

Outreach newsletter: October 2022

Welcome to the October 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.

With best wishes,

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

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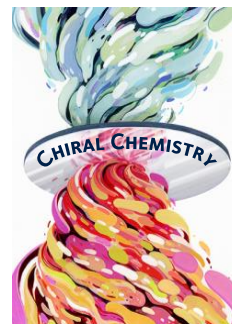
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Upcoming Events:

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:

REQUEST A SPACE

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

Explore Chemistry – A super-curricular series **[NEW]**

KS5 UK state school students and their teachers are invited to sign up for this series of talks and Q&As. There will be a week to watch a pre-recorded talk (posted online), reflect and note any questions before joining a 45-minute online live Q&A session with the researcher presenting the talk.

Our next talk and Q&A will feature **Priyansh Gujarati** (Ed Anderson Group). The talk will be released on the 17th November 2022, with the Q&A following on the 24th November, 16.15–17.00.



SIGN UP TO THE SERIES

Please note that for Chiral Chemistry and Explore Chemistry 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>

Ask a Chemist – Lina Cox **[REPEAT]**

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

JOIN HERE!

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)**.

Brian studied Chemistry at Oriel College, starting in 1992. He completed his DPhil in Oxford, making ceramic superconductors, after which he accepted a job with consultancy firm Frost & Sullivan in June 2000, where he has remained since. Frost & Sullivan's remit is to help clients identify opportunities for sustainable future growth for their business, and is structured around industry groups. Brian joined as an analyst in the Chemicals team and he now manages that team at a global level, advising some of the world's largest chemical companies, such as Dow, Clariant, Evonik and Arkema, helping them to understand growth trends in their markets.



**SIGN UP HERE FOR
UPDATES!**

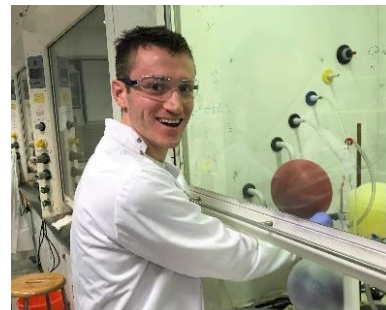
Past Events:

Autumn Chemistry Conference 2022 **[UPDATE]**

We held our third Virtual Autumn Chemistry Conference in September – thank you to all who attended! Two Oxford Chemistry researchers shared their innovative work and journey to Oxford Chemistry, and responded to questions from attendees. You can catch up on each talk and Q&A from both of our speakers:

Ben Shennan is a 3rd year DPhil student in the group of Prof. Darren Dixon discussed his forays into natural product synthesis, targeting molecules isolated from a sea sponge from Papua New Guinea and a Chinese mountain shrub.

Hannah Asiki is a DPhil student on the Wellcome Trust Chemistry in Cells programme. She is undertaking a collaborative project with Prof. Ed Anderson (Department of Chemistry) and Dr Richard Wheeler, synthesising anti-parasitic compounds and investigating their mechanism of action.



WATCH HERE!

Future Events:

School / Community Workshops **[REPEAT]**

Online Primary Workshop: Plastic Fantastic?

We'll be announcing dates for upcoming Plastic Fantastic? workshops on our website and in this newsletter shortly.

Chemistry Teaching Laboratory (CTL) Workshops **[REPEAT]**

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 [here](#). *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).



Other Opportunities:

Astrophoria Foundation Year Presentation and Q&A **[NEW]**

Find out more about the University of Oxford's Astrophoria Foundation Year Programme on **Friday 7th October, 18.00–19.00 BST**. This event will be held on Zoom and will be presented by Dr Jo Begbie, the Programme Lead. There will also be an opportunity to ask the Foundation Year Team and a former foundation year student questions at the end.



REGISTER HERE!



Target Oxbridge **[NEW]**

Target Oxbridge is a free programme that aims to help Black African and Caribbean students and students of mixed race with Black African and Caribbean heritage increase their chances of getting into the Universities of Oxford or Cambridge. Since launching in 2012, Target Oxbridge has helped over 350 students to secure Oxbridge offers.

The programme is open to UK-based students in Year 12 who ideally have achieved 5 GCSEs at grades 9, 8 or 7. Priority will be given to applicants from state schools and students who meet the widening participation criteria used by the Universities of Oxford and Cambridge.

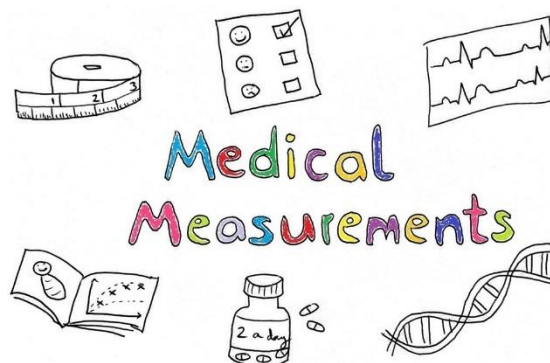
For more information and to apply for the 2023–24 programme, visit the Target Oxbridge website here: <https://targetoxbridge.co.uk/>



Centre for Personalised Medicine Art Competition [REPEAT]

What can we measure about our health? Is it possible to measure too many things? Should researchers be allowed to use any measurements collected by the NHS? We want to see what you think!

The Oxford Centre for Personalised Medicine is asking pupils in Years 7-9 to create art about measuring things to do with health and disease. There are loads of different things your art could look at: what might be helpful to measure if someone is ill? Are measurements always right? Who should be able to look at a person's healthcare measurements? We can't wait to see your ideas!



You can make a drawing, a painting, a collage, a sculpture – anything goes as long as it's something you can take a photo of. First prize is £100, and the best entries will form part of a display at a Centre for Personalised Medicine art exhibition in Oxford next year.

The deadline for entries is 20th January 2023. More details can be found here: <https://cpm.well.ox.ac.uk/art-competition>

RSC Women in Chemistry: Survey [REPEAT]

We'd like your opinion! Please take part in our survey 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 here. Connect with us on Twitter and Instagram **@women_in_chem**. If you haven't already, take a look at our PowerUP! Challenge which ties in nicely with the RSC's recently launched Global Battery Experiment.



Did you know...

The 2019 Nobel Prize for Chemistry was awarded for work on the development of the lithium-ion rechargeable battery

These batteries are the ones powering your phone

POWERUP! bit.ly/PowerUPWiC **MAKING A DIFFERENCE**

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 advertised via our website. Please do not send us unsolicited requests for work experience opportunities in the meantime, thank you.

Learning Resources

Featured resource: The Chemistry of All Hallows' Eve and Bonfire Night [UPDATE]

Join Saskia O'Sullivan (Oxford Chemistry) and Tim Harrison (Bristol ChemLabS) as they explore the underlying chemistry of two of our most popular celebrations. This lecture-demonstration was recorded at Bristol ChemLabS in October 2021 by Dr Jonny Furze (Bristol ChemLabS). Watch the video here: <https://www.youtube.com/watch?v=KMPvbBtNh44>

