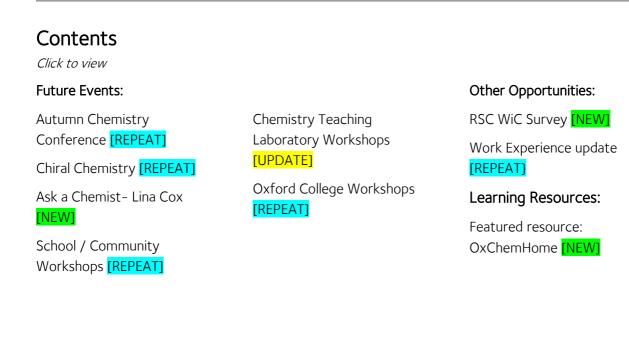
Outreach newsletter: August 2022

Welcome to the August 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 <u>link</u>. If you wish to be removed, please email <u>outreach@chem.ox.ac.uk</u>.

With best wishes,

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





Future Events:

Date for your diary: Autumn Chemistry Conference 2022 [REPEAT]

We'll be holding our third Virtual Autumn Chemistry Conference on Thursday 29th September 16.00–18.00 GMT. Open to all Year 12 and 13 students (or equiv., 16–19 yrs) and their teachers interested in finding out more about the cutting edge research happening in the field of chemistry, and hosted online by the Department of Chemistry, University of Oxford. Students are welcome to attend unaccompanied by a teacher. Information on speakers and registration to follow in due course.

KS5 Chiral Chemistry Workshops [REPEAT]

Our Chiral Chemistry workshops will continue in 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.

We have now announced dates for the next academic year. The workshop will be delivered on the following dates/times:

Tuesday, 11 October 2022	16.00-17.00
Wednesday, 9 November 2022	16.00-17.00
Thursday, 01 December 2022	16.00-17.00
Tuesday, 10 January 2023	16.00-17.00
Wednesday, 08 February 2023	16.00-17.00
Monday, 13 March 2023	16.00-17.00
Thursday, 20 April 2023	16.00-17.00

Please note, 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 <u>https://www.ox.ac.uk/about/increasing-access</u>



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DEPARTMENT OF CHEMISTRY

Ask a Chemist – Lina Cox [NEW]

Our next Ask a Chemist session will feature Lina Cox on Tuesday 18th October (13.00–14.00 BST)

Lina is a trainee patent attorney with J A Kemp LLP. Originally from North Yorkshire, she made the journey down to attend the UNIQ chemistry summer school in the summer of 2015. She studied chemistry at Exeter College, Oxford from 2016 to 2020. For her final year project, she researched synthetic oligonucleotide backbone mimics (trying to overcome the barriers preventing wider adoption of DNA based therapeutics). In October 2020, she started at J A Kemp as a trainee patent attorney in their chemistry and pharmaceutical team.

Following on from Lina's Q&A, our next Ask a Chemist session will feature **Brian Balmer (Tuesday 15th November, 13.00–14.00 BST)**.

School / Community Workshops [REPEAT]

Online Primary Workshop: Plastic Fantastic?

We have concluded our current term of the online Plastic Fantastic? Workshops. We'll be announcing dates for the next term on our website in due course.

Chemistry Teaching Laboratory (CTL) Workshops [UPDATE]

Due to the continuing construction work associated with the Life and Mind Building, we are, as yet, unsure if CTL workshops will be able to run in 2022–2023. We will update you via this newsletter as soon as we have news.

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 <u>here</u>. *If you do not hear back from your link college within 14 days, do get in touch directly with us.*









Small, yet Mighty!

A brand-new workshop focused on fuel cells and linked to the GCSE curriculum. Students explore catalysis, hydrogen fuel cells, and create their own enzyme-fuel cell before tackling a puzzle which includes information about current research in the Department of Chemistry.

'I learnt a lot about hydrogen fuel cells which I didn't know before completing this workshop. Thank you so much!' Student

'I learnt new things that I can adapt into my school science lessons.'Student

'It was brilliant - a really high-quality session.' Teacher

Thinking 3D

A workshop is for KS4 (14–16 yrs) and is designed to showcase the importance of maths and geometry in chemistry through a circus of activities. Most suitable for students who are interested in maths. Minimum of 16 / maximum of 40 students.

"It helped me understand the topic and I learned new things about chemistry' - Student

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 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).







DEPARTMENT OF CHEMISTRY



RSC Women in Chemistry: Survey [NEW]

We'd like your opinion! Please take part in our <u>survey</u> to help us plan future events which would be most beneficial to you.

In the meantime, you can catch up on our live panel events from spring 2022 <u>here</u>. Connect with us on Twitter and Instagram **@women_in_chem**. If you haven't already, take a look at our <u>PowerUP! Challenge</u> which ties in nicely with the RSC's recently launched <u>Global Battery Experiment</u>.

Work experience update [REPEAT]

It is with regret that we are unable to offer work experience placements in the 2022-23 academic year. We do understand that many students are keen to undertake work experience having had these opportunities severely curtailed in the pandemic. We are hopeful to be able to offer placements in the future, which will be have advertised via our website. Please do not send us unsolicited requests for work experience opportunities in the meantime, thank you.

Learning Resources

Featured resource: OxChemHome [NEW]

We've created a series of resources and experiments for curious young chemists that can be explored in the home! Explore the principles of reactions, densities, acids and bases, and have fun with food, liquids and secret messages! These resources are most suitable for home chemists as well as primary science clubs. You can find all of our resources at <u>bit.ly/OxChemHome</u>



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bit.ly/PowerUPWiC

POWERUP

