

Outreach Newsletter: July 2025

Welcome to the July 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.

Thank you for reading!

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KS5 Autumn Chemistry Conference **[REPEAT]**



Our sixth Autumn Chemistry Conference will be held on Thursday 25th September 16.00-18.00 BST at the Inorganic Chemistry Laboratory, Department of Chemistry (and streamed online). This will be open to all Year 11, 12 and 13 students (or equiv., 15-19 yrs) and their teachers interested in finding out more about the cutting-edge currently research happening in the field of chemistry.

Students are welcome to attend in-person unaccompanied by a teacher provided that they are aged 16 or over on the day of the event and have provided emergency contact details. Priority will be given to local state schools.

About the speakers:



Dr Josef Boronski is a Lecturer in the Department of Chemistry at Imperial College London and is interested in the chemistry of the elements from the s-, p-, and f-blocks of the Periodic Table. Before this role, Josef graduated with an MChem from the University of York in 2017 and subsequently undertook a PhD at the University of Manchester, which he completed in 2021. In the same year, Josef was awarded a Junior Research Fellowship at St John's College, Oxford. Here, he initiated a programme of research into the chemistry of beryllium. In 2023, Josef won the Dalton Emerging Researcher Prize.



Dr Shurui Miao is the Career Development Research Fellow in Chemistry at St John's College. Before this role, Shurui graduated in 2018 with a BSc in Chemistry from the University of Sydney, Australia and he continued to pursue his postgraduate studies there. In December 2022, he moved to the University of Oxford joining Prof. Susan Perkin as a postdoctoral research associate. Shurui's work specialises in experimental physical chemistry and his research interests are centered around sustainability and self-assembly processes in solution. Shurui's current research focus on understanding how carbonate minerals form, which is crucial for carbon capture and storage, mitigating the effects of climate change.

FOR MORE INFORMATION ON IN-PERSON AND ONLINE REGISTRATIONS, PLEASE VISIT OUR WEBSITE [HERE](#).

Oxford University Open Days **[REPEAT]**



One of the best ways to decide if Oxford might be right for you is to come to one of our **University Open Days**, with the final one of this year taking place on Friday 19th September 2025. Come and look round our beautiful university city, chat to staff and students and discover for yourself what life here is like.

It is not mandatory to register for an Oxford Open Day, although we strongly recommend that you do in order to receive our newsletters, full of top tips on how to make the most of your day. You may also need to book for some popular sessions in advance.

Please see <https://www.ox.ac.uk/admissions/undergraduate/open-days-and-visits> for further information.

Creative Chemistry Tents – Summer 2025 **[REPEAT]**

This summer, departmental ambassadors and staff will be attending seven Oxfordshire Play Association playdays, bringing our Creative Chemistry Tent to parks and green spaces across the county. Visitors to the Creative Chemistry Tent will have the opportunity to meet scientists and enjoy our droplet art activity.



Further details, including event dates, locations, and timings, can be found [here](#).

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](#). Please note, the inclusion of one of our workshops is subject to the college's capacity to host your visit. Please do copy us (outreach@chem.ox.ac.uk) into any correspondence with the College team regarding the inclusion of one of our workshops. *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 puzzle box workshop for Year 9 (13-14 yrs), featuring a series of practical and theoretical problems. Minimum of 12 students from UK state schools.

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 from UK state schools.

"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 - 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), from UK state schools.

You can mix and match Graffiti Game, Poison Puzzle and Lab Lurker puzzle boxes for groups including Year 9, 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: Application Support for Oxford

Keble College Admissions Webinars [REPEAT]

Keble College, University of Oxford, is running a series of online Admissions Webinars during the summer term to support students considering applying to Oxford. These sessions provide clear, up-to-date advice on the admissions process and include opportunities to ask questions directly to University staff.



All webinars are open to Year 12/13 (or equivalent) students currently attending UK state schools or colleges, as well as parents, carers, and supporters of prospective applicants. Of particular interest to students considering Chemistry or other subjects within the Mathematical, Physical and Life Sciences (MPLS) Division, these sessions will include guidance on personal statements, super-curricular activities, and Oxford's admissions tests—all with relevance to STEM courses. Please see the schedules below for prospective students and for parents/carers. All sessions are free to attend.

Registration:

- [Register here for Admissions Webinars for prospective students.](#)
- [Register here for Admissions Webinars for parents, carers and supporters.](#)

Registration remains open until 08:00 on the day of each webinar. Joining details will be sent shortly after this time, regardless of when you register.

St Hilda's Webinar Series [REPEAT]

St Hilda's College is excited to announce a new Webinar Series taking place this June and July, designed specifically for state school students (Years 10–13) and teachers.

This free series will cover everything from choosing a course to understanding the Oxford admissions process and crafting a standout UCAS personal statement. Whether you're just beginning to explore university options or getting ready to apply, there's something for everyone.



Webinar Schedule:

- Wednesday 9th July (16:00–16:45). *An Overview of the Oxford Admissions Process (for Students).*
- Wednesday 16th July (16:00–16:45). *UCAS Personal Statement.*

Find out more and sign up [here](#).

Oxford University Islamic Society **[NEW]**

The Oxford University Islamic Society (OUISoc) is expanding its outreach efforts to support prospective Muslim students applying to Oxford. Their dedicated Access Team runs a range of initiatives designed to ease the transition to higher education, address common misconceptions, and involve parents in the process.

To stay up to date with upcoming opportunities, events, and resources, teachers and school representatives are encouraged to join the OUISoc Access Mailing List.



Who it's for: Muslim students in sixth form, regardless of background or level of spirituality, as well as teachers and school staff supporting them.

Stay connected:

- Join the OUISoc Access [Mailing List](#)
- For more information, visit [OUISoc's website](#) or email the Access Team directly at: ouisoc.outreach@gmail.com

Other Opportunities: Application Support for University

Trinity College – Online Talks for Parents and Carers **[NEW]**

Trinity College, is hosting two online talks designed especially for parents, carers, and supporters of students in Years 10, 11, and 12 who are considering university. These sessions are ideal for those who may not have attended university themselves or who would like up-to-date information on how to best support a young person through the university application process. Both talks will include a live Q&A with current Oxford undergraduates.



Talk Schedule:

- Monday 7th July (18:00–19:30) – A Guide to University
An introduction to higher education in general – ideal for those seeking to better understand university routes, benefits, and funding.
- Thursday 10th July (18:00–19:30) – A Guide to the University of Oxford and the Application Process. Focused specifically on Oxford, including application advice and how families can support students through the process.

Registration is available [here](#) until 48 hours before each session.

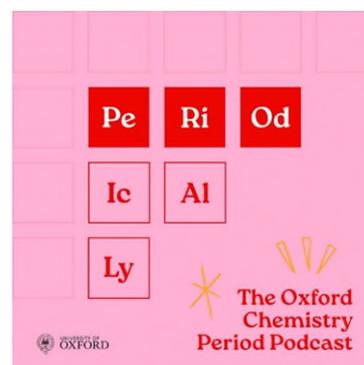
Other Opportunities: Enrichment and CPD

RSC Women in Chemistry [REPEAT]

A reminder that there are resources for practical challenges, information about research and profiles of team members available via their [website](#). These are particularly suitable for Science Clubs in schools, community groups, such as Scouts and Guides, as well as for enjoyable holiday challenges.

PERIODically Podcast [REPEAT]

PERIODically is a podcast created by undergraduate and postgraduate Chemistry students at the University of Oxford to discuss their experiences of how having a period has affected their time studying Chemistry. The podcast aims to discuss how the physicality and intensive nature of studying Chemistry can be affected by symptoms of periods (such as cramps, mental health and medical issues) and seeks to shed light on these problems, tackle stereotypes and misconceptions, and start a conversation on how study can be improved for those with periods. You can find further information and links to listen [here](#).



Trinity College's 'Beyond the Classroom' [REPEAT]

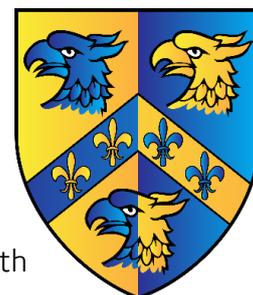
Trinity College, Oxford, is pleased to announce the return of its online after-school academic enrichment programme in 2025. Beyond the Classroom will offer a series of mini lectures, Explore taster sessions, academic skills talks, and guidance on preparing for university study—including how to submit a strong application to both university in general and the University of Oxford.

Who it's for: State school students in Years 7 to 12 with an interest in cross-subject learning and exploring academic themes beyond the classroom, including those considering an application to Oxford. Students who attend seven or more sessions will receive a certificate of participation from Trinity College, Oxford.

Dates: 5th March – 9th July 2025.

Registration is available under this [Link](#) - Register at any point before 9th July 2025.

The events are online and free to attend.



Trinity College Teacher CPD Programme [REPEAT]



Trinity College invites state school teachers and colleagues responsible for student progression to university, to participate in their free online Continuing Professional Development (CPD) programme. This comprehensive programme is designed to provide practical information, guidance, and support for teachers working with students aspiring to apply to Oxford or other higher education institutions.

What's Included?

- Insights into the Oxford application process, admissions tests, and interviews.
- Strategies for higher education applications, personal statements, and teacher references.
- Flexible attendance with a certificate for completing all six sessions.

Who is it for? UK state school teachers, and they particularly welcome teachers from non-selective schools, especially those new to Oxford applications, Russell Group universities, or higher education progression in general.

When and where: Sessions from 13th January to October 2025, online. Residential Easter 2026.

Programme Highlight: Residential (optional): A free, fully funded three-night Teacher Enrichment Residential during Easter 2026, allowing participants to explore a subject area or teaching practice using the University of Oxford's library collections.

How to Register: Sign up [here](#).



Photo by [Elena Diaz](#) on [Unsplash](#)

Learning Resource: DNA aids the creation of nanoscale DNA dinosaurs **[NEW]**

Scientists have taken a giant leap in nanotechnology by building a nanoscale dinosaur using strands of DNA — and it's no prehistoric fluke.

Researchers from Australia's UNSW Sydney, in collaboration with international teams, have used cutting-edge DNA origami techniques to assemble a miniature Tyrannosaurus rex just 100 nanometres long — about a thousand times thinner than a human hair.

The breakthrough was made possible with oxDNA, a powerful simulation tool developed at the University of Oxford that allows scientists to precisely model how DNA strands twist, fold, and snap into place. Think of it as computer-aided design (CAD), but for molecules.

This tiny dino isn't just for show — it's a proof-of-concept for how DNA can be used to build programmable nanomachines, next-gen drug delivery systems, or even smart materials. It marks a fun but serious milestone in synthetic biology and nanoscale engineering.

Fun Fact: The DNA dino's design was inspired by children's pop-up books — proof that inspiration can come from the most unexpected places!

Read more about oxDNA and the science behind the DNA dinosaur [here](#) and [here](#).

