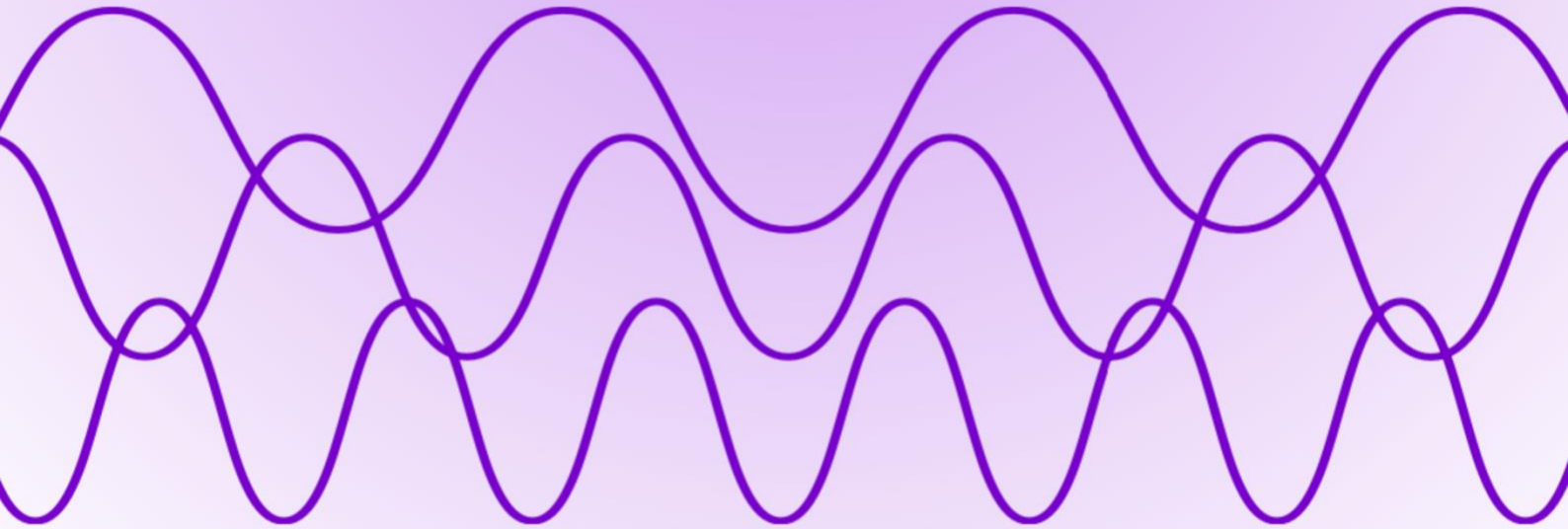
OPTICA Advancing Optics and Photonics Worldwide | Formerly OSA

Oxford Optics & Photonics Society (OxOPS)

Oxford Optica Student Chapter

2025 Summary



OXFORD OPTICS AND PHOTONICS SOCIETY

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Introduction

Oxford Optics and Photonics Society (OxOPS) is the official Optica Student Chapter registered at the University of Oxford. The society is advised by Professor Martin Booth, Chair of Optical and Photonic Engineering at Oxford, and operates as a student component of the University's Photonics Network. Its membership spans multiple departments including Engineering Science, Physics, Chemistry, and Materials, bringing together students and early-career researchers from undergraduate level to postdoctoral researchers. OxOPS therefore represents the principal student-led organisation for optics and photonics within the University of Oxford.

OxOPS is committed to advancing academic exchange, interdisciplinary collaboration, and public engagement in optics and photonics. Through a diverse programme of academic seminars, research-sharing events, industry visits, creative competitions, and outreach activities, members deepen their understanding of cutting-edge photonics research while developing transferable skills in scientific communication, cross-disciplinary teamwork, and public engagement. These initiatives have attracted broad participation across multiple departments and have significantly enhanced the visibility and influence of optics and photonics within the wider Oxford academic community.

In addition, OxOPS has established strong collaborations with the Oxford University Materials Science Society, the Oxford University Physics Society, and other Optica Student Chapters. Through joint academic and outreach activities, the chapter serves as an effective bridge between disciplines, institutions, and industry, fostering knowledge exchange and strengthening the optics and photonics community in alignment with Optica's mission and values.

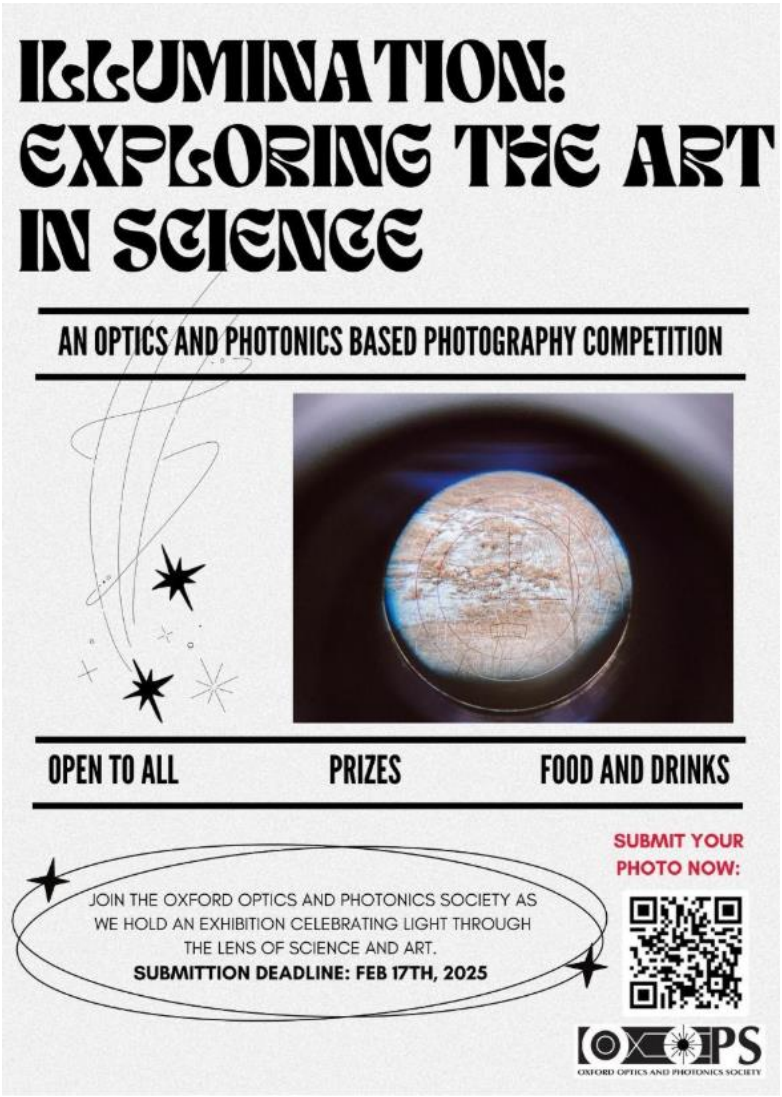
Table 1: Current OxOPS Committee Members

Position in OxOPS	**Affiliation**	**Committee Member**
President	University of Oxford	Yuxi Cai
Vice-President	University of Oxford	Andrei Enoea
Secretary	University of Oxford	Meng Lip Lim
Treasurer	University of Oxford	Linquan Yuan
Officer	University of Oxford	Zhaoming Wang
Officer	University of Oxford	Maike Lenz

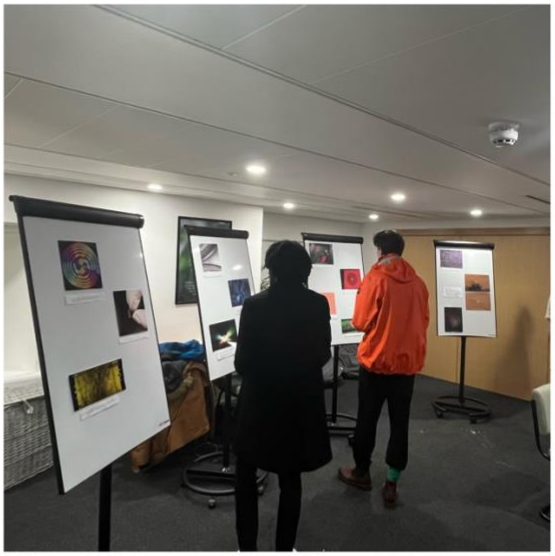
2025 OxOPS Event Summary

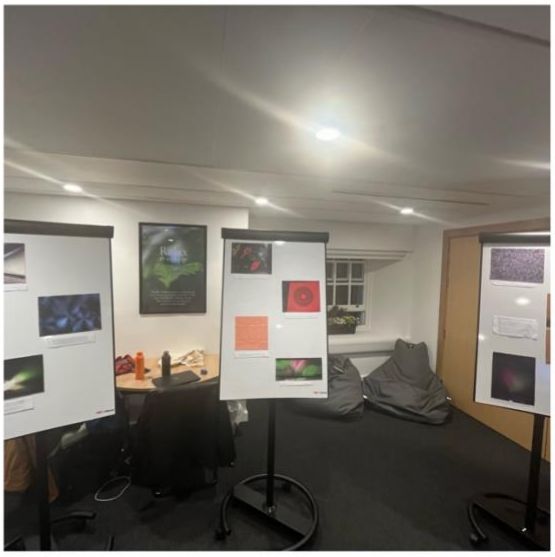
OxOPS Photo Competition (24 Feb 2025)

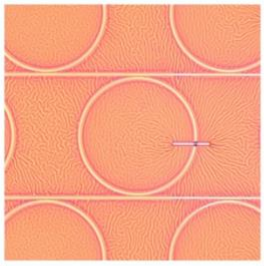
OxOPS organized an Optics and Photonics–themed photography competition open to all Oxford University students. The initiative received 18 submissions, spanning themes from optical phenomena in nature, such as the northern lights, to microscopy and liquid crystal imaging. The winning photographs were exhibited at the Oxford University Science Library and shared across OxOPS social media platforms. The competition helped promote public engagement and awareness of optics and photonics through creative expression, with winners awarded Optica student memberships.

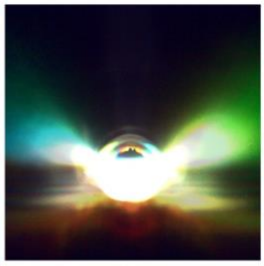


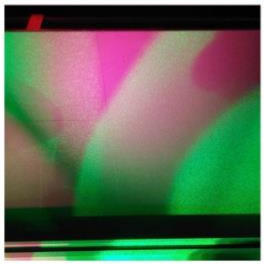

BODLEIAN
Wellbeing Ro
ROOM BOOKED
This room is booked for a private event from 17:30-21:00
If you have any questions please email
enquiries.rsl@bodleian.ox.ac.uk
ILLUMINATION: EXPLORING THE ART IN SCIENCE
AN OPTICS AND PHOTONICS BASED PHOTOGRAPHY COMPETITION
OPEN TO ALL
PRIZES
FOOD AND DRINKS
OPS

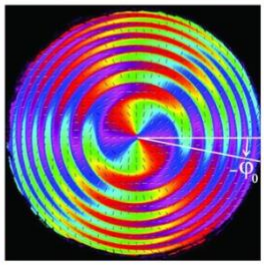


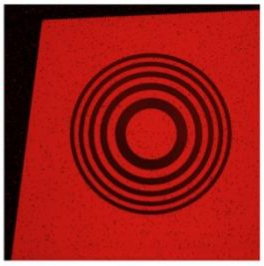


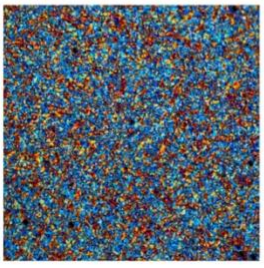


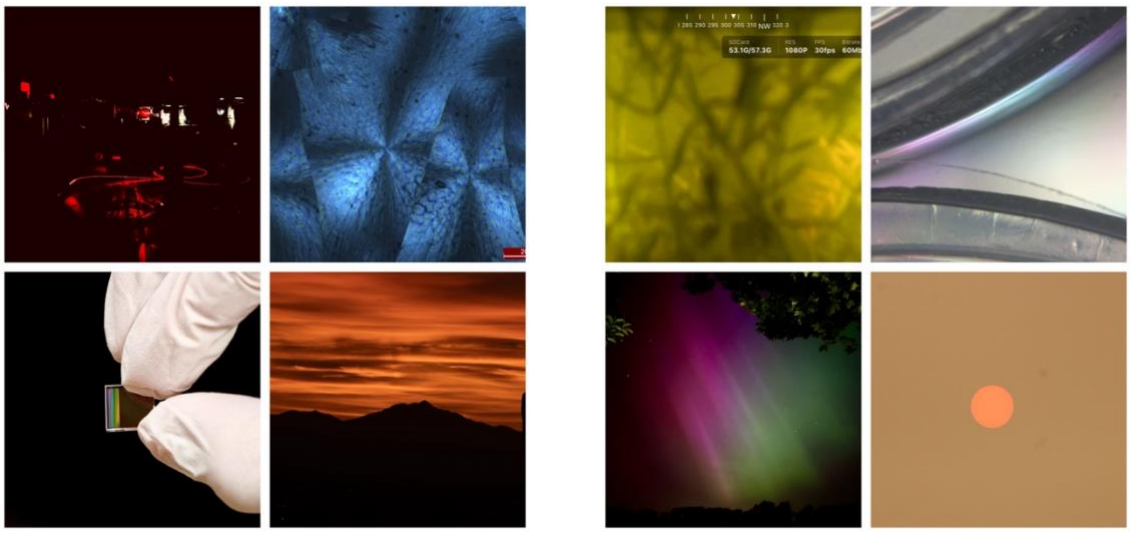











53.1G/57.3G
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Oxford–Southampton Exchange (29 April 2025)

This event featured Prof Jeremy Baumberg who delivered an academic talk on the extreme confinement of light using plasmonic metal nanostructures. This event was a collaboration with the Southampton Optica Student chapter. 50 students and early career researchers attended from both institutions to listen to the talk. There was also a lunch event for networking both between students, and the opportunity to have more discussions with Prof Baumberg. We then arranged some lab tours in Oxford for the guests from Southampton, and organised flashtalks given by students from both institutions on their research topics, as well as a poster session. This event was a great success with a lot of positive feedback, particularly about how engaging Prof Baumberg's talk was.

On 29 April 2025, the Oxford Optics and Photonics Society (OxOPS) hosted the an Oxford–Southampton Exchange, a full-day event bringing together two active Optica Student Chapters. The event was supported by the Optica Traveling Lecturer Grant, which allowed us to host Prof Jeremy Baumberg (University of Cambridge) as keynote speaker.

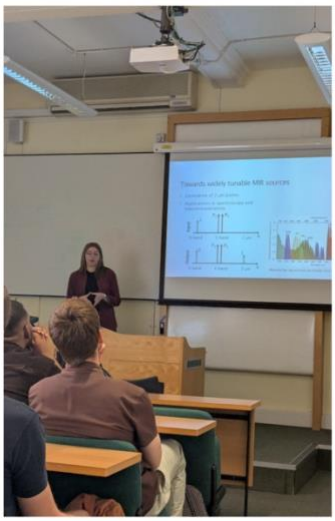
The exchange was held at the University of Oxford's Department of Engineering Science and brought together around 50 participants from both Southampton and Oxford. The programme combined an invited lecture, flash talks, lab tours, and a poster session, giving space for scientific exchange, networking, and collaboration.

The day started with a welcome from Prof Martin Booth (University of Oxford), who spoke about optics research in Oxford and links with Southampton. Prof Baumberg then delivered the keynote lecture on the confinement of light at the nanoscale and applications in nanophotonics. His talk was a highlight of the day and sparked many questions and follow-up conversations.

In the afternoon, Oxford chapter members led lab. These gave visitors a look into Oxford's facilities and generated a lot of interest. Student contributions were another key part of the programme. Student members of both chapters delivered flashtalks on their research topics ranging from polarisation control and tomography to fibre manufacturing, encouraging new ideas and discussion. The event closed with a poster session, where a wide range of projects were presented from both institutions. Many attendees commented that this was a valuable chance to exchange ideas and connect across the two universities.

Overall, the Oxford–Southampton Exchange was a great success. It strengthened links between the two student chapters and gave students the chance to present and discuss their work. Importantly, it set the stage for future joint activities and collaborations.

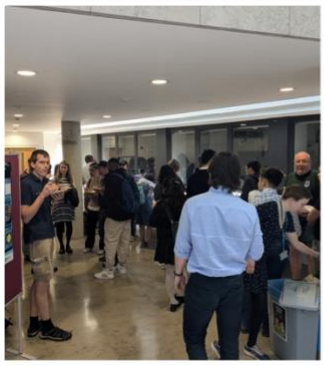
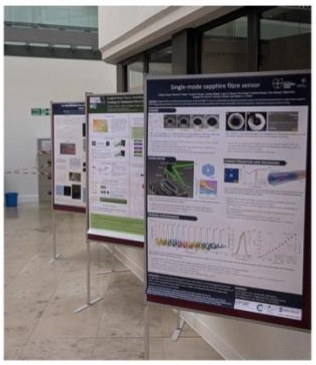
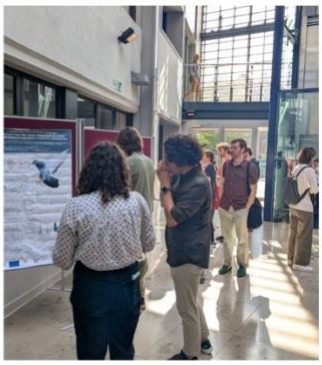
We are very grateful to Optica for supporting the event through the Traveling Lecturer Grant. Prof Baumberg's participation elevated the scientific content and was an inspiration to students from both chapters. The grant made a real impact by enabling meaningful exchange and community building, in line with Optica's mission of advancing optics and photonics worldwide.

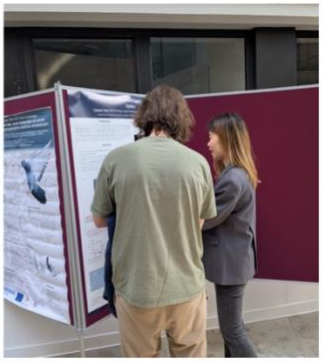

Extreme Light-Matter Coupling

Towards widely tunable MIR sources

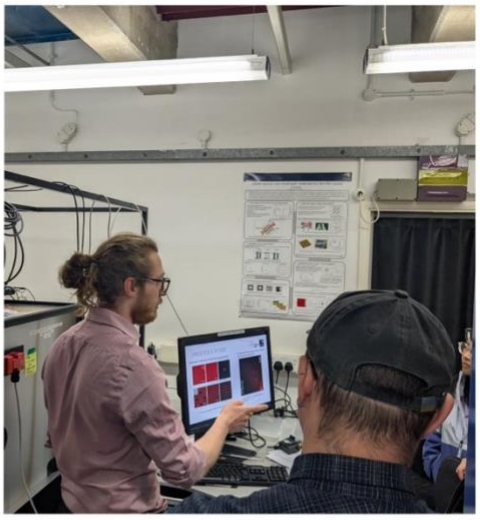
MCVD Overview

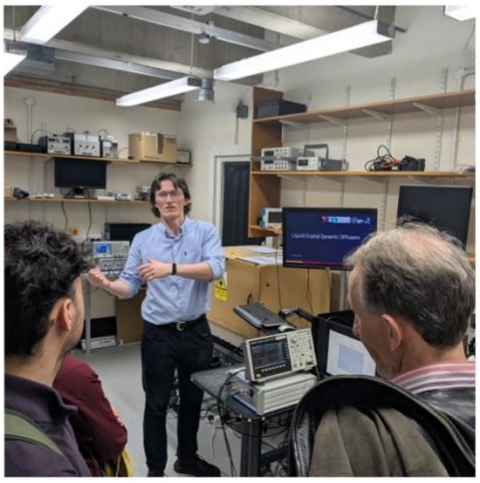
Optical Polarization is the
Trojan Horse of light propagation

Experimental setup

Sensing


Single-mode sapphire fibre sensor






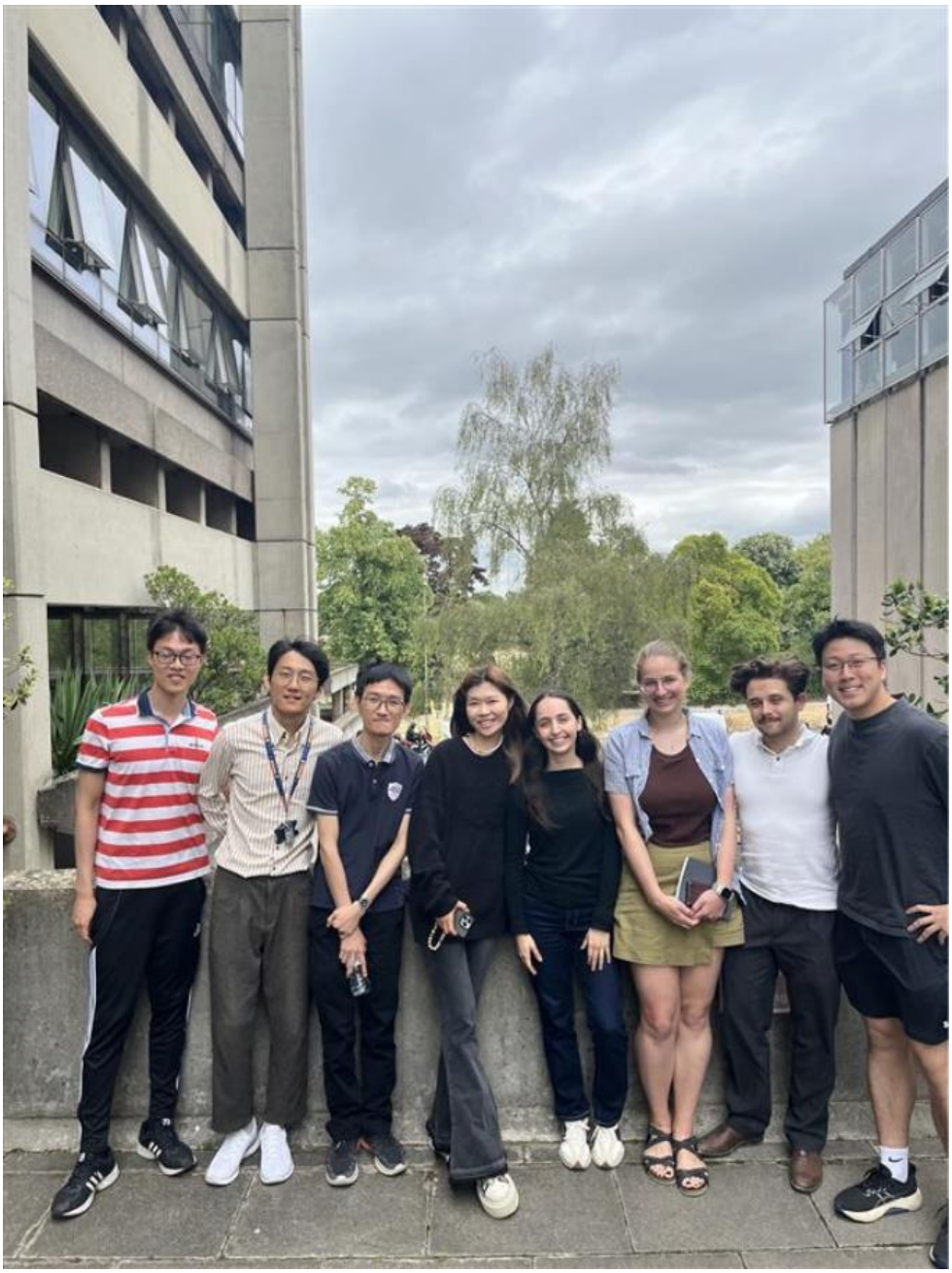
OxOPS round table with Dr. Michle Lebby (27 June 2025)

Dr. Michael Lebby visited the Department of Engineering Science at the University of Oxford, where he met with members of OxOPS. During the meeting, OxOPS members introduced their ongoing research projects and engaged in an in-depth discussion with Dr. Lebby about the scientific challenges they are addressing. They also sought his insights on potential future research directions as well as the broader technological and industrial applications of their work.

After the round table discussion, Dr. Lebby delivered a talk on engineering entrepreneurship and technology translation, chaired by Prof. Martin Booth. In his presentation, he shared his perspectives on how cutting-edge research can be effectively transformed into real-world innovations, offering valuable guidance and inspiration to the attending students and researchers.

OxOPS round table with Ellisa Torres (15 July 2025)

Ellisa Torres, the founder of Girls in Quantum and currently a student at Duke University, visited Oxford University during the summer and met with members of OxOPS at the Department of Engineering Science. During the meeting, we discussed recent developments in photonics and quantum technologies, and she shared her experiences in running Girls in Quantum. OxOPS and Girls in Quantum will continue to stay in touch and collaborate in the future, working together to help more young students gain exposure to and develop interest in photonics and quantum science.



OxOPS Pub Night Social (18 Nov 2025)

On 18 November 2025, OxOPS hosted a pub night from 6:30 pm to 9:30 pm with a group of ten attendees, including eight Engineering Science students, one Physics student, and one Physics postdoctoral researcher. Despite a minor change in the menu due to the pub's oven being out of order, the event proceeded smoothly, and everyone was able to enjoy a drink along with a pub burger.

Throughout the evening, participants engaged in lively conversations about their ongoing research projects and a range of exciting topics in optoelectronics. Coincidentally, the pub was running its weekly quiz, and we formed two teams to take part. Joining the quiz added an extra layer of fun to the night, giving everyone the chance to relax, laugh, and bond outside an academic environment. The friendly atmosphere, good food, and shared team spirit made the event thoroughly enjoyable. Overall, it was a successful and memorable social gathering that helped strengthen the sense of community within OxOPS.

OxOPS OPTICA Journal writing workshop (19 Nov 2025)

On 19 November 2025, we hosted a writing workshop from 10:15 am to 1:30 pm with a total attendance of 29 participants. A light lunch was provided, including sandwiches with vegetarian options, fruit, snacks, and hot tea and coffee, allowing participants to relax and network during the break.

We were honoured to welcome four guest speakers: Prof. Martin Booth from the Department of Engineering Science, Mr. Yann Amouroux from OPTICA, Prof. Alexander Lvovsky from the Department of Physics, and Dr. Abderrahmen Trichili from the Department of Engineering Science. Their presence greatly enriched the event. The workshop was promoted in collaboration with the Diamond Light Source Institute and the Oxford Materials Science Society, leading to excellent outreach and attracting students and researchers from across Oxford as well as colleagues from the Diamond Light Source. Following requests from participants, we also shared the speakers' presentation slides after the event.

The programme began with participants arriving at the LMH main gate at 10:15 am, followed by opening remarks from Prof. Booth. Prof. Lvovsky then delivered a talk on what top-tier journals such as Optica look for in submitted papers, with a particular focus on writing strong and effective abstracts. This was followed by a comprehensive session from Dr. Trichili on how to conduct high-quality research and write an excellent journal manuscript.

After a short lunch break and informal discussions, the event continued with an abstract writing workshop. Several participants—Maike, Daniel, Adrian, and Qizheng—presented their abstracts, receiving constructive feedback from Mr. Amouroux and Dr. Trichili. This interactive session provided valuable practical guidance and encouraged participants to refine their academic writing.

Overall, the workshop was highly successful and intellectually stimulating. It offered attendees both strategic insights into academic publishing and hands-on feedback, helping to strengthen the community's research and writing capabilities.


JOURNAL WRITING WORKSHOP
HOW TO WRITE A GOOD PAPER FROM A TOP-TIER JOURNAL EDITOR'S PERSPECTIVE
GUEST SPEAKERS
Prof. Alexander Lvovsky
• Associate Editor, Optica
Dr. Abderrahmen Trichili
• Topical Editor, Optics Letters
Scan and submit the registration form to secure your place
Brief Schedule
10:15 Arrival at LMH Porters' Lodge
10:30 Presentation on the editorial and publication process
12:00 Lunch Break (tea, coffee, and light refreshments provided)
12:30 Interactive exercise on writing an abstract
Lady Margaret Hall
University of Oxford
Wednesday
19 November 2025
OPTICA
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OPTICA
Author Workshop:
University of Oxford,
Oxford Optics & Photonics
Society : OXOPS
Demystifying
the Publishing Process


OPTICA
Author Workshop:
University of Oxford,
Oxford Optics & Photonics
Society : OXOPS


Scientific best practices – Principles


Types of papers


TICK TOCK
Doritos
HARIBO

Plans for the Upcoming Year

In the coming year, OxOPS plans to develop its activities across three core pillars: social engagement, academic exchange, and career development. The chapter's primary objective is to foster closer collaboration between optics and photonics and other disciplines at the University of Oxford, including biology, chemistry, and physics, leveraging the student chapter platform to support the development and dissemination of cutting-edge optical research.

Through a coordinated programme of interdisciplinary seminars, networking events, and professional development activities, OxOPS aims to further strengthen the presence and impact of Optica student activities at Oxford. These initiatives are expected to enhance cross-disciplinary dialogue, broaden awareness of optics and photonics within the wider scientific community, and attract a growing number of early-career researchers and students to engage with Optica and its student chapter.

Overall, these planned activities will contribute to the continued growth, visibility, and influence of OxOPS while supporting Optica's mission to advance optics and photonics through education, collaboration, and community building.

Pillar I – Social Engagement and Community Building

Objectives:

- Strengthen the sense of community among optics and photonics students and researchers at Oxford
- Increase visibility of OxOPS across colleges and departments
- Encourage participation from early-stage students

Planned Activities:

- Interdepartmental Social Mixers:
  Joint social events with the other societies to promote interdisciplinary interaction.
- Creative Outreach Competitions:
  Photo and illustration competitions themed around “Light and Optics”, showcased online and during departmental exhibitions.
- Public Engagement Activities:
  Interactive demonstrations during Oxford open days or science festivals to introduce photonics concepts to the general public and prospective students.

Expected Impact:
Increased membership recruitment, stronger interdepartmental connections, and enhanced visibility of optics and photonics across the University.

Pillar II – Academic Exchange and Research Interaction

Objectives:

- Provide platforms for students to present and discuss research
- Promote interdisciplinary understanding of photonics applications
- Strengthen academic links within and beyond Oxford

Planned Activities:

- Interdisciplinary Seminar Series:
  A termly seminar programme featuring speakers from Engineering, Physics, Chemistry, Materials, and Biological Sciences, highlighting optical techniques applied in diverse research areas.

- Student Research Flash Talks:
  Short presentation sessions allowing undergraduate and graduate students to share their ongoing research, fostering peer learning and collaboration.

- Joint Symposium with External Chapters:
  Collaborative academic events with the Optica Student Chapter at the University of Southampton, promoting inter-university exchange.

- Industry and Facility Visits:
  Organised visits to research facilities such as Diamond Light Source or industrial photonics companies to expose students to real-world applications.

Expected Impact:
Enhanced research communication skills, broader academic exposure, and strengthened cross-institutional collaboration.

Pillar III – Career Development and Professional Training

Objectives:

- Support students' professional growth
- Build connections between academia and industry
- Equip members with transferable skills

Planned Activities:

- Career Development Workshops:
  Sessions on academic publishing, research presentation skills, grant writing, and scientific CV preparation.

- Industry Networking Evening:
  An event inviting alumni and industry professionals working in photonics-related sectors to share career experiences and offer mentorship.

- Optica Resources Promotion:
  Training sessions introducing members to Optica learning resources, conferences, and travel grants.

- Formal Annual Dinner and Awards Evening:
  A celebration event recognising outstanding student contributions and providing networking opportunities with faculty and industry guests.

Expected Impact:
Improved employability, increased awareness of photonics career pathways, and stronger engagement with the professional optics community.

Acknowledgement

On behalf of the current OxOPS Committee Board, we would like to express our sincere gratitude to all members who have supported and participated in OxOPS activities and contributed to the society's development. We are deeply grateful to Optica for its continued financial support over the past year, which has enabled the chapter to operate and deliver its programme of academic and community activities.

We also sincerely thank our Society Advisor, Professor Martin Booth, Chair of Optical and Photonic Engineering at the University of Oxford, as well as the Oxford Photonics Network, for their guidance, support, and ongoing encouragement. Finally, we extend special appreciation to the previous OxOPS Committee Board led by Maike Lenz, whose continued care, advice, and dedication have provided a strong foundation for the society's growth.

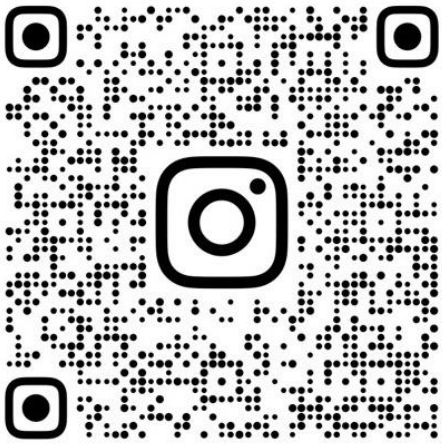
Contact and Follow us

Stay connected with OxOPS and keep up to date with our latest events, opportunities, and activities in optics and photonics at Oxford.

Follow us on Instagram for event highlights and community updates, and join our mailing list to receive announcements, seminar invitations, and career opportunities directly in your inbox.

We warmly welcome new members from all departments and colleges — whether you are new to photonics or already engaged in optical research, OxOPS offers a platform to connect, learn, and grow within Oxford's vibrant photonics community.

(Instagram QR code and Mailing List QR code placed below)



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(Join OxOPS Maillist)