

Welcome to Liverpool

Our Bid for the 28th International Mass Spectrometry Conference (IMSC 2030)

On behalf of the **British Mass Spectrometry Society (BMSS)**, our Local Organising Committee, and our partners across academia, industry and government, it is our great pleasure to present Liverpool's bid to host the **28th International Mass Spectrometry Conference (IMSC 2030)**.

We are honoured to submit this proposal to the **International Mass Spectrometry Foundation (IMSF)** and to offer Liverpool as the host city for the world's leading international conference dedicated to mass spectrometry. For more than sixty years, the IMSC has brought together the global community to share scientific discoveries, inspire technological innovation and strengthen international collaboration. We are committed to delivering a conference that builds on this proud tradition while creating new opportunities for scientific excellence, partnership and impact.

Liverpool is a city defined by innovation, discovery and global connections. Internationally recognised for its scientific excellence, vibrant cultural heritage and warm hospitality, the city has evolved into one of the United Kingdom's leading centres for life sciences, analytical chemistry and translational research. Home to world-renowned universities, internationally respected research institutes and a thriving innovation ecosystem, Liverpool provides an exceptional setting for a truly global scientific congress.

Our bid is proudly supported by the **Mayor of the Liverpool City Region**, reflecting the region's commitment to attracting world-leading scientific events that generate lasting economic, educational and societal benefits. We are equally honoured to have the support of the **Vice-Chancellor of the University of Liverpool**, reinforcing the University's long-standing commitment to research excellence, international collaboration and the advancement of analytical science.

A defining strength of Liverpool's bid is its close partnership with the international mass spectrometry industry. We are delighted to have the support of **Waters Corporation** and **Shimadzu**, whose presence within the region offers delegates a unique opportunity to engage directly with leading instrument manufacturers. As part of the conference programme, delegates will have the opportunity to participate in exclusive technical visits and factory tours, providing a rare behind-the-scenes insight into instrument development, manufacturing and innovation—an experience that few previous host cities have been able to offer.

Developed in partnership with the **British Mass Spectrometry Society**, the United Kingdom's recognised affiliate of the IMSF, our proposal has been carefully designed to meet the Foundation's requirements while reflecting the aspirations of the international mass spectrometry community. Our distinguished Local Organising Committee represents the breadth of expertise across academia, healthcare, environmental science, industry and technology, ensuring a scientifically ambitious and inclusive programme that spans the full spectrum of modern mass spectrometry.

Liverpool offers outstanding facilities to host a congress of this scale. Our proposed venue provides the flexibility and capacity to welcome 1,500–2,000 delegates, with modern lecture theatres, extensive poster and exhibition halls, dedicated spaces for workshops, commercial exhibitions and pre-conference short courses. The city's compact and walkable waterfront campus, excellent public transport, international air and rail connectivity, and diverse range of accommodation—from affordable student residences to premium hotels—ensure an accessible and welcoming experience for every delegate.

Our vision extends beyond delivering an exceptional scientific meeting. We are committed to creating a conference that reflects the core values of the IMSF by promoting diversity, equity and inclusion, embedding environmental sustainability throughout the event, and investing in the next generation of scientists through travel grants, mentoring opportunities and affordable participation for students and early-career researchers.

Beyond the scientific programme, delegates will experience the distinctive character of one of Europe's most welcoming and vibrant cities. As the birthplace of **The Beatles** and a UNESCO City of Music, Liverpool offers a unique setting where world-class science is complemented by unforgettable cultural experiences. Supported by **Waters**, **Shimadzu**, the **Mayor of the Liverpool City Region** and the **University of Liverpool**, we will showcase the very best of our city through a memorable social programme, including opportunities to experience Liverpool's iconic musical heritage, creating a conference that is both scientifically outstanding and unmistakably Liverpudlian.

We respectfully submit Liverpool's proposal for consideration by the **International Mass Spectrometry Foundation** and its affiliate societies. We believe Liverpool offers a distinctive combination of scientific excellence, industrial partnership, civic leadership, academic strength and international accessibility that will deliver an outstanding International Mass Spectrometry Conference.

It would be our privilege to welcome the global mass spectrometry community to Liverpool in **September 2030**. Together, we look forward to creating an inspiring and memorable congress that celebrates scientific discovery, fosters new international collaborations, showcases the very best of mass spectrometry, and leaves a lasting legacy for our community.

We thank the International Mass Spectrometry Foundation and its affiliate societies for considering Liverpool's bid and look forward to welcoming delegates from around the world to the **28th International Mass Spectrometry Conference (IMSC 2030)**.

Professor Dame Carol Robinson
July 2026

Curriculum Vitae

Carol Vivien Robinson

1. IDENTIFYING INFORMATION

Carol V. Robinson DBE FRS FMedSci FRSC

Director, Kavli Institute for Nanoscience Discovery/Dr. Lee's Professor of Chemistry, University of Oxford

Orcid ID: 0000-0001-7829-5505



4. APPOINTMENTS AND POSITIONS

2021	Founder Director, Kavli Institute of Nanoscience Discovery
2016	Founder Director, OMass Therapeutics, Oxford
2009	Professorial Fellow, Exeter College, University of Oxford
2009	Dr Lee's Professor of Physical and Theoretical Chemistry, University of Oxford
2006 – 2016	Royal Society Research Professorship
2003 – 2009	Senior Research Fellow, Churchill College, University of Cambridge
2001 – 2009	Professor of Mass Spectrometry, Department of Chemistry, University of Cambridge
1999 – 2001	Titular Professor, University of Oxford
1998 – 2001	Research Fellow, Wolfson College, University of Oxford
1995 – 2001	Royal Society University Research Fellow, Oxford
1991 – 1995	Postdoctoral Research Fellow, University of Oxford Supervisor: Prof. C. M. Dobson FRS
1991 – 1991	Postgraduate Diploma in Information Technology, University of Keele
1983 – 1991	Career break to raise three children
1982 – 1983	MRC Training Fellowship, University of Bristol
1972 – 1979	Laboratory Technician, Pfizer, Sandwich, Kent

2. ORGANIZATION AND LOCATION

Kavli Institute for Nanoscience Discovery

Dorothy Crowfoot Hodgkin Building
Dorothy Hodgkin Road
Oxford
OX1 3QU, UK
carol.robinson@chem.ox.ac.uk
<https://robinsonweb.chem.ox.ac.uk>
<https://kavlinano.ox.ac.uk>
<https://www.omass.com>

3. PROFESSIONAL PREPARATION

1980 – 1982	Doctor of Philosophy, University of Cambridge. Supervisor: Prof. D. H. Williams FRS
1979 – 1980	Master of Science, University of Wales. Supervisor: Prof. J. H. Beynon FRS
1976 – 1979	Graduate of the Royal Society of Chemistry, Medway College of Technology, Kent
1972 – 1976	ONC and HNC in Chemistry, Canterbury College of Technology, Kent

5. PRODUCTS

CURRENT GRANTS

2023 – 2028	ERC Advanced Grant €2,000,000. IMPLEMENT
2024 – 2028	Bipolar Disorder (BD ²) £3,400,000. Voltage-gated ion channels in Bipolar Disorder (Co-PI)
2021 – 2026	Medical Research Council £1,758,852 Developing MS to understand molecular mechanisms of antibacterial and antiviral drugs
2021 – 2026	Wellcome Trust Investigator Award £2,188,450 Targeting membrane proteins in native environments
2020 - present	Kavli Foundation \$10 M Establish The Kavli Institute for Nanoscience Discovery (KIND)
2025 – 2027	Kavli Foundation \$ 250,000 Research Ethics and Policy

Technologies and techniques

During her early research, Carol developed and applied mass spectrometry to show how protein folding could be monitored in the presence of molecular chaperones. This research prompted her to find new ways to preserve mega Dalton complexes in the gas phase and led her to uncover the heterogeneity and dynamics of multi-protein complexes.

In recent work, she has demonstrated the numerous roles played by lipids in regulating the structure and function of membrane protein assemblies.

Her current interest is in uncovering the synergy of lipid and drug binding. Informed by this research, she is exploring new ways to characterise receptor-signalling complexes.

Inventions, patent applications and licenses

Carol is a co-inventor on ten patents that are primarily focussed on the mass spectrometry of membrane proteins with various enabling features such as bespoke detergents, novel ionization methods, and new instrumentation. Six patents have been licensed.

Selected examples:

1. Detection of membrane protein-therapeutic agent complexes by mass spectrometry
Patent number: 9536718
Inventors: Carol V. Robinson, Sheila Wang, Nelson P. Barrera. Filed: 2012 Granted: 2017.
2. Dendritic detergents for analysis of proteins by MS
Publication number: 20210188902
Inventors: Carol V. Robinson, Ildir Liko, Hsin-Yung Yen, Kevin Pagel, Rainer Haag, Svenja Christina Ehrmann, Leonhard Hagen Urner. Filed: 2021.
3. Detection of membrane proteins by MS
Publication number: 20210325402
Inventors: Dror S. Chorev, Carol V. Robinson.
Filed: October 21, 2021

New business creation

As scientific co-founder of OMass Therapeutics, Carol helped raise Series B investment (US\$110 million) from a syndicate of well-established investors, including Google Ventures, Syncona, Sanofi, and Northpond.

Using mass spectrometry, OMass are identifying and progressing new medicines to treat patients with rare conditions and diseases that don't respond to treatments already on the market.

The company, whose defining technology is mass spectrometry, has now established more than 50 jobs and initiated on a brown-field site on the outskirts of Oxford.
[On founding OMass.](#) Although much of her drug discovery protocols are proprietary her recent discovery of a first in class [potential therapy for IBD](#) was press released. This marks the start of a pipeline of candidate drugs advancing towards the clinic that target solute carriers and GPCRs involved in difficult-to-treat conditions with high unmet patient need.

6. SYNERGISTIC ACTIVITIES

Outreach, women in STEM and diversity

Carol has had an unorthodox career path, which began to take shape when she completed her graduate education while working full-time in industry. She then completed her PhD from the University of Cambridge in two years. Following an eight-year career break to raise her three children, she returned to research at Oxford.

In 2001, she became the first female Professor of Chemistry at the University of Cambridge, returning to Oxford in 2009 upon election to the Dr. Lee's Chair of Physical and Theoretical Chemistry.

Based on her extensive and varied experience throughout this journey, she regularly presents at Women in Science events and mentors many scientists. Her research group is consistently diverse, and ~30 of her researchers have gone on to establish independent academic groups worldwide.

Carol is also a member of the Advisory Board of the Royal National Children's Springboard with a mission to widen access to the best schools for young people facing the greatest barriers to development.

Advocacy and Leadership

As president of the Royal Society of Chemistry, Carol focussed on the roles of technicians and support staff in teaching and research laboratories. As President Elect of the Society, and as a former technician herself, Carol was keen to begin launching the Technician's Charter. This charter was designed to increase Visibility, Recognition and Career Development of technical staff. She continued to promote this cause throughout her presidency, presenting the first awards to technical staff and delivering lectures to highlight the roles of technicians. Over 100 higher education institutions have now signed up to this scheme, with the charter displayed in entrance halls across the UK.

In 2021, Carol became the founding director of the Kavli Institute for Nanoscience Discovery in Oxford (KIND), an interdisciplinary science institute with a mission to bring together eight different departments across two divisions. To coincide with this opening, Carol applied for funding to initiate a Research Culture Program to give all researchers a voice in shaping the institute and to introduce a collaborative, supportive and non-competitive environment.
[On founding the Kavli Institute](#)

Today the institute is oversubscribed, attracting scientists from eight departments. Its open-door policy means that it regularly hosts researchers from disadvantaged backgrounds and ethnic minorities. The institute has also secured significant funding, including grants for displaced scientists.

Recently, it secured additional support from the Kavli Foundation to appoint Research Fellows in Ethics and Policy. These fellows engage with researchers to mitigate ethical risks and to promote responsible research practice.