

Outreach Newsletter: December 2025

Welcome to the December 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 outreach@chem.ox.ac.uk.

Thank you for reading!

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Oxford chemists design OLEDs that electrically flip the handedness of light [NEW]



Upcoming Events

KS5 Chiral Chemistry Workshops [REPEAT]

We would like to announce the 2025–2026 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.

Wednesday 3 rd December 2025	15:45-17:00
Tuesday 20 th January 2026	16:45-18:00
Tuesday 10 th February 2026	16:45-18:00
Wednesday 15 th April 2026	15:45-17:00

REQUEST A SPACE

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.



Our next talk, Fantastic drugs and how to 'fish' for their targets, will take place on Tuesday 2nd December, 17:15–18:00, where DPhil Josh

SIGN UP TO THE SERIES

Mealing-Stott will share his journey to Oxford Chemistry and his research on how scientists use clever chemical tools to "fish out" the specific proteins that a drug targets inside living cells, allowing us to better understand how they work and any potential risks and limitations.— please ensure you are subscribed to the mailing list to receive updates!

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



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 visit. Please сору host your do us (outreach@chem.ox.ac.uk) into any correspondance 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 problemsolving 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).



UNIQ 2026 [REPEAT]

UNIQ is the University of Oxford's FREE access programme for UK state school with high academic potential in year 12 (England & Wales), year 13 (Northern Ireland) or S5 (Scotland). They prioritise places for students with good grades from backgrounds that are underrepresented at Oxford and other universities.



Attendees will start their UNIQ journey with an introductory chat before joining one of UNIQ's regional events. Attendees will then experience a one-week, subject-specific residential in Oxford. After the residential, sustained online support for applications to Oxford will be provided.

Applications open on Monday 15th December 2025 and close midday on Tuesday 13th January 2026. How to apply and further information can be found on the <u>UNIQ website</u>. Stay informed by signing up to the UNIQ newsletter <u>here</u>.

Battle the Bugs! Tackling Antimicrobial Resistance [NEW]

In partnership with the Ineos Oxford Institute (IOI) and the History of Science Museum (HSM), the Department of Chemistry is running two *Battle the Bugs!* Study days in March, for state school A level students studying Chemistry, Maths and Biology. The day provides exciting opportunities to discover research into antimicrobial resistance and career paths in this field. It includes a hands-on laboratory workshop at the Chemistry Teaching Laboratory, learning about current research and meeting IOI researchers, and engaging with the unique collections at HSM.



We're offering this study day on two dates: Wednesday 18th March and Thursday 19th March 2026. Teachers at state schools who would like to request places, can sign up here.



Balliol's Insight into Science Talks [NEW]

What: Booking is now open for Balliol College's Insight into Science Talks for Yr 12 and interested Yr 11 students. Applications must be made at least 48 hours before the relevant talk date. There will be an opportunity to ask questions and the talks will be recorded and uploaded at a later date.

Where: Online

When:

- Thursday 8th January 2026 4.00-5.00pm The Chemistry of Everyday Life
- Monday 2nd February 2026 4.00-5.00pm When Science Goes Wrong: Ethics and Safety in Drug Development
- Monday 9th February 2026 4.00-5.00pm How We design New Medicine: From Atoms to Treatment
- Wednesday 11th February 2026 174.00-5.00pm The Science of Crystals: From Clock to Chocolate

All the talks can be booked on the <u>Insight into Science booking form</u>.

Keble's Subject Taster Days [NEW]

What: Keble's Chemistry Taster Day offers opportunities for prospective Yr.12 students from UK state schools/colleges to experience a day visiting the University and interacting with staff and students involved in studying Chemistry. The Chemistry Taster Day includes academic sessions related to studying Chemistry at a top university, the opportunity to meet current students, and subject-specific guidance on the admissions process. They provide hot lunches and reimburse travel expenses for attendees.



Where: Keble College.

These events are regularly over-subscribed, so they aim to choose students with promising academic profiles who will benefit most from the experience. Students are required to apply independently: they are unable to accommodate school groups booked by teachers.

Apply via the Keble website before 12 noon on Tuesday 27th January 2026.





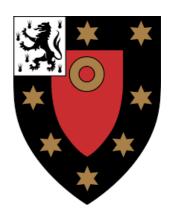
St John's Study Day [NEW]

What: Inspire Study Days are immersive, subject-specific events that take place at St John's College that enable Y12 students to experience what it is like to study their chosen subject at university. These events are free and include various workshops and lectures, college tours, and free lunch.

When: Monday 23rd February - Chemistry

Where: St John's College.

How: Apply <u>here</u>. Explore other subjects <u>here</u>. Please note students should only apply to one event. Applications close 7 weeks ahead of each event.



Bright Matter: Women and Non-Binary People in STEM [REPEAT]

Bright Matter is a programme for women and non-binary students in Year 11 and 12 who are interested in studying STEM subjects at university. Bright Matter is run jointly by St Anne's, St Catherine's, St Hilda's, Magdalen, Mansfield, Oriel, and University Colleges, Oxford, and aims to broaden interested in STEM fields.

What: 15 online sessions introducing each subject area. Each session will include a presentation about studying that subject at Oxford and a 20-minute academic taster session.

When: Chemistry – Thursday 15th January 2026, 16:30–17:30.

How: Sign up here.

Other Opportunities: Application Support for Oxford

Oxford University Islamic Society [REPEAT]

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@qmail.com .



University of Oxford Access Day for Young Women in Year 10–12 with Bangladeshi and Pakistani heritage [REPEAT]

What: Trinity College is collaborating again with the Oxford Centre for Islamic Studies (OCIS) and Jesus college to offer young women in Year 10–12 with Bangladeshi and Pakistani heritage an exciting day exploring life as a student at the University. Students will have the opportunity to visit the Oxford Centre of Islamic studies, Trinity and Jesus College, experience an academic taster, gain guidance and information relating to courses and admissions and hear from current students with shared identities.

Who: Young women from state schools in Year 10–12 with Bangladeshi and Pakistani heritage. **When:** Thursday 12th February 2026, 09:30 to 15:30, with the option to tour Jesus College at the end of the day.

Where: The day begins with registration at the Oxford Centre for Islamic Studies and ends at Trinity College at 15:30, with the option to tour Jesus College.

How: Register here by 5pm on Tuesday 6th January 2026.

Materials Science Open Days [REPEAT]

Applications are open for the Materials Science open days in February and March 2026. Attendees will experience lectures, tour the department, meet students, and more! When: 17th & 18th February, 17th & 18th March 2026 – in person, 20th February 2026 – online.

Where: Department of Materials/Online (Zoom webinar).

Audience: Prospective Y11 & Y12 students

How: Register for the 17th & 18th February here; Register for the 20th February here; Register

for the 17th & 18th March here. To find out more visit their website.

University of Oxford Astrophoria Foundation Year [NEW]

What: The University of Oxford's Astrophoria Foundation Year is a one-year fully-funded (no-fee) programme, with additional full bursary to cover accommodation and living expenses. 16 different courses enable motivated students to reach their academic potential through a supportive and challenging academic course aimed at developing their skills, self-belief and academic confidence. Students passing the course are awarded a nationally recognised Certificate in Higher Education (CertHE) qualification. If passed at the required level, they will be automatically admitted to their chosen undergraduate degree course, without the need to reapply. Students are also supported to apply to other universities using their CertHE qualification if not continuing onto the full degree programme at Oxford. Chemistry Foundation Year.

Who: For UK state school students predicted to meet A level entry requirements ranging from BBB-AAB (depending on course selected) with significant academic potential, who have Back to Contents 7



experienced severe personal disadvantage and/or disrupted education which has resulted in them being unable to apply directly for an Oxford undergraduate degree programme.

When: Full time study will begin in October 2026.

Where: University of Oxford.

Applications (no tests required but there will be an interview) are <u>open now via UCAS</u>. Deadline to apply is 14th January 2026. Find out more about the programme on the course website <u>here</u>.

Uncover Engineering Residential Programme for Black African or Black Caribbean heritage students [NEW]

What: Uncover Engineering is a residential programme run by Oxford University that gives Yr.10 students the opportunity to explore engineering and learn more about the real-world application of the maths, physics and other sciences taught in school. It is also a chance to experience university life by living in an Oxford College.

Who: UK-based Year 10 state-school students of any gender who are of Black African or Black Caribbean heritage. Applicants should be predicted/likely to obtain a minimum of six GCSEs graded at 7-9 or five National 5 graded at A or equivalent qualifications. These must include Maths, Science and English.

When: 30th March to 2nd April 2026.

Where: Trinity College and the Department of Engineering Science, University of Oxford.

Deadline to apply is 5pm on 31st December. More information is available here.

Uncover Engineering Residential Programme for girls [NEW]

What: Uncover Engineering is a residential programme run by Oxford University that gives Yr.10 students the opportunity to explore engineering and learn more about the real-world application of the maths, physics and other sciences taught in school. It is also a chance to experience university life by living in an Oxford College.

Who: UK-based Year 10 state-school girls. Applicants should be predicted/likely to obtain a minimum of six GCSEs graded at 7-9 or five National 5 graded at A or equivalent qualifications. These must include Maths, Science and English.

When: 7th to 10th April 2026.

Where: St Hugh's College and the Department of Engineering Science, University of Oxford.

How: Deadline to apply is 5pm on 31st December. More information is available here.



African Caribbean Society (ACS) Shadowing Day [NEW]

What: This event is designed to inspire and support students on their path to Oxford. During the day they will have the opportunity to shadow a current undergraduate from the ACS studying your field of interest, attend interactive taster lectures delivered by world-class academics, get expert application advice to strengthen your Oxford application, tour the stunning grounds of Oxford colleges and experience life at Oxford University firsthand. The Oxford ACS aim to give students the chance to connect, learn, and envision themselves thriving at one of the world's top universities.

Who: State school students in Year 12 with African and Caribbean heritage.

When: Thursday 19th February 2026.

Where: The day begins with registration at Trinity College and ends at Brasenose College, University of Oxford, in the afternoon.

How: Apply here. Deadline to apply is 11:59pm on Tuesday 13th January 2026. For any inquiries or the need for additional information, contact the Oxford ACS Access team at access@oxfordacs.org.

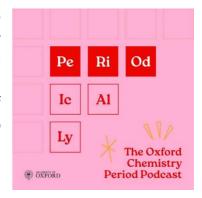
Other Opportunities: Enrichment and CPD

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 <u>website</u>. 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.





Centre for Personalised Medicine Art Competition [REPEAT]

The Oxford Centre for Personalised Medicine is inviting students in Years 7–9 to get creative and share their thoughts on the meaning of 'personalised medicine' through art.



Personalised medicine means different things to different people

– from using genetic information to tailor treatment, to

understanding a person's story and what matters most to them. This competition is a chance for young people to express what they think it means.

Students can submit any form of visual art – a drawing, painting, collage, sculpture, or more – as long as it can be photographed. All entrants receive a certificate, and cash prizes will be awarded to standout submissions. Group entries are welcome too! Winning artworks will be considered for display at prestigious locations across Oxford, including the John Radcliffe Hospital, Churchill Hospital, Centre for Human Genetics, and St Anne's College.

More details, including a short video about the competition, and downloadable information for teachers available <u>here.</u>

Lincoln College Teacher CPD Conference [REPEAT]

Lincoln College have opened their applications for their <u>free</u> one-night, one-day CPD conference for state school teachers and school leaders with responsibility for progression, to help them support and encourage their pupils in all higher education applications. This exciting programme provides up-to-date information and guidance on:



- The Oxford application process.
- Reference writing.
- Personal statements.
- Admissions tests and interviews, and more!

When: 6:30 on Tuesday 16th December, to 16:00 on Wednesday 17th December.

Where: Lincoln College

Other important information: This entirely free event, includes accommodation on the night of 16th December, lunch and dinner in their fifteenth-century hall, and a networking drinks reception. Travel reimbursements are also available for those travelling from outside Oxford.

How: Lincoln College have now reached capacity for 2025's Teacher Conference. However, if you would like to be added to the waiting list, <u>please fill out the form on their website</u>.



Trinity College Teacher CPD Programme [REPEAT]

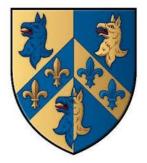
What: A programme made up of six sessions, running between January and October each year, that each provide up to date practical information and guidance relating to the Oxford application process and the purpose of each stage, for example, the admissions tests and interviews.

Where: Online.

When: Selected dates on a Monday and Thursday after school from 12th January to 15th October 2026.

Who: State school teachers with responsibility for and an interest in student progression to university.

How: Register here.



Inspire Critical Thinking [REPEAT]

What: Inspire Critical Thinking is a free online programme designed to help pupils explore supercurricular materials including articles and challenges created by academics at



the University of Oxford. Each year group has a different theme to explore, split into 4 smaller workshops. Each workshop also focuses on a different critical thinking skill, with materials to support pupils with their understanding and practice of these key skills. Pupils have the opportunity to submit responses to prize-winning workshops challenges and following the workshops, all registered pupils will be invited to attend St John's Inspire Virtual Summer School.

When: Resources are live between January and April 2026, pupils can engage with them at their own pace.

Who: Yr 9-12 students who attend a non-selective state school in the UK.

How: Register <u>here</u> and find out more <u>here</u>.

Next Generation Earth: Youth Investigators Programme 2026 — Entangled Ecosystems [NEW]

What: The Oxford University Museum of Natural History is offering students an exciting, handson programme exploring ecology, natural history, and environmental science. Participants will work collaboratively to investigate ideas, discuss scientific themes, and design their own creative responses to current environmental questions. The aim of the programme is to inspire young people to engage with the natural world and history and develop skills in scientific inquiry, discussion, and science communication.

Who: Students aged 14–16 (particularly motivated 13-year-olds may also be considered).

When: Saturdays, 10th-31st January 2026, 2:00-4:00 pm (4 sessions in total).



Where: Oxford University Museum of Natural History (in-person).

Interested students (or their teachers/parents) should email Devika at devika@education.ox.ac.uk She will send a short interest form — no formal application required. Deadline to apply: 15th December 2025. Only 15 places are available.

Lincoln College Life Sciences Essay Competition [NEW]

What: Students will be invited to write an essay of up to 1,500 words in answer to a question. They welcome creative submissions, and entrants are welcome to approach the question in whatever way is most meaningful to them, as long as they demonstrate that they are thinking scientifically. The questions are designed to test creativity and scientific intuition rather than knowledge.

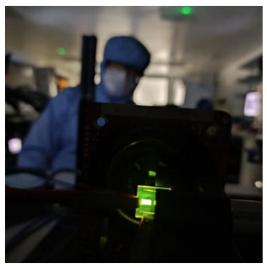
Who: UK students in Year 12 or equivalent. They welcome entries from students studying in any school in the UK, but they particularly encourage entries from students who: are currently attending a state-maintained school; would be the first in their immediate family to go to university; are or have previously been eligible for Free School Meals; are young carers or have been in care.

When: Questions released in January 2026.

Where: Online

How: Full details about how to submit your essay, together with this year's questions, will be released in January. However, if you would like to sign up for information, please sign up here. Anyone interested can sign up here to get reminders sent out directly.

Learning Resource:



A photograph of an OLED device from the study.

Oxford chemists design OLEDs that electrically flip the handedness of light <a>[NEW]

Researchers from the University of Oxford have for the first time discovered an approach to electrically switch organic LEDs (OLEDs) to emit either left- or right-handed circularly polarized light without changing the light-emitting molecules. This could be useful for a range of technological applications, from more energy efficient OLED displays, to optical information transfer. Find out more here and read about their results in a study published in Nature Photonics.