

Outreach newsletter: September 2023

Welcome to the September edition of our Outreach newsletter!

We'd like to introduce two new members of the Oxford Chemistry Outreach team who'll be working with us to organise and deliver our outreach events and programmes:

Isabelle Thacker has joined as our Apprentice Outreach Programmes Manager, working closely with the Chemistry Outreach team to organise and deliver our programme of activities. She also likes drawing, and plays football (we're hoping to recruit her for the rumoured Oxford Chemistry 5-a-side team in due course).



Nicholas Pitt has joined as our Public and Community Engagement with Research Officer, promoting community engagement with research across the department. He has spent the last two years working as the PER officer for the Wellcome Centre for Ethics and Humanities, developing various programmes on public engagement. He comes from arts background and is a trained theatre director, having produced various works with researchers and artists.



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.

Thank you!

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Upcoming Events:

KS5 Autumn Chemistry Conference **[REPEAT]**

We'll be holding our fourth Autumn Chemistry Conference on **Thursday 28th September 16.00–18.00 BST**. 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.

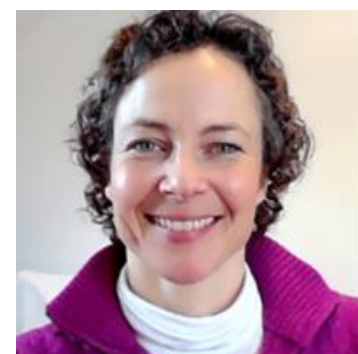
[REGISTER HERE!](#)

About the speakers:

Professor Tom Brown is Professor of Nucleic Acid Chemistry in the Departments of Chemistry and Oncology. His research interests centre on nucleic acid chemistry and its applications in biology and medicine. He is co-inventor of several technologies for genetic analysis, is co-founder of three successful Biotech companies; Oswel, Primer Design and ATDBio, and has published over 450 research papers and patents.



Professor Claire Vallance is Professor of Physical Chemistry in the Department of Chemistry, Tutorial Fellow in Physical Chemistry at Hertford College, and until July 2021 was President of the Faraday Division of the Royal Society of Chemistry. She has research interests spanning chemical reaction dynamics, the development of laser spectroscopy techniques for chemical sensing, and the application of mass spectrometry and spectroscopy in clinical medicine.



KS5 Chiral Chemistry Workshops **[UPDATE]**

We would like to announce the 2023–2024 academic year dates for our Chiral Chemistry workshop. 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.

[REQUEST A SPACE](#)

The workshop will be delivered on the following dates/times (please note the workshop is running at a slightly earlier time than last year):

Tuesday 17 th October 2023	15.45–16.45
Thursday 9 th November 2023	15.45–16.45
Tuesday 5 th December 2023	15.45–16.45
Tuesday 16 th January 2024	15.45–16.45
Thursday 8 th February 2024	15.45–16.45
Tuesday 5 th March 2024	15.45–16.45
Wednesday 24 th April 2024	15.45–16.45

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

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.



We'll announcing some sessions for the 2023–24 academic year shortly – please ensure you are subscribed to the mailing list to receive updates!

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>

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.

Dates for the 2023–24 academic year will be released shortly.

Oxford College Workshops **[NEW]**

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 – Graffiti Game

A new puzzle box workshop for Year 9 (13–14 yrs), featuring a series of practical and theoretical problems. Minimum of 12 students, state schools please.

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, state schools please.

“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 six studying Chemistry A level, or equivalent), state schools please.



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 three from a Key Stage is required).

Other Opportunities:

RSC Women in Chemistry **[REPEAT]**

In-between our scheduled RSC Women in Chemistry events, a reminder that there are lots of exciting opportunities to participate in practical work over the summer (and beyond), including Science Clubs. Do keep an eye on our [website](#) and [Twitter](#) for further information on future events and activities!

UK Chemistry Olympiad 2024: Register Now! [NEW]

Registration is now open for the 2024 RSC UK Chemistry Olympiad. This competition for UK students (aged 16–18) aims to test knowledge, develop creative thinking and problem-solving skills, and push students to excel in chemistry. [Supporting resources and past papers](#) are available in advance on the first round written test in January.

Registration is open to all members of [Teach Chemistry](#) – a free scheme to provide additional support to secondary education teachers and technicians. Members can register their school or college through their Teach Chemistry account (you do not need to provide student names at this stage). Further info on this can be found [here](#).



Register [here](#). Registration will close on **7 January 2024**.

Work experience [UPDATE]

It is with regret that we are unable to offer work experience placements in the 2023–24 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 Resource: Extension Article [NEW]

New 'Droplet Battery'

Exciting new research from the University of Oxford makes a big step towards realising miniature bio-integrated devices, capable of directly stimulating cells. Researchers have developed a miniature battery using an ionic gradient across a chain of droplets – inspired by how electric eels generate electricity – that could be used to power tiny devices integrated into human tissues.

You can find out more about the research [here](#).

